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1835

ENCYCLOPÆDIA AMERICANA.

A

POPULAR DICTIONARY

OF

ARTS, SCIENCES, LITERATURE, HISTORY, POLITICS AND BIOGRAPHY,

BROUGHT DOWN TO THE PRESENT TIME;

INCLUDING

A COPIOUS COLLECTION OF ORIGINAL ARTICLES

IN

AMERICAN BIOGRAPHY;

ON

THE BASIS OF THE SEVENTH EDITION OF THE GERMAN

CONVERSATIONS-LEXICON.

EDITED BY

FRANCIS LIEBER,

ASSISTED BY

E. WIGGLESWORTH AND T. G. BRADFORD.

Vol. VI.

Philadelphia:

CAREY AND LEA.

SOLD IN PHILADELPHIA BY E. L. CAREY AND A. HART—IN NEW YORK BY G. & C. & H. CARVILL—IN BOSTON BY CARTER, HENDEE & BABCOCK.

1831.

EASTERN DISTRICT OF PENNSYLVANIA, *to wit:*

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D. CALDWELL,

Clerk of the Eastern District of Pennsylvania.

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ENCYCLOPÆDIA AMERICANA.

GREECE, ANCIENT. The name of *Græcia* originated in Italy, and was probably derived from Pelasgian colonies, who, coming from Epirus, and calling themselves *Grecians*, from *Græcus*, the son of their ancestor, Thessalus, occasioned the application of this name to all the people who spoke the same language with them. In earlier times, e. g., in the time of Homer, Greece had no general name among the natives. It afterwards received the name of *Hellas*, and still later, after the country was conquered by the Romans, the name of *Achaia*, under which Macedonia and Epirus were not included. The Grecian tribes were so widely dispersed, that it is difficult to determine, with precision, the limits of *Greece*, properly so called. The name was sometimes applied only to that country which was surrounded on three sides by the Mediterranean sea, was separated from Macedonia by the Cambunian mountains, and contained about 42,000 square miles; sometimes it was taken in a wider sense, including Macedonia and Epirus, having mount Hæmus and the Ægean and Ionian seas for its boundaries, and comprising the islands of these two seas. Greece consists partly of continental, and partly of insular regions. A chain of mountains, extending from the Ambracian gulf, in the west, to Thermopylæ, on the east, separates Northern Greece from Southern. The climate is alternately severe or mild, as the mountains or valleys predominate, but it is agreeable and healthy. People are not unfrequently found here, whose age is over 100 years. The soil of the valleys and plains is favorable to the growth of the finest tropical fruits, while the summits of the high mountains are covered with the plants of the polar regions. In Athens, the thermometer very seldom falls below the freezing point, or rises above 25° Réaumur (88 Fahrenheit). In the islands, every evening, at a particular hour, a gentle sea breeze sets in, which tempers the heat of the day. But in the plains of Thessaly, which lie 1200 feet above the level of the sea, and more especially in the mountains of Arcadia, the winter is as severe as in England. The fruits of the soil are as abundant as they are various. Even where it is not adapted for the purposes of husbandry, it produces thyme, marjoram, and a number of aromatic herbs, which afford a rich pasturage. Greece produces eight kinds of corn and ten kinds of olives. It is, perhaps, the native country of the grape, particularly of the small sort, from which the currants of commerce are made. The name of these is a corruption of *Corinth*, the chief plantation having formerly been on the isthmus of this name. There are 40 kinds of Grecian grapes known. The honey of this country is very famous. (See *Hymettus*.) Greece produces all the necessaries of life, and there is no country whose coast is so well supplied with bays and harbors for commerce. The main land is now divided into Northern Greece, Middle Greece, Greece Proper, or Hellas, in its narrower sense, and the Peloponnesus (Morea). I. Northern Greece includes, 1. Thessaly (q. v.) (now Janna); 2. Epirus (q. v.) (now Albania); 3. Macedonia (now Macedonia, or Filiba-Vilajeti), accounted a part of Greece from the time of Philip and Alexander, and making a link in the chain between Greece and Thrace, of which, in earlier times, Mace-

donia made a part. II. Middle Greece, or Hellas (now Livadia), contains, 1. Acarnania, inhabited by a rough and warlike people, with no remarkable rivers or mountains; 2. Ætolia (q. v.); 3. Doris, or Doris Tetrapolis (formerly Dryopolis); 4. Locris (q. v.), with the pass of Thermopylæ; 5. Phocis, watered by the Cephissus, and containing mount Parnassus, under which lay Delphi (q. v.); 6. Bœotia (q. v.); 7. Attica (q. v.); 8. Megaris, with the city of Megara, the smallest of all the Grecian states. III. The peninsula of the Peloponnesus, to which the isthmus of Corinth led through Megaris, contained, 1. the territory of Corinth (q. v.), with the city of the same name, called, in earlier times, *Ephyra;* 2. the small territory of Sicyon, with the ancient city of the same name; 3. Achaia, anciently called *Ægialos*, and, afterwards, *Ionia*, contained 12 cities on the coast which stretched along the Corinthian gulf to the river Melas; 4. Elis, divided into two parts by the river Alpheus, stretched from Achaia, south-west, to the sea-coast; it contained the celebrated cities of Cyllene and Olympia (q. v.); 5. Messenia, with the river Pamisus, extending from the southern part of Elis along the sea to the extremity of the continent, with the city of Messene, and the frontier towns of Ithome and Ira; 6. Laconia, Laconica, Lacedæmon, a mountainous country traversed by the Taygetus, and watered by the Eurotas, bounded on three sides by the Messenian, the Laconian and the Argolic gulfs; Sparta (q. v.) was the capital; 7. Argolis (q. v.); 8. Arcadia (q. v.). The islands which belong to Greece, lie, I. in the Ionian sea, on the west and south of the main land. 1. Corcyra (Corfu); 2. Cephalonia; 3. Asteris; 4. Ithaca (Teaki); 5. Zacynthus (Zante: St. Maura is the ancient peninsula of Leucadia, formerly connected with the main land of Acarnania); 6. Cythera (Cerigo); 7. the group of islands in the Argolic gulf; 8. the island of Pelops, near the territory of Trœzene, and, not far off, Sphæria, Calauria (Poros); 9. Ægina; 10. Salamis (Coluri), and many surrounding islands; 11. Crete (Candia). II. In the Ægean sea, now called the *Archipelago*, on the south and east sides of the main land, lie, 1. Carpathos (Scarpanto); 2. Rhodes; 3. Cyprus; 4. the Cyclades, i. e., Delos, and the surrounding islands on the west; and, 5. the Sporades, i. e., those scattered over the eastern Archipelago. To the Cyclades belong Delos (Sdilli), Rhenæa, Miconos, Tenos (Tine), Andros, Gyaros, Ceos (Zia), Syros, Cythnus (Thermia), Seriphos, Siphnos, Cimolis (Argentiere), Melos (Milo), Thera (Santorin), Ios, where Homer is said to have been buried, Naxos (in more ancient times, Dia), Paros (Paria), &c. To the Sporades belong Cos (Stanchio, Stingo), Parmacusa, Patmos (Palmo, Palmosa), Samos, Chios (Scio), with many smaller surrounding islands, Lesbos (Mitylene), the surrounding islands called *Hecatonnysoi*, i. e., the *hundred islands*, Tenedos (Bogdscha, Adassi), Lemnos (Stalimene), Imbros (Lembro), Samothrace, Thasos, and, nearer the Grecian coast, Scyros and Eubœa (Negropont). Ancient Macedonia was, in its interior, rough, woody and barren, and produced wine, oil and fruit-trees only on the coast. The same is true of Epirus. But Thessaly was a fruitful and well watered country, and produced the finest horses. Bœotia was likewise fruitful, and abounded in fine herds of cattle. The soil of Locris was moderately good; that of Doris was more fruitful, and that of Phocis still more so, producing, in abundance, good wine, fine oil and madder. The rough mountains of Ætolia were neither suited to pasturage nor to agriculture. Acarnania, the sea-coast of Attica, and the mountainous parts of Megaris, were as little remarkable for fertility as Achaia. Argolis had a fruitful soil; and in Laconia, Messenia and Elis, both agriculture and pasturage flourished. Arcadia was a mountainous country, well adapted for the raising of flocks. The Grecian islands lie under a fortunate sky, and are most of them very rich in wine and in wild and cultivated fruits.*

* See Hellas, or a Geographical and Antiquarian Account of Ancient Greece and its Colonies, with a View of the Modern Discoveries made in that Country, by F. K. G. Kruse, professor (Leipsic, 1826), two volumes, with an Atlas. A Journal of a Tour through Greece and Albania (Berlin, 1826), contains very satisfactory accounts of Ancient Greece, particularly in a military point of view. Gell and Dodwell have written on the geography, topography and history of Greece in ancient and modern times, with the writings of the ancients in their hands. Dodwell's companion, Pomardi, has given some additional information (Rome, 1820), Chandler, Stuart, Revett, have given accurate descriptions of the remains of the architecture and sculpture of the ancient Greeks. Spohn and Wheeler, Le Chevalier, Choiseul-Gouffier, and Clark and Turner have furnished accurate accounts of parts of the country previously little known. See also Horner's Picture of Grecian Antiquities, or an Account of the most celebrated Places and most important Works of Art of Ancient Greece, (Zurich, 1824, et seq.). The journals of Hughes, Holland, Vaudoncourt, Leake, Douglas, Castellan, and also Galt's Letters from the Le-

The History of Greece is divided into three principal periods—the periods of its rise, its power, and its fall. The first extends from the origin of the people, about 1800 years B. C., to Lycurgus, 875 years B. C.; the second extends from that time to the conquest of Greece by the Romans, 146 B. C.; the third shows us the Greeks as a conquered people, constantly on the decline, until at length, about A. D. 300, the old Grecian states were swallowed up in the Byzantine empire. According to tradition, the Pelasgi, under Inachus, were the first people who wandered into Greece. They dwelt in caves in the earth, supporting themselves on wild fruits, and eating the flesh of their conquered enemies, until Phoroneus, who is called *king of Argos*, began to introduce civilization among them. Pelasgus in Arcadia, and Ægialeus in Achaia, endeavored at the same time to civilize their savage subjects. The Cyclopean walls are their work. (See *Cyclopean Works.*) Small kingdoms arose; e. g., Sparta and Athens. Some barbarous tribes received names from the three brothers, Achæus, Pelasgus and Pythius, who led colonies from Arcadia to Thessaly, and also from Thessalus and Græcus (the sons of Pelasgus), and others. Deucalion's flood, 1514 B. C., and the emigration of a new people from Asia, the Hellenes, produced great changes. The Hellenes spread themselves over Greece, and drove out the Pelasgi, or mingled with them. Their name became the general name of the Greeks. Greece now raised itself from its savage state, and improved still more rapidly after the arrival of some Phœnician and Egyptian colonies. About 60 years after the flood of Deucalion, Cadmus, the Phœnician, settled in Thebes, and introduced a knowledge of the alphabet. Ceres, from Sicily, and Triptolemus, from Eleusis, taught the nation agriculture, and Bacchus planted the vine. The Egyptian fugitive Danaus came to Argos, and Cecrops to Attica. Now began the heroic age, to which Hercules, Jason, Pirithous and Theseus belong, and that of the old bards and sages, as Thamyris, Amphion, Orpheus, Linus, Musæus, Chiron and many others. A warlike spirit filled the whole nation, so that every quarrel called all the heroes of Greece to arms, as, for instance, the war against Thebes, and the Trojan war, 1200 years B. C., which latter forms one of the principal epochs in the history of Greece. This war deprived many kingdoms of their princes, and produced a general confusion, of which the Heraclidæ took advantage, 80 years after the destruction of Troy, to possess themselves of the Peloponnesus. They drove out the Ionians and Achæans, who took refuge in Attica. But, not finding here sufficient room, Neleus (1044) led an Ionian colony to Asia Minor, where a colony of Æolians, from the Peloponnesus, had already settled, and was followed, 80 years after, by a colony of Dorians. In other states republics were founded, viz., in Phocis, in Thebes, and in the Asiatic colonies, and at length also in Athens and many other places; so that, for the next 400 years, all the southern part of Greece was for the most part occupied by republics. Their prosperity and the fineness of the climate, in the mean time, made the Asiatic colonies the mother of the arts and of learning. They gave birth to the songs of Homer and Hesiod. There commerce, navigation and law flourished. Greece, however, still retained its ancient simplicity of manners, and was unacquainted with luxury. If the population of any state became too numerous, colonies were sent out; for example, in the 7th and 8th centuries, the powerful colonies of Rhegium, Syracuse, Sybaris, Crotona, Tarentum, Gela, Locris and Messena were planted in Sicily and the southern part of Italy. (See *Magna Græcia.*) The small independent states of Greece needed a common bond of union. This bond was found in the temple of Delphi, the Amphictyonic council, and the solemn games, among which the Olympic were the most distinguished, the institution, or rather revival of which, 776 B. C., furnished the Greeks with a chronological era. (See *Epoch.*) From this time, Athens and Sparta began to surpass the other states of Greece in power and importance. At the time of the Persian war, Greece had already made important advances in civilization. Besides the art

vant, contain good observations on the manners and customs of Modern Greece, and the islands of the Archipelago. The principal work, however, is that of Pouqueville (formerly French consul-general near Ali Pacha) *Voy. dans la Grèce* (Paris, 1820, six volumes). Iken's *Hellenion*, &c., contains information on the history of the cultivation of the modern Greeks. Gell, in his Narrative of a Journey in the Morea (London, 1823), maintains that the Greeks do not possess such cultivation as to be worthy of freedom. The contrary opinion is maintained by Ed. Blaquière, in his Report on the present State of the Greek Confederation, &c. (London, 1823). P. O. Brœnsted's *Voyages dans la Grèce accompagnés de Recherches Archéologiques* (Paris, 1826, with engravings), is a valuable work. (For a list of works on the Greek revolution, see *the close of that division of this article, in which it is treated.*)

of poetry, we find that philosophy began to be cultivated 600 B. C., and even earlier in Ionia and Lower Italy than in Greece Proper. Statuary and painting were in a flourishing condition. The important colonies of Massilia (Marseilles), in Gaul, and Agrigentum, in Sicily, were founded. Athens was continually extending her commerce, and established important commercial posts in Thrace. In Asia Minor, the Grecian colonies were brought under the dominion of the Lydian Crœsus, and soon after under that of Cyrus. Greece itself was threatened with a similar fate by the Persian kings Darius and Xerxes. Then the heroic spirit of the free Greeks showed itself in its greatest brilliancy. Athens and Sparta almost alone withstood the vast armies of the Persian, and the battles of Marathon, Thermopylæ and Platæa, as well as the sea-fights at Artemisium, Salamis and Mycale, taught the Persians that the Greeks were not to be subdued by them. Athens now exceeded all the other states in splendor and in power. The supremacy which Sparta had hitherto maintained, devolved on this city, whose commander, Cimon, compelled the Persians to acknowledge the independence of Asia Minor. Athens was also the centre of the arts and sciences. The Peloponnesian war now broke out, Sparta being no longer able to endure the overbearing pride of Athens. This war devastated Greece, and enslaved Athens, until Thrasybulus again restored its freedom; and, for a short time, Sparta was compelled, in her turn, to bend before the Theban heroes Epaminondas and Pelopidas. In spite of these disturbances, poets, philosophers, artists and statesmen, continued to arise, commerce flourished, and manners and customs were carried to the highest degree of refinement. But that unhappy period had now arrived, when the Greeks, ceasing to be free, ceased to advance in civilization. A kingdom, formed by conquest, had grown up on the north of Greece, the ruler of which, Philip, united courage with cunning. The dissensions which prevailed among the different states, afforded him an opportunity to execute his ambitious plans, and the battle of Chæronea, 338 B. C., gave Macedonia the command of all Greece. In vain did the subjugated states hope to become free after his death. The destruction of Thebes was sufficient to subject all Greece to the young Alexander. This prince, as generalissimo of the Greeks, gained the most splendid victories over the Persians. An attempt to liberate Greece, occasioned by a false report of his death, was frustrated by Antipater. The Lamian war, after the death of Alexander, was equally unsuccessful. Greece was now little better than a Macedonian province. Luxury had enervated the ancient courage and energy of the nation. At length, most of the states of Southern Greece, Sparta and Ætolia excepted, concluded the Achæan league, for the maintenance of their freedom against the Macedonians. A dispute having arisen between this league and Sparta, the latter applied to Macedonia for help, and was victorious. But this friendship was soon fatal, for it involved Greece in the contest between Philip and the Romans, who, at first, indeed, restored freedom to the Grecian states, while they changed Ætolia, and soon after Macedonia, into Roman provinces; but they afterwards began to excite dissensions in the Achæan league, interfered in the quarrels of the Greeks, and finally compelled them to take up arms to maintain their freedom. So unequal a contest could not long remain undecided; the capture of Corinth, 146 B. C., placed the Greeks in the power of the Romans. During the whole period which elapsed between the battle of Chæronea and the destruction of Corinth by the Romans, the arts and sciences flourished among the Greeks; indeed, the golden age of the arts was in the time of Alexander. The Grecian colonies were yet in a more flourishing condition than the mother country; especially Alexandria, in Egypt, became the seat of learning. As they, also, in process of time, fell under the dominion of the Romans, they became, like their mother country, the instructers of their conquerors. In the time of Augustus, the Greeks lost even the shadow of their former freedom, and ceased to be an independent people, although their language, manners, customs, learning, arts and taste spread over the whole Roman empire. The character of the nation was now sunk so low, that the Romans esteemed a Greek as the most worthless of creatures. Asiatic luxury had wholly corrupted them; their ancient love of freedom and independence was extinguished; and a mean servility was substituted in its place. At the beginning of the fourth century, the nation scarcely showed a trace of the noble characteristics of their fathers. The barbarians soon after began their ruinous incursions into Greece.—Besides the well known works on the history of Greece,

by Mitford, Gillies, Barthélemy (Anacharsis), &c., we would mention Clinton's *Fasti Hellenici* (Oxford, 1824), an important work on the political and literary chronology of Greece, from the 55th to the 124th Olympiad; and Wachsmuth's *Hellenische Alterthumskunde* (1 vol., Halle, 1826); also Heeren's Politics of Ancient Greece (translated, Boston, 1824).—The principal traits in the character of the ancient Greeks, were simplicity and grandeur. The Greek was his own instructer, and if he learned any thing from others, he did it with freedom and independence. Nature was his great model, and in his native land, she displayed herself in all her charms. The uncivilized Greek was manly and proud, active and enterprising, violent both in his hate and in his love. He esteemed and exercised hospitality towards strangers and countrymen. These features of the Grecian character had an important influence on the religion, politics, manners and philosophy of the nation. The gods of Greece were not, like those of Asia, surrounded by a holy obscurity; they were human in their faults and virtues, but were placed far above mortals. They kept up an intercourse with men; good and evil came from their hands; all physical and moral endowments were their gift. The moral system of the earliest Greeks taught them to honor the gods by an exact observance of customs; to hold the rights of hospitality sacred, and even to spare murderers, if they fled to the sanctuaries of the gods for refuge. Cunning and revenge were allowed to be practised against enemies. No law enforced continence. The power of the father, of the husband or the brother, alone guarded the honor of the female sex, who therefore lived in continual dependence. The loss of virtue was severely punished, but the seducer brought his gifts and offerings to the gods, as if his conduct had been guiltless. The security of domestic life rested entirely on the master of the family. From these characteristic traits of the earliest Greeks, originated, in the sequel, the peculiarities of their religious notions, their love of freedom and action, their taste for the beautiful and the grand, and the simplicity of their manners. The religion of the Greeks was not so much mingled with superstition as that of the Romans; thus, for example, they were unacquainted with the practice of augury. The Greek was inclined to festivity, even in religion, and served the gods less in spirit than in outward ceremonies. His religion had little influence on his morals, his belief, and the government of his thoughts. All it required was a belief in the gods, and in a future existence; a freedom from gross crimes, and an observance of prescribed rites. The simplicity of their manners, and some obscure notions of a supreme God, who hated and punished evil, loved and rewarded good, served, at first, to maintain good morals and piety among them. These notions were afterwards exalted and systematized by poetry and philosophy, and the improvement spread from the cultivated classes through the great mass of the people. In the most enlightened period of Greece, clearer ideas of the unity of the deity, of his omniscience, his omnipresence, his holiness, his goodness, his justice, and of the necessity of worshipping him by virtue and purity of heart, prevailed. The moral system of some individuals among the Greeks was equally pure. The precepts of morality were delivered at first in sententious maxims; for example, the sayings of the seven wise men. Afterwards, Socrates and his disciples arose, and promulgated their pure doctrines. The love of freedom among the Greeks sprang from their good fortune, in having lived so long without oppression or fear of other nations, and from their natural vivacity of spirit. It was this which made small armies invincible, and which caused Lycurgus, Solon and Timoleon to refuse crowns. Their freedom was the work of nature, and the consequence of their original patriarchal mode of life. The first kings were considered as fathers of families, to whom obedience was willingly paid, in return for protection and favors. Important affairs were decided by the assemblies of the people. Each man was master in his own house, and in early times no taxes were paid. But as the kings strove continually to extend their powers, they were ultimately compelled to resign their dignities, and free states arose, with forms of government inclining more or less to aristocracy or democracy, or composed of a union of the two; the citizens were attached to a government which was administered under the direction of wise laws, and not of arbitrary power. It was this noble love for a free country, which prompted Leonidas to say to the king of Persia, that he would rather die than hold a despotic sway over Greece. It was this which inspired Solon, Themistocles, Demosthenes and Phocion, when, in spite of the ingratitude of their countrymen, they

chose to serve the state and the laws, rather than their own interests. The cultivation of their fruitful country, which, by the industry of the inhabitants, afforded nourishment to several millions, and the wealth of their colonies, prove the activity of the Greeks. Commerce, navigation and manufactures flourished on all sides; knowledge of every sort was accumulated; the spirit of invention was busily at work; the Greeks learned to estimate the pleasures of society, but they also learned to love luxury. From these sources of activity sprang also a love of great actions and great enterprises, so many instances of which are furnished by Grecian history. Another striking trait of the Grecian character, was a love of the beautiful, both physical and intellectual. This sense of the beautiful, awakened and developed by nature, created for itself an ideal of beauty, which served them, and has been transmitted to us, as a criterion for every work of art. A noble simplicity pervades every thing which comes from them. It is this which has made the Greeks the instructers of all ages and nations.

Greek Language and Writing. The language, which we call *Greek*, was not the primitive language of Greece, for Greece was originally inhabited by the Pelasgi. Their language was already extinct in the time of Herodotus, who asserts that it was different from the Hellenic, and adds, that it is probable that the Hellenes have retained their original language (I. 57). But on the question whence it originated, there is a diversity of opinion; for some derive it from the Persian, others from the Scythian—two opinions, which are not, perhaps, incompatible with each other. Out of Greece, it was spoken in a great part of Asia Minor, of the south of Italy and Sicily, and in other regions which were settled by Grecian colonies. From the great number of Hellenic tribes of the same race, it was to be expected that there would be different dialects, the knowledge of which is the more necessary for becoming acquainted with the Greek language, since the writers of this nation have transmitted the peculiarities of the different dialects in the use of single letters, words, forms, terminations and expressions, and that not merely to characterize more particularly an individual represented as speaking, but even when they speak in their own person. It is customary to distinguish three leading dialects, according to the three leading branches of the Greeks, the Æolic, the Doric, and the Ionic, to which was afterwards added the mixed Attic dialect; besides these, there are several secondary dialects. The four leading dialects may be reduced to two, the Hellenic-Doric and the Ionic-Attic. The former was the oldest; in fact, Doric was generally used to signify what was ancient. The oldest Doric style is displayed in the Æolic dialect, from which the Latin language is derived. The Doric was hard and harsh; the Ionic was the softest. The Æolic was spoken on the north of the Isthmus (excepting in Megara, Attica and Doris), in the Æolian colonies of Asia Minor, and on some of the northern islands of the Ægean sea. The Doric was spoken in the Peloponnesus, in the Doric Tetrapolis, in the Doric colonies of Asia Minor, of Lower Italy (Tarentum), of Sicily (Syracuse, Agrigentum), and most purely by the Messenians; the Ionic in the Ionian colonies of Asia Minor, and on the islands of the Archipelago; and the Attic in Attica. In each of these dialects, there are celebrated authors. To the Ionic dialect belong, in part, the works of the oldest poets, Homer, Hesiod, Theognis, etc.; it is found pure in some prose writers, especially Herodotus and Hippocrates; the poems of Pindar, Theocritus, Bion and Moschus. Little Doric prose remains, and that is mostly on mathematical or philosophical subjects. In Æolic, we have fragments of Alcæus and Sappho. After Athens had obtained the supremacy of Greece, and rendered itself the centre of all literary cultivation, the masterpieces of Æschylus, Sophocles, Euripides, Aristophanes, Thucydides, Xenophon, Plato, Isocrates, Demosthenes, etc., made the Attic the common dialect of literature. Grammarians afterwards distinguished the genuine Attic, as it exists in those masters, from the Attic of common life, calling the latter the *common Greek* or *Hellenic dialect*, and even the later Attic writers, posterior to the golden age of the literature, *Hellenes* or *common Greeks*. In this latter class are Aristotle, Theophrastus, Apollodorus, Polybius, Plutarch and others, many of whom, however, wrote genuine Attic, as Lucian, Ælian and Arrian. Except the dramatists, the poets by no means confined themselves to the Attic; the dramatists themselves assumed the Doric, to a certain degree, in their choruses, for the sake of giving them additional solemnity, because these belonged to the oldest liturgy of the Greeks; and the other poets retained the Homeric style. It cannot be denied, that the Greeks were

much better acquainted with their different dialects than some moderns, the Germans, for instance, are with theirs. This may, perhaps, have been, in a great degree, the effect of the universal popularity of Homer, the use of a religious ritual, and the great mutual intercourse of the nation. But, probably, the dialects were not, in the earliest times, so distinct from each other as they afterwards became; and on this hypothesis we must explain the peculiarities of the style of Homer and Hesiod. "In Homer and Hesiod," says Mathiä, "forms and expressions occur, which grammarians pronounce Æolic, Doric, Attic, or the peculiarities of a local dialect. But they could hardly have been such at the time of these poets, who would have as little allowed themselves to employ such a mixture, as a German poet would permit himself to mingle together Lower Saxon and High German provincialisms. The language of Homer seems rather to have been the language of the Ionians of that time. Of the forms common in Homer, all did not remain in the Ionic dialect, but some subsisted in the Æolic-Doric only, others merely in the Attic. The grammarians call that Attic, Æolic, Doric, etc., in Homer, which was so at their time." The period when these changes took place in the leading dialects cannot be determined. It follows from all this, that, to have a thorough knowledge of the Greek language, we must follow out, historically, the course of its formation, taking no partial grammar as our foundation, but extending our view over all the varied forms of the dialects—a labor which this language, so rich in classic models of every kind, and therefore so perfect, so flexible, so expressive, so sweet in its sound, so harmonious in its movement, and so philosophical in its grammatical forms and whole structure, merits, and richly rewards. At what time this language first began to be expressed in writing, has long been a subject of doubt. According to the general opinion, Cadmus, the Phœnician, introduced the alphabet into Greece. His alphabet consisted of but 16 letters; four (θ ξ φ χ) are said to have been invented by Palamedes, in the Trojan war, and four more (ζ η ψ ω) by Simonides of Ceos. That the eight letters mentioned, are more modern than the others, is certain, partly from historical accounts, partly from the most ancient inscriptions. As the Ionians first adopted these letters, and the Athenians received them from them, the alphabet with 24 letters is called the *Ionic*. The figures of the oldest Phœnician and Greek letters differ very much from the modern Hebrew and Greek letters. There have not been wanting persons, however, who assert that the art of writing was practised among the Pelasgi before the time of Cadmus. This opinion, not unknown to the ancients, but corroborated by no single author of authority, has not failed to meet with advocates in modern times. Others, on the contrary, have appeared, who place the origin of the art of writing in Greece much later. The first who attracted attention to this point, was Wood, in his Essay on the original Genius of Homer. It is, at all events, of great importance, for forming a proper judgment of Homer, and deciding respecting Ante-Homeric poetry and literature, to ascertain whether the art of writing was or was not known in the time of Homer. Wood's opinion is, that we may place the time when the use of the alphabet became common in Greece, and the beginning of prose writing, in about the same period, 554 before Christ, and about as long after Homer. In Homer's time, all knowledge, religion and laws were preserved by memory alone, and for that reason were put in verse, till prose was introduced with the art of writing. The argument drawn from several ancient inscriptions on temples, Wolf has deprived of all its force: in his *Prolegomena* to Homer, he has converted the question with more precision into two:—1. When did the Greeks become acquainted with the art of writing? 2. When was it common among them? In solving the latter question, it must be ascertained when convenient materials for writing became common, and in what century the writing of books was introduced among the Greeks. Wolf proves not only that Homer committed to writing nothing which he sung, the skins of animals not having been used for writing till after him, nor Egyptian papyrus till the time of Psammeticus, but that his verses were never committed to writing till the middle of the sixth century before Christ. It remains to remark, that the Greeks originally wrote their lines from right to left, then *boustrophedon* (see *Boustrophedon*), and finally from left to right.

Greek Literature. The origin of Greek literature, that is, of the intellectual cultivation of the Greeks by written works, is lost in an almost impenetrable obscurity. Though there existed in Greece, in earlier times, no actual literature, there was by no means a want of what we may, not

improperly, call *literary cultivation*, if we free ourselves from the prejudice, that the palladium of humanity consists solely in written alphabetical characters. The *first period* of Grecian cultivation, which extends to the invasion of the Peloponnesus by the Heraclidæ and Dorians, and the great changes produced by it, consequently to 80 years after the Trojan war, and which we may designate by the name of the *Ante-Homeric period*, was indeed utterly destitute of literature; but it may be questioned whether it was also destitute of all that culture, which we are accustomed to call *literary*. The fables which are told of the intellectual achievements of this period, have a certain basis of truth. Among the promoters of literary cultivation, in this time, we must distinguish three classes—1. Those of whom we have no writings, but who are mentioned as inventors of arts, poets and sages: Amphion, Demodocus, Melampus, Olen, Phemius and Prometheus. 2. Those to whom are falsely attributed works no longer extant: Abaris, Aristeas, Chiron, Epimenides, Eumolpus, Corinnus, Linus and Palamedes. 3. Those to whom writings yet extant, which, however, were productions of later times, are attributed: Dares, Dictys, Horapollo, Musæus, Orpheus, and the authors of the Sibylline oracles. This is not the place to inquire whether any and how much of these writings is genuine. It is enough, that the idea of such a forgery proves the existence of earlier productions. And how could the next period have been what it was, without previous preparation? If we may thus infer what must have been, in order that the succeeding period should be what it was, we learn, also, from the various traditions of the Ante-Homeric period, that there existed in it institutions which, through the means of religion, poetry, oracles and mysteries, had no small influence on the civilization of the nation and the promotion of culture; for the most part, indeed, in Oriental forms, and perhaps of Oriental origin; and that these institutions, generally of a priestly character, obtained principally in the northern parts of Greece, Thrace and Macedonia. We must here remark, that intellectual cultivation did not prosper at once in Greece, nor display itself simultaneously among all the tribes; that the Greeks became Greeks only in the process of time, and some tribes made more rapid progress than others. About 80 years after the Trojan war, new commotions and a new migration began within the borders of Greece. A portion of the inhabitants emigrated from the mother country to the islands and to Asia Minor. This change was in the highest degree favorable to Grecian genius; for the new settlements, abounding in harbors, and destined by nature for commerce and industry, afforded them not only a more tranquil life, but also a wider field for refinement, and gave rise to new modes of life. The ancients ascribed to the colonies in Ionia and Asia Minor the character of luxury and voluptuousness. The blue sea, the pure sky, the balmy air, the beautiful prospects, the finest fruits and most delicious vegetables in abundance, all the requisites of luxury, here united to nourish a soft sensuality. Poetry and philosophy, painting and statuary, here attained their highest perfection; but great and heroic deeds were oftener celebrated than performed. Near the scene of the first grand national enterprise of the Greeks—the Trojan war—it was not strange that the interest it excited should be lively, and that it should take a powerful hold of the imagination. Poetry thus found a subject, in the treatment of which it necessarily assumed a character entirely distinct from that of the former period. Among all nations, heroic poetry has flourished with the spirit of heroism. The heroes were here followed by the bards, and thus the epopee was formed. We therefore call this *second period* the *epic age* of the Greeks. The minstrel (ἀοιδός) now appears separated from the priest, but highly honored, particularly because the memory of the heroes lived in his verse; and poetry was the guardian of all the knowledge of preceding times, so long as traditions were not committed to writing. From its very nature, the epopee must be historical, in an enlarged sense. Under such circumstances, it is not strange that regular schools for poets were established; for the imagination of the first poet fired the imagination of others, and it was then, perhaps, believed that poetry must be learned like other arts—a belief to which the schools for priests contributed not a little, on which the schools for minstrels were probably modelled. But they were minstrels in the strictest sense, for their traditions were sung, and the poet accompanied his verses on a stringed instrument. On every important occasion, minstrels were present, who were regarded as standing under the immediate influence of the gods, especially of the muses, who were acquainted with the present, the past and the future. The minstrel, with the seer, thus stood at the head of men. But,

among the many minstrels which this age undoubtedly possessed, Homer alone has survived. We have from him two great epic poems, the Iliad and Odyssey, with several hymns and epigrams. One mock heroic poem, the *Batrachomyomachy* (the Battle of the Frogs and Mice), is ascribed to him. From him an Ionian school of minstrels takes its name—the *Homeridæ*—who probably constituted, at first, at Chios, a distinct family of rhapsodists, and who preserved the old Homeric and epic style, the spirit and tone of the Homeric verse. Much that is attributed to Homer, may reasonably be assigned to them. The same may be the case with the epic Cyclus, also ascribed to Homer; which brings us to the Cyclic poets, who began, however, to deviate materially from the Ionian epos, the historical element predominating more and more over the poetical. By *Cyclus*, we here understand the whole circle of traditions and fables, and not merely the events of the Trojan war. Cyclic poetry comprehended the whole compass of mythology; and we may, therefore, divide it into, 1. a cosmogonical, 2. a genealogical, and 3. a heroic Cyclus; in the latter of which there are two separate periods; 1. of the heroes before, and 2. of those after, the expedition of the Argonauts. To the first class belong the battles of the Titans and giants; to the second, the theogonies and herogonies. To the first period of the third class belong the Europia, several Heracleia and Dionysiacs, several Thebaids, Argonautics, Theseids, Danaids, Amazonica, etc. In the second period, the poetry generally related to the Trojan war. To this belonged the Nostoi, which treated of the return of the heroes from Troy. The earliest of these Cyclic poets appeared about the time of the first Olympiad. A history of the gradual formation of their poetry cannot be given, because we have only very general accounts respecting them. But what we do know justifies us in concluding that between these historic poets and the Ionian school of minstrelsy, something intervened, making, as it were, the transition. And we actually find this in the *Bœotian-Ascrean* school, which arose in European Greece probably about 890 B. C. It derived its name from Ascra in Bœotia, the residence of Hesiod, who stood at its head, and by whom poetry was probably conducted back again from Asia Minor (for he originated from Cumæ in Æolia) to Greece. His works, also, were at first preserved by rhapsodists. They were not arranged till a later period, when they were augmented by foreign additions; so that, in their present form, their authenticity is as doubtful as that of the poems ascribed to Homer. (See *Hesiod.*) Of the sixteen works attributed to him, there have come down to us the Theogony, the Shield of Hercules (the fragment of a larger poem), and Works and Days, a didactic poem on agriculture, the choice of days, intermixed with moral and prudential maxims, &c. These works, especially those of Homer and Hesiod, which acquired a canonical importance, and constituted, in a certain degree, the foundation of youthful education, gave to the character of the Greeks that particular direction, by which it was afterwards distinguished, and which was most strikingly displayed in their religion; which, for want of the necessary dignity, and especially of a caste of priests, was so indefinite, and therefore so fanciful. The mysticism of the first period was, therefore, for the most part, discarded; and in the later Grecian mythology (for that a new system of divinities had arisen cannot be doubted), nothing was seen but the perfection of human nature. Sensuality thence became the characteristic of the Grecian religion, in which no other morality could subsist but that which teaches the enjoyment of the pleasures of life with prudence. Hitherto poetry had been the only instructress of the Grecian world; and it remained so still, when it took another direction. This happened in the *third period*, the age of lyric poetry, of apologues and philosophy, with which history gradually acquired a greater certainty. About the beginning of the epoch of the Olympiads (776 B.C.), there ensued a true ebb and flood of constitutions among the small states of Greece. After numerous vicissitudes of power, during which the contending parties persecuted each other for a long time with mutual hatred, republics, with democratical constitutions, finally sprung up, which were in some measure united into one whole by national meetings at the sacred games. The spirit prevalent in such a time greatly favored lyric poetry, which now became an art in Greece, and reached the summit of its perfection at the time of the invasion of the Persians. Next to the gods, who were celebrated at their festivals with hymns, their country, with its heroes, was the leading subject of this branch of poetry, on the character of which external circumstances seem to have exercised no slight influence. The mental energies of the nation were roused by the circumstances of the country; and the numerous wars

and conflicts, patriotism, the love of freedom and the hatred of enemies and tyrants, gave birth to the heroic ode. Life, however, was at the same time viewed more on its dark side. Thence there was an intermingling of more sensibility in the elegy, as well as, on the other side, a vigorous reäction, in which the spirit of ridicule gave rise to the iambus (satire). In every thing there was a more powerful impulse towards meditation, investigation and labor for the attainment of a desired condition. The golden age, the gift of the gods, was felt to have departed. Whatever man discovered in future was to be the fruit of his own efforts. This feeling showed that the age of manhood had arrived. Philosophy had become necessary, and attained continually a greater developement. It first spoke in maxims and gnomes, in fables and in dogmatic precepts. Lyric poetry next gave utterance to the feelings excited by the pleasures of earth. Of those who gained a reputation in this way, as well as by the improvement of music and the invention of various forms of lyric poetry, history presents us the names Archilochus of Paros, inventor of the iambus; Tyrtæus of Miletus, author of war songs; Callimachus of Ephesus, inventor of the elegiac measure; Alcman, the Lydian; Arion of Methymna, who perfected the dithyrambus; Terpander of Antissa, inventor of the barbitos (a kind of lyre); the tender Sappho of Mitylene; her countryman Alcæus; Erinna, the contemporary of both; Mimnermus of Colophon, the flute player; Stesichorus of Himera; Ibycus of Rhegium; Anacreon and Simonides of Ceos; Hipponax of Ephesus; Timocreon of Rhodes; Lasus of Hermione; Corinna of Tanagra, the friend and instructress of Pindar. As gnomic writers (see *Gnomic*), Theognis, Phocylides, Pythagoras, deserve to be named; as a fabulist, Æsop. In the order of time, several belong to the following period, but are properly placed here, on account of their connexion. If we consider the philosophy of this age, we find it to have generally had a practical character. The philosophy of life must precede the philosophy of science. Philosophy must give lessons of wisdom, before it can furnish scientific systems. In this light must we consider the *seven wise men of Greece*, as they are called (Periander, instead of whom others place Epimenides of Crete or Myon, Pittacus, Thales, Solon, Bias, Chilo and Cleobulus); six of whom acquired their names, not by diving into hidden lore, but by mature experience and the practical wisdom resulting from it, by their prudence and reflection, their skill in affairs of state, in business and the arts. Their sayings are practical rules, originating in the commerce of life, and frequently only the expression of present feelings. But as knowledge is the foundation of science, further investigations resulted in theoretical philosophy. Thales was the founder of the Ionic philosophy. Here we stand on the most important point of the history of the literary developement of Greece, where poetry ceases to contain every thing worthy of knowledge, to be the only source of instruction. Hitherto she had discharged the office of history, philosophy and religion. Whatever was to be transmitted to posterity, whatever practical wisdom and knowledge was to be imparted, whatever religious feelings were to be inspired, recourse was had to her measured strains, which, from their rhythmical character, left a deeper and stronger impression on the memory. Henceforth it was to be otherwise. Civil life was to have an important influence on language. The public transactions, in which the citizen took a part, compelled him to make the language of common life more suitable for public delivery. This and alphabetical writing, that had now become common in Greece, with the introduction of the Egyptian papyrus, prepared the way for the formation of prose. All this had an essential influence on the condition of science. From epic poetry proceeded, by degrees, history. From the practical wisdom conveyed in verse proceeded an investigating philosophy. Our former singleness of view is thus lost. We must now necessarily turn our attention to different sides, and, in the rest of our sketch, follow out each branch separately. Every thing tended to excite the spirit of inquiry, and a scientific activity was every where awakened. We may therefore call the *fourth period*, that now ensued, the *scientific period*. It reaches to the end of Greek literature, but is divided into several epochs, according to the different spirit which predominated, and the superiority which a particular branch acquired at different times. The *first epoch* extends from Solon to Alexander (594—336 B. C.) In philosophy, a physico-speculative spirit was manifested; for philosophy originated immediately from religion, and all religion rests on the conception of the Divinity, which was not then distinguished from nature. Now, since the conception of religion contained nothing but poetical ideas of the origin of the principal phe-

nomena of nature, that is, of the divinities, the most ancient philosophy was, of necessity, natural philosophy, in which the human mind sought to analyze more thoroughly the phenomena previously observed, to explain them more satisfactorily, and to comprehend them in one whole. From the want of sufficient experimental acquaintance with nature, it was to be expected that the imagination would frequently interfere in the work of the understanding and reason. From this cause, these philosophical inquiries are interwoven with poetical images. This was the form of the Ionic philosophy, whose author was Thales; the Italian, whose founder was Pythagoras, and the older and later Eleatic. To the Ionic school, which sought after a material origin to the world, belonged Pherecydes, Anaximander, Anaximenes, Anaxagoras, Diogenes of Apollonia, Anaxarchus and Archelaus of Miletus. The principal disciples of the Pythagorean philosophy, which referred the organization of the world to number and measure, were Alcmæon, Timæus of Locris, Ocellus Lucanus, Epicharmus, Theages, Archytas, Philolaus and Eudoxus. To the older Eleatic school, which held the idea of a pure existence, belonged Xenophanes, Parmenides; to the later, Zeno, Melissus and Diagoras. With this is connected the atomic school of Leucippus and Democritus, and the dualist, Empedocles. On the other hand, Heraclitus stands alone in his theory of the eternal flow of things. Till near the 90th Olympiad, the philosophers and their scholars were dispersed through all the Greek cities. About this time, Athens became their principal place of residence, which contributed not a little to breathe another spirit into philosophy, the Sophists becoming the teachers. Gorgias of Leontium in Sicily, who joined the Eleatics, Protagoras of Abdera, Hippias of Elis, Prodicus of Cos, Trasimacus and Tisias are the most celebrated whose names have reached us. Their name designates them as men of science; and they were, in fact, the encyclopædists of their times, who collected the ideas and sentiments of the former ages, and enriched them with their own. They were particularly distinguished in rhetoric and politics, two sciences so highly important in democratic forms of government; but, not contented with this, they also professed the natural sciences, mathematics, the theory of the fine arts, and philosophy. In the last, it does not seem to have been their object to arrive at truth, but only to make a plausible argument; and for this end were formed sophistics and eristics, or the art of reasoning, which was afterwards called *dialectics*; in which their object was to prove every thing they wished. For this they invented those fallacies, still called, from them, *sophistries*, and sought to lead their opponents astray by various means. That this must needs be detrimental to true philosophy is evident. So much the more fortunate was it that, in this very age, Socrates appeared, who was not only a strenuous antagonist of these Sophists, but opened a new career to philosophy itself. It has been justly said of him, that he brought down philosophy from heaven to earth, for he gave it again a practical direction, differing, however, from the former, since the object was no longer merely to string together experiments, but philosophers began to investigate the nature and relations of man, the object and best regulation of his life; and reflection was turned principally to psychology and morals, instead of physics and metaphysics. Socrates had many scholars, some of whom committed his ideas to writing in his manner—Cebes, Æschines, Xenophon; others, deviating more or less from his ideas and his manner, were founders of philosophical schools of their own. The four following schools proceeded from that of Socrates: 1. the Cyrenaic, whose founder was Aristippus of Cyrene (see *Aristippus*); 2. the Megaric, Elian and Eretrian, under Euclid, Phædon and Menedemus; 3. the academic, whose founder was Plato; and 4. the Cynic, whose founder was Antisthenes. Plato (q. v.) was unquestionably the most comprehensive and splendid genius. With the philosophical knowledge of the former Greek philosophers, he combined that of the Egyptian priests, and the eloquence of the Sophists. A fondness for the supernatural, a delicate moral sense, a fine, acute and profound understanding, reign in his productions, which are adorned with all the graces of expression, and are enlivened by a rich imagination. By his poetic talent, the philosophical dialogue of Socrates was presented under a truly dramatic form. While philosophy was making such important progress, history rapidly approached perfection. In the period of 550—500 B. C., traditions were first committed to writing in prose, and Cadmus, Dionysius and Hecatæus of Miletus, Acusilaus the Argive, Hellanicus of Mitylene and Pherecydes of Scyros are among the oldest historical writers. After them appeared Herodotus (q. v.), the Homer of history. His example kindled Thucydi-

des to emulation, and his eight books of the history of the Peloponnesian war make him the first philosophical historian, and a model for all his successors. If his conciseness sometimes renders Thucydides obscure, in Xenophon, on the contrary, there prevails the greatest perspicuity; and he became the model of quiet, unostentatious historical writing. These three historians are the most distinguished of this period, in which we must, moreover, mention Ctesias, Philistus, Theopompus, Euphorus, who, however, abandoned the genuine style of historical narration for a rhetorical affectation. An entirely new species of poetry was created in this period. From the thanksgiving festivals, which the country people solemnized after the vintage, in honor of the giver of joys, with wild songs and comic dances, arose, especially in Attica, the drama. By degrees, variety and a degree of art were given to the songs of the chorus, or dithyrambics, at the sacrifice of the goat, which, in the process of time, became more serious, while an intermediate speaker related popular fables, and the chorus varied the eternal praises of Bacchus by moral reflections, as the narration prompted. Their reward, if they gave satisfaction, was a goat. Sportive dances were introduced, mingled with waggish pranks, and every thing to excite laughter. These games of the feast of the vintage were soon repeated on other days. Solon's contemporary, Thespis, who smeared his actors, like vintagers, with lees of wine, exhibited at the cross ways or in the villages, on movable stages, stories sometimes serious with solemn choruses, sometimes laughable with dances, in which satyrs and other ridiculous characters excited laughter. Their representations were called tragedies (τραγῳδίαι), that is, songs of the sacrifice of the goat, or τρυγῳδίαι, songs of the vintage; comedies, festive dances and satirical actions (*drama satyricum*). These sports were finally exhibited, with much more splendor, on the stages of the towns, and acquired a more and more distinct character, by their peculiar tone and morality. Instead of an intermediate speaker, who related his story extemporaneously, Æschylus first substituted actors, who repeated their parts by rote; and he was thus the actual creator of the dramatic art, which was soon carried to perfection; tragedy by Æschylus, Sophocles, Euripides; comedy by Cratinus, Eupolis, Crates, but especially by Aristophanes. Under the government of the thirty tyrants, the freedom, which comedy had possessed, of holding up living characters to ridicule, was restricted, and the middle comedy was thus gradually formed, in which the chorus was abolished, and, with delineations of general character, characteristic masks were also introduced. In this, Aristophanes and Alexis were distinguished. The mimes of Sophron of Syracuse, dramatic dialogues in rhythmical prose, formed a distinct species, in connexion with which stands the Sicilian comedy of Epicharmus. In the order of time, several gnomic and lyric writers belong to this period. Several philosophers appeared as didactic poets—Xenophanes, Parmenides, Empedocles; as epic poets, Pisander and Panyasis were famous for their Heraclea, and Antimachus for his Thebaid. The epic soon became more and more historical, and lost its beautiful poetic aspect. With poetry, her severer sister, eloquence, also flourished in this period, which republican constitutions rendered necessary, and which the Greek character speedily elevated to the rank of a fine art. Antiphon, Gorgias, Andocides, Lysias, Isocrates, Isæus, Demosthenes, Æschines, were highly appreciated as masters of this art, for which schools were actually established. We still possess the admired masterpieces of several of these orators. How near rhetoric was then to triumphing over poetry, is manifested in Euripides, and there is no question that it had a considerable influence on Plato and Thucydides. Mathematics was now cultivated, and geography served to illustrate history. Astronomy is indebted to the Ionic school, arithmetic to the Italian, and geometry to the academic school for many discoveries. As mathematicians, Theodorus of Cyrene, Meton, Euctemon, Archytas of Tarentum, Eudoxus of Cnidus, were celebrated. Geography was, particularly, enriched by voyages of discovery, which were occasioned by commerce; and, in this view, Hanno's voyage on the western coast of Africa, the Periplus of Scylax, a description of the coasts of the Mediterranean, and the discoveries of Pythias of Massilia in the north-west of Europe, deserve mention. The study of nature was likewise pursued by the philosophers; but the healing art, hitherto practised by the Asclepiades in the temples, constituted a distinct science, and Hippocrates became the creator of scientific medicine. The following period is usually called the *Alexandrine*, and might be characterized as the *systematizing* or *critical period*. Athens did not, indeed, cease to sustain its ancient reputation; but Alexandria was, in reality,

the leading city. From this cause, the spirit of Grecian literature necessarily took another turn; and it is evident, that the use of an immense library must necessarily have made erudition triumph over the former free action of mind, which, however, could not be immediately suppressed. In philosophy, Plato's acute and learned disciple, Aristotle, appeared as the founder of the Peripatetic school, which gained distinction by enlarging the territory of philosophy, and by its spirit of system. He separated logic and rhetoric, ethics and politics, physics and metaphysics (to which last science he gave its name), and applied philosophy to several branches of knowledge; thereby producing economics, pedagogics, poetics, physiognomics. He invented the philosophical syllogism, and gave philosophy the form which it preserved for centuries. His disciple Theophrastus followed his steps, in the investigation of philosophy and natural history. But the more dogmatic was the philosophy of Aristotle, the more caution was requisite to the philosophical inquirer, and the spirit of doubt was salutary. This was particularly exhibited in the system of scepticism which originated with Pyrrho of Elis. A similar spirit, at least, subsisted in the middle and new academies, of which Arcesilaus and Carneades were the founders. The Socratic school put forth new branches in the Stoic school, founded by Zeno of Citium in Cyprus, and the Epicurean, of which Epicurus of Gargettus in Attica was the founder. Mathematics and astronomy made great progress in the schools at Alexandria, Rhodes and Pergamus. And to whom are the names of Euclid, Archimedes, Eratosthenes and Hipparchus unknown? The expeditions and achievements of Alexander furnished abundant matter to history; but, on the whole, it gained in extent, not in value, since a taste for the wonderful had now become prevalent. The more gratifying, therefore, is the appearance of Polybius of Megalopolis, about the end of this period, who is to be regarded as the author of true historical description, by which universal history acquired a philosophical spirit and a worthy object. Geography, which Eratosthenes made a science, and Hipparchus united more closely with mathematics, was enriched in various ways. To the knowledge of countries and nations much was added by the accounts of Nearchus and Agatharchides, and to chronology by the Parian chronicles. With respect to poetry, many remarkable changes occurred. In Athens, the middle comedy gave place, not without the intervention of political causes, to the new, which approaches to the modern drama, as it took the moral nature of man for the subject of its representations. Among the 32 poets of this class, Menander, Philemon and Diphylus were eminent. From the mime proceeded the idyl, in which branch of poetry, after the period of Stesichorus, Asclepiades, etc., Theocritus, Bion and Moschus were particularly celebrated. The other kinds of poetry did not remain uncultivated; but all these labors, as well as the criticisms on poetry and the fine arts, point to Alexandria; and we shall therefore pass them over in this place. At the end of this period, Greece ceased to be independent, and Rome, the queen of empires, established her dominion over it. (See the continuation of this subject, under the articles *Alexandrian School*, and *Roman Literature*.)

Greece, Revolution of Modern. (For the history of Greece under the Eastern empire, see *Byzantine Empire;* and for the period from the downfall of this empire to the late revolution, see *Turkey*, and *Venice*.)

For centuries, the name of Greece possessed a melancholy celebrity in the political history of Europe. In the primitive seat of European civilization, amid the noblest ruins of the ancient world, one people has preserved its existence through the wild tempests of Asiatic conquerors, and has recently contended with the enemies of Christianity and civilization, like a shipwrecked mariner with the waves, for life and freedom, whilst Christian Europe beheld the death-struggle, for seven years, without coming to any resolution which posterity will consider as due from this age. From the year 1821, Europe saw the Greeks asserting a national existence; but she considered this as the effort of despair, and, from day to day, expected to see the last sparks of Grecian life extinguished. She therefore withheld, for years, the assistance that was prayed for. Europe did not see, in the oppressors of this people, a powerful state, resting on firm foundations, but rather expected every day the dissolution of this hollow mass of seraglio slaves and janizaries. The jealous policy, both of the neighboring and distant powers, had thus far supported the falling state, and therefore a contest, strange as it was terrible, was prolonged before our eyes, between a state and a people, both of whom stood equally near destruction. The Sublime Porte appeared so little in a condition to conquer the Greeks, that it

called from Africa the boldest and most powerful of its satraps, that he might exterminate the men of Greece, send their wives and children as slaves to the Nile, and spread Africans over the land of classic reminiscences. Even Frenchmen offered their aid to subjugate the Morea. Had the powerful viceroy of Egypt succeeded in uniting under one government the Ægean sea, the Peloponnesus, Crete and the land of the Nile, then this Egyptian dynasty, like the ancient Fatimites, would have been in a situation to rule the Mediterranean sea, to close the Dardanelles, to give laws to the trade of the Levant, and to invade Italy. Then would Greece, that venerable ruin of classical antiquity, have been for ever annihilated. The Porte, called the *key-stone of the European arch*, would hardly have been the shadow of the last caliphs of Bagdad. Europe would have numbered a new Sesostris among her monarchs. God be thanked that the result of the conflict has been more auspicious!

The Turks and Greeks never became one nation; the relation of conquerors and conquered never ceased. However abject a large part of the Greeks became by their continued oppression, they never forgot that they were a distinct nation; and their patriarch at Constantinople remained a visible point of union for their national feelings. (See Ranke's *Fürsten und Völker*, &c., Berlin, 1827.) The Greeks had been repeatedly called upon by Russia to shake off the Turkish yoke, as in 1769, 1786 and 1806. The last revolution broke out in March, 1821. As early as 1809, a society had been formed at Paris for the liberation of Greece. In 1814, the *Hetaireia* (q. v.) was formed in Vienna, but the revolution began too early for their plans. Coray (q. v.) with many others, as Mustoxydy, Gazy, Ducas, Cumas, Bambas, Gorgorios, Oiconomos, Capetanaki, exerted themselves to enlighten their nation, and to prepare it, by a better education, for a struggle for liberty. Similar views had been entertained fifty years earlier, by several Greeks, in different parts of the country, among whom were Panagiotis, Mavrocordato and Demetrius Cantemir. In Greece itself, several attempts were made to revive the study of the ancient language, and with it a taste for letters, civilization and liberty. This was particularly the case in the islands (see *Hydriots*), where intercourse with France, and even with the U. States, contributed to hasten the revival of a thirst for liberty. The works of Fénélon, Beccaria, Montesquieu, and those of some German scholars; also Goldsmith's Greece and Franklin's Poor Richard, were translated into modern Greek. At Athens, Saloniki, Yanina, Smyrna, Cydonia (Aivali), Bucharest, Jassy, Kuru-Tschesme (a village on the European shore of the Bosphorus), in Scio, &c., schools were established. But the war has destroyed all these schools, with the exception of that on mount Athos. Rhigas (q. v.) animated the spirit of his countrymen by his songs. In addition to all this, the wretched state of Turkey, weak from without and within; every thing, in short, seemed favorable, when the precipitancy of one or a few individuals, was the origin of infinite mischief, because the cause of liberty was not yet ripe. February 1, 1821, prince Charles Calimachi was appointed, by the Porte, hospodar of Walachia, in the place of the deceased Alexander Suzzo. The fear of new exactions (which take place, in that country, with every new governor), produced commotions among the people of Walachia; and this excitement seemed to the members of the *Hetaireia* in St. Petersburg, to afford a favorable moment for taking up arms against the Turks, in which they expected to be supported by the Russian cabinet. Without knowing any thing of this plan, a Walachian, Theodore Wladimiresko, left Bucharest, January 30, with 60 pandoors, and instigated the peasants to revolt, promising them the protection of Russia and the restoration of their old rights. The Arnaouts, who were sent against him, joined him, and he soon became master of Little Walachia, at the head of 5000 men. The Greeks in Moldavia likewise rose, under prince Alexander Ypsilanti (q. v.), a major-general in the Russian service. This insurrection was connected with the *Hetaireia*. (q. v.) Perhaps the object was to hasten the threatened breach between Russia and Turkey. Besides, the Greeks always relied much on the (so called) *Greek project of Catharine II.* March 7, 1821 (Feb. 23, old style), a proclamation of Ypsilanti was placarded in Jassy, under the eyes of the hospodar Michael Suzzo, which declared, that all the Greeks had, on that day, thrown off the Turkish yoke; that he would put himself at their head with his countrymen; that prince Suzzo wished the happiness of the Greeks; and that nothing was to be feared, as a great power was going to march against Turkey. Several officers and members of the *Hetaireia* had accompanied Ypsilanti from Bessarabia and Jassy. Some Turks were murdered, but Ypsilanti did all in his power to pre-

vent excesses, and was generally successful. He wrote to the emperor of Russia, Alexander, who was then at Laybach (q. v.), asking his protection for the Greek cause, and the two principalities Walachia and Moldavia; but the revolutions in Spain and Piedmont had just then broken out, and that monarch considered the Greek insurrection to be nothing but a political fever, caught from Spain and Italy, which could not be checked too soon (besides, Ypsilanti was actually in the service of Russia, and therefore had undertaken this step against the rules of military discipline). Alexander publicly disavowed the measure, Ypsilanti's name was struck from the army rolls, and he was declared to be no longer a subject of Russia. The Russian minister, and the Austrian internuncio at Constantinople, also declared that their cabinets would not take advantage of the internal troubles of Turkey in any shape whatever, but would remain strictly neutral. Yet the Porte continued suspicious, particularly after the information of an Englishman had led to a detection of some supposed traces of the Greek conspiracy at Constantinople. It therefore ordered the Russian vessels to be searched, contrary to treaty. The commerce of Odessa suffered from this measure, which occasioned a serious correspondence between baron Stroganoff, the Russian ambassador, and the reis effendi. The most rigorous measures were taken against all Greeks: their schools were suppressed; their arms seized; suspicion was a sentence of death; the flight of some rendered all guilty; it was prohibited under penalty of death; in the divan, the total extinction of the Greek name was proposed; Turkish troops marched into the principalities; the hospodar Suzzo was outlawed; the patriarchs of Constantinople and Jerusalem excommunicated all insurgents (March 21); and a hatti-sheriff of March 31, called upon all Mussulmans to arm against the rebels for the protection of the Islam; no Greek was, for some time, safe in the streets of Constantinople; women and children were thrown into the sea; the noblest females openly violated and murdered or sold; the populace broke into the house of Fonton, the Russian counsellor of legation; and prince Murusi was beheaded in the seraglio. After the arrival of the new grand-vizier, Benderli Ali Pacha (appointed April 10), who conducted a disorderly army from Asia to the Bosphorus, the wildest fanaticism raged in Constantinople. In Walachia and Moldavia, the bloody struggle (not the devastation of the country, however) was brought to a close through the treachery, discord and cowardice of the pandoors and Arnaouts, with the annihilation of the valiant "sacred band" of the *Hetaireia*, in the battle of Dragashan (June 19, 1821), and with Jordaki's heroic death in the monastery of Seck. (See *Ypsilanti*.) In Greece Proper, no cruelty could quench the fire of liberty; the beys of the Morea invited all bishops and the noblest Greeks (*proëdroi*) to Tripolizza, under pretence of consulting with them on the deliverance of the people from their cruel oppression. Several fell into the snare: when they arrived, they were thrown into prison. Germanos, archbishop of Patras, alone penetrated the intended treachery, and took measures with the others for frustrating the designs of their oppressors. The beys of the Morea then endeavored to disarm the separate tribes; but it was too late; the Mainotes, always free, descended from mount Taygetos, in obedience to Ypsilanti's proclamation, and the heart of all Greece beat for liberty.

The revolution in the Morea began, March 23, 1821, at Calavrita, a small place in Achaia, where 80 Turks were made prisoners. On the same day, the Turkish garrison of Patras fell upon the Greek inhabitants; but they were soon relieved. In the ancient Laconia, Colocotroni and Peter Mavromichalis roused the people to arms. The archbishop Germanos collected the peasants of Achaia. In Patras and the other places, the Turks retreated into the fortresses. As early as April 6, a Messenian senate assembled in Calamata, and the bey of Maina, Peter Mavromichalis, as commander-in-chief, proclaimed that the Morea had shaken off the yoke of Turkey to save the Christian faith, and to restore the ancient character of their country. "From Europe, nothing is wanted but money, arms and counsel." From that time, the suffering Greeks found friends in Germany, France, Switzerland, England and the U. States, who sympathized with them, and did all in their power to assist them in their struggle. The cabinets of Europe, on the contrary, threw every impediment in the way of the Hellenists, until they were finally obliged, against their inclination, to interfere in their favor. Jussuf Selim, pacha of Lepanto, having received information of these events from the diplomatic agent of a European power, hastened to relieve the citadel of Patras, and the town was changed into a heap of ruins. The massacre of the inhabitants, April 15, was the

signal for a struggle of life and death. Almost the whole war was thenceforward a succession of atrocities. It was not a war prosecuted on any fixed plan, but merely a series of devastations and murders. The law of nations could not exist between the Turks and Greeks, as they were then situated. The monk Gregoras, soon after, occupied Corinth, at the head of a body of Greeks. The revolution spread over Attica, Bœotia, Phocis, Ætolia and Acarnania. The ancient names were revived. At the same time, the islands declared themselves free. In the beginning of April, the wealthy merchants and ship-owners, the bold mariners of Hydra, Spezzia and Ipsara (see *Hydriots*), long before gained over to the cause of liberty by Bambas* and other patriots, erected an independent government in Hydra. They fitted out their vessels for war, and the blue and red flag of the *Hetaireia* soon waved on 180 vessels, mostly of 10 or 12 guns.† It must be remembered that the inhabitants of the islands, particularly those just mentioned, and the heroic population of Suli, are very different from the people of the Morea and Livadia, if we wish to form a correct understanding of the Greek struggle. While the conduct of the Moreots has but too often drawn on them the just reproach of their compatriots, the former have gained a name in history, which will be honored as long as an invincible love of liberty and bold and inflexible courage in an unequal struggle are prized. Even women, among the islanders, took arms for liberty, and, among them, Lascarina Bobolina, of Spezzia, was distinguished. The Hydriots cruised in the Turkish waters, and blockaded the ports. In some islands, the Turks were massacred in revenge for the murder of the Greeks at Patras, and, in retaliation, the Greeks were put to death at Smyrna, in Asia Minor, and in those islands which had not yet shaken off the Turkish yoke. The exasperation was raised to its highest pitch by the cruelties committed against the Greeks in Constantinople, after the end of March. On mere suspicion, and often merely to get possession of their property, the divan caused the richest Greek merchants and bankers to be put to death. The rage of the Mussulmans was particularly directed against the Greek clergy. April 22, Gregory (q. v.) the patriarch of Constantinople, was murdered, with his bishops, in the metropolis. In Adrianople, May 3, the venerable patriarch Cyrillus, who had retired to solitude, and Prœsos, archbishop of Adrianople, and others, met the same fate. Several hundred Greek churches were torn down, without the divan paying any attention to the remonstrances of the Christian ambassadors. The savage grand-vizier, indeed, lost his place, May 1, and soon after his life; but Mahmud (q. v.), and his favorite Halet Effendi, persisted in the plan of extermination. The courageous Stroganoff (q. v.) was yet less able to make his remonstrances heard, after the grand seignior, in order to save his favorite, who was hated by the janizaries, on account of his plan of reform in the military department, gave a seat, in the divan, to three members of those riotous troops. The commerce of Russia, on the Black sea, was totally ruined by the blockade of the Bosphorus, and the ultimatum of the ambassador was not answered. Baron Stroganoff, therefore, broke off all diplomatic relations with the reis effendi, July 18, and, July 31, embarked for Odessa. He had declared to the divan, that if the Porte did not change its system, Russia would feel herself obliged to give "the Greeks refuge, protection and assistance." The answer of the reis effendi to this declaration, given too late, was sent to Petersburg; but it was only after the most atrocious excesses committed by the janizaries and the troops from Asia (for instance, in Constantinople, June 27 and July 2), that the foreign ministers, particularly the British minister, lord Strangford, succeeded in inducing the grand seignior to recall the command for the arming of all Mussulmans, and to restore order. The Porte even promised an amnesty, on condition of the submission of the Greeks; but what guarantee was there for the fulfilment of it? Individual executions still continued. Prince Calimachi, hospodar of Walachia, was sent, with his family, to Asia Minor, where he suddenly died on hearing of the execution of his brother. The old families of the Fanariots (q. v.) no longer existed in Constantinople, and, after all the cruelties they had suffered, the Greeks could not trust the amnesty of the sultan. They remembered, too, the 300,000 Moreots, who had been mur-

* Neophytos Bambas, teacher of natural philosophy and mathematics in the school of Scio, published, in 1818, in Venice, a manual of moral philosophy, which is one of the most valuable productions of modern Greek literature. He has since been professor in the Ionian university, in Corfu, established by the influence of lord Guilford.

† According to Pouqueville, the mercantile marine of the Greek islands consisted of 615 vessels, with 17,500 sailors and 5878 guns

dered by the orders of a former sultan, though their pardon had been stipulated with Catharine II. Their hopes were also strengthened by the war which broke out between Turkey and Persia, and they never gave up the confidence that the "*Moscoviti*" would at last arm for their protection, which Russia had taken upon herself in the three last treaties with the Porte. Meanwhile the Turkish general in Epirus, Khurshid Pacha, who was besieging the rebel Ali (q. v.), in Yanina, had sent troops against the Suliots, into the Morea and to Thessaly. But the Ætolians under Rhangos, and the Acarnanians under the brothers Hyscus, obliged the Turks to shut themselves up in Arta, and made themselves masters of Salona. Ulysses put himself at the head of some Armatolics (q. v.), in Thessaly, and the archimandrite, Anthymos Gazis, called the peasants to arms. In Eubœa (Negropont), all the peasants took up arms, and obliged the Turks to shut themselves up in the fortified cities; but these movements were not decisive, because they took place without coöperation; and, in fact, nothing was effected, but the driving the Turks from the country into the cities. The pacha of Saloniki delivered the pacha who was besieged in Larissa. Omer Vrione, the lieutenant of Khurshid Pacha, entered Livadia; the inhabitants of Athens fled to the islands; the Acropolis was garrisoned by Turks. The Greeks afterwards retook Athens, and attempted to reduce the Acropolis by famine; but it was relieved by Omer Vrione, July 30, 1821, and the inhabitants of Athens again fled to Salamis. On the Achaian sea, Greek and other pirates frustrated the plans of the *navarchs* (admirals) in Hydra, and the European powers were obliged to protect their vessels by cruisers. In the general confusion, the islanders distinguished themselves by their valor in battle, and their greater order in the organization of government; and if much complaint has been made against their piracies, it must be remembered, that the convulsed state of things offered great temptations to piracy; that the government was too weak to repress it; and that, privateering being lawful against the Turks, it was not strange that a people, so much removed from the influence of European civilization, exceeded the legitimate limits of private warfare. The Greek sailors were bolder and much more expert than the Turkish, their vessels much swifter. In fact, we can hardly imagine a navy in a more wretched state of discipline than the Turkish. When, therefore, the first Turkish squadron left the Dardanelles, May 19, the Greeks constantly pursued it with their fire-ships, avoiding, at the same time, a general engagement; and, June 8, they attacked a vessel of the line, which had got ashore at Tenedos, burned it, and compelled the rest of the squadron to put back to the Dardanelles. June 15, the Ipsariots landed on the coast of Asia Minor, and took possession of the ancient Cydonia, now the Greek city of Aivali; but, after they had retired, the Turks burned the city, and 35,000 inhabitants either perished or were driven from their homes. The ill success of their expedition added fresh fuel to the rage of the Turks. The Greeks in the island of Candia, who had avoided all participation in the insurrection, were disarmed, and their archbishop and several clergymen executed. But the peasants in the mountains, and the inhabitants of the small island Sphakia, called the *Suliots of Candia*, refused to give up their arms, collected, and drove the Turks back again into the towns. From that time, the struggle continued, and the Turks, though supported by several thousand men from Egypt, were never again able to make themselves masters of the highlands. They, however, maintained themselves in the cities. Madden, in his Travels in Egypt, &c., gives some interesting details of the Egyptian expedition to Candia. On the island of Cyprus, where also there had been no appearances of an insurrection, the Greeks were disarmed in November, 1821, and almost all the inhabitants of Larnica, with the archbishop and other prelates, murdered. The peasants united for mutual protection; as a punishment for which 62 villages were burned in August, 1822. Since that time, the stillness of the grave has brooded over Cyprus. Similar atrocities were committed by the Turks at Scala Nuova, in Rhodes and at Pergamos, after the Greeks had surprised the latter place. In Smyrna, also, new cruelties were committed; and the European consuls did not succeed until November, 1821, in inducing the pacha to put a stop to the enormities of the Turks. Since that time, the public security has rarely been interrupted in that place.* But in the European prov-

* Here, and in other places, the commanders of French, English, Austrian and American vessels, and the European consuls, among whom the French consul, David, deserves to be particularly mentioned, saved the lives of many unfortunate

inces of Turkey, the cruelties against Christians continued, as the sultan had issued a *hatti-sheriff* (September 20, 1821), calling upon all Mussulmans to take arms against the Giaours. This order was not published in Constantinople, for which the populace, in that place, revenged themselves by setting fire to the city, whenever news of ill success exasperated them against the Greeks.

The great Turkish fleet, under the capudan pacha, Kara Ali, strengthened by Egyptian, Tunisian and Algerine vessels, had, indeed, driven away the Greek flotillas, supplied the Turkish garrisons in the Morea with troops, arms and provisions, burned the small village of Galaxidi, in the gulf of Lepanto, October 2, 1821, and taken some small Greek fishing craft in the harbor of this place. Yet the fleet had effected nothing decisive. Hardly had it returned to the Dardanelles, October 22, 1821, when the Greek fleets renewed their system of blockade, and became, as formerly, masters of the Ægean sea and the gulf of Saloniki. Meanwhile, Demetrius Ypsilanti had arrived at Hydra, with prince Alexander Cantacuzeno, with authority from his brother, Alexander Ypsilanti. In Hydra, the unfortunate result of the struggle in Walachia was not yet known. Demetrius promised the aid of Russia, and announced the restoration of the Greek empire. Yet it was with great difficulty that he succeeded in being appointed, on July 24, 1821, *archistrategos* (commander-in-chief) of the Peloponnesus, the Archipelago, and all the liberated provinces, and, as such, in being placed at the head of the Greeks in the Morea, where the dissensions among the *capitani*, and the undisciplined state of the soldiery, had a most injurious effect. Soon after (August 3), the principal Turkish fortress, Monembasia (Napoli di Malvasia) surrendered to prince Cantacuzeno, and Navarino to Demetrius Ypsilanti; but the rapacious Moreots did not observe the articles of capitulation. Some details of what happened after the capitulation of Navarino are related in the editor's Journal in Greece (in German, Leipsic, 1823). Demetrius, disgusted at this disorder, declared his intention to leave Greece, unless he were invested with power to put a stop to this licentiousness, which he received at least nominally. At the same time, the senate of Calamata united with that of Hydra, in order to assemble a congress of deputies from all Greece, at Calamata. Whilst Mavrocordato and others were making these preparations, Demetrius Ypsilanti was closely besieging Tripolizza, the chief fortress of the Turks, situated in the plain of Mantinea, in the centre of Greece. The garrison was on the point of surrendering, when the appearance of the Turkish fleet, in the waters of the Peloponnesus, gave them new courage. But in order to induce the Turkish troops to make an obstinate resistance, from fear of the vengeance of the Christians, the Turkish commanders, at Tripolizza, ordered 80 priests and noble Greeks, who had been brought there, in part, by the treacherous invitations of the beys, to be all murdered, excepting two. October 5, after 2000 Albanians had received permission to depart, and the negotiations with the Turks were broken off, Tripolizza was taken by storm. The last post was surrendered, on terms of capitulation, by the gallant Kiaja Bey; but the Moreots could not be restrained, and 8000 Turks perished. Even the Albanians were attacked, and some of them plundered. In Tripolizza, the Moreots gained their first heavy cannon, and the place became the seat of the *soi-disant* Greek government, until it was transferred to Argos.

Ulysses was equally successful in Thessally. He and some other guerilla leaders, or *capitani*, among whom was Perovos, on September 5 and 6, near Thermopylæ, defeated a Turkish army, which had advanced from Macedonia. January 26, 1822, the Acrocorinthus (q. v.) fell into the hands of the Greeks by capitulation. On the other hand, the pacha of Saloniki took the peninsula of Cassandra, Nov. 11, by storm, the Greeks having become enfeebled by dissensions. 3000 Greeks were put to the sword, women and children carried into slavery, and the flourishing peninsula made a desert. The monks and hermits on mount Athos (Monte Santo), alone saved themselves by a heavy ransom, and remained undisturbed, because the Turks consider these rocky hermitages sacred. At the same time, Khurshid Pacha, November 13, assaulted Ali's fortress Zathariza, and the old tyrant of Epirus in vain expected succor from the Greeks in his last place of refuge, a castle in the lake near Yanina. The Greeks, towards the end of November, having occupied Arta, without obtaining possession of the citadel, were obliged to leave the city in the middle of December, when Omer Vrione returned from Livadia, and dis-

persons, who would otherwise have become the victims of Turkish or Greek fanaticism.

perse themselves in the mountains. During this irregular war, the government began to acquire some form, as the separate senates established connexions with each other. They invested Demetrius Ypsilanti with the chief command in the Morea, Ulysses with the same office in Thessaly, and somewhat later also in Attica. Prince Mavrocordato received the chief command in the Albanian provinces. They finally sent prince Cantacuzeno to the emperor Alexander, to implore his assistance; but the prince could not obtain passports for St. Petersburg, because the system of the holy alliance was *neutrality* (as they called it), and discouragement of the Greek insurrection. Equally unsuccessful were the *navarchs*, in Hydra, in their attempts to secure the neutrality of the viceroy of Egypt by sea, as he now hoped for an opportunity of uniting Crete with Egypt.

First Attempt towards a Political Organization of the Greeks, January 13 (*January* 1), 1822, *in Epidaurus, until the second National Assembly in Astro, March* 14, 1823. With the greatest difficulty, Mavrocordato and some prelates had succeeded in giving somewhat of a federative constitution and a central government to a country which was by no means yet entirely freed from the Turks, and was occupied by parties often hostile to each other. The western part of Greece—Acarnania, Ætolia and Epirus, sent thirty deputies to Missolonghi, who, under the presidency of Alexander Mavrocordato, formed a government or *gerousia*, Nov. 4, 1821, consisting of ten members; the eastern part of the main-land, comprising Attica, Bœotia, Eubœa, Phocis, Locris, Doris, Ozolæ, Thessaly and Macedonia, sent thirty-three deputies to Salona, who, under the presidency of Theodore Negris, formed, on the 16th of November, the areopagus of fourteen members. The Morea, or the Peloponnesus, with the islands of Hydra, Ipsara, Spezzia, &c., sent sixty deputies to Argos, who assembled, Dec. 1, under the presidency of prince Demetrius, and established the Peloponnesian *gerousia* of twenty members. These three governments were to prepare a permanent constitution, which was to receive, in future, such amendments as experience should suggest. For this purpose, 67 deputies from all the provinces of Greece formed the first national assembly in Epidaurus, Jan. 10, 1822, under the presidency of Mavrocordato, which, January 13, the Greek new year's day, proclaimed a provisionary constitution. Its principles were the following: the annual election of all chief magistrates of the provinces, districts and communities; laws were to be made by the concurrent vote of the deliberative and executive councils; the execution of laws was to rest with the executive council, which appointed the eight ministers; the independence of the judiciary was to be provided for; this branch of government was to be exercised by the district, provincial and supreme courts. The congress then elected the thirty-three members of the legislative and the five members of the executive council. Mavrocordato was elected *proëdros*, or president; Theod. Negris, secretary of state of the executive council; Ypsilanti, who had expected this place, was appointed president of the legislative council, but never discharged the duties of his office. Finally, the congress of Epidaurus issued a manifesto, Jan. 27, 1822, in which they pronounced the union of the Greeks under an independent federative government. The operation of this was not so beneficial as had been expected. A people so long enslaved, and so deficient in civilization, could not at once establish a wise and firm government. The central government fixed its seat at Corinth, and, at a later period, again at Argos. The Porte was now obliged to divide its forces. One army was unsuccessfully employed in Armenia on the Euphrates, against the Persians; another was stationed on the Danube, to observe the Russian army in Bessarabia. But Ali's fall encouraged the Porte, and it was with difficulty that the Austrian and English ministers could convince the divan of the peaceable intentions of Alexander. But, in 1822, at the request of Russia, the sultan ordered the restoration of some Greek churches, and the election of a new patriarch in the usual way. The choice fell upon Anthymos, bishop of Chalcedon. He was treated with respect, for the purpose of inducing the Greeks to accept the amnesty. The Asiatic hordes, in May, 1822, evacuated the principalities of Walachia and Moldavia, after committing every kind of excess; in July, new hospodars were appointed—Ghika for Walachia, and Sturdza for Moldavia; both were Boyards, and Greeks were excluded from all offices in the principalities. The new hospodars were under the superintendence of Turkish seraskiers, and European Turks continued to occupy the principalities; they were, however, withdrawn from Jassy, which they burned and pillaged, August 10, 1822, enraged at the orders of the divan.

Meanwhile, the year 1822 had produced important results in Greece, because both parties had followed, in some sort, a military plan of operations. After Ali's fall, Khurshid Pacha in Thessaly determined to collect reinforcements from Rumelia, in order to conquer Livadia and Morea, whilst, in February and March, 1822, a Turkish fleet, under Hali Bey, was to reinforce the garrisons in the Morea, so that Jussuf Pacha, from Patras and Lepanto, could support Khurshid's attack upon the isthmus and his invasion of the Morea. But the attempt of the Turkish fleet to reduce the Morea by fresh troops, totally failed, and the opposition of the Suliots kept back the seraskier in Epirus. These events gave Colocotroni time to shut up the troops, which had been landed in Patras, and to send assistance to Acarnania. At the same time, new insurrections broke out in several places, which again divided the power of the Turks. The misfortune of Scio saved the Greek main-land. The numerous Greek population of the flourishing and defenceless island of Scio (see *Scio*) had declined every invitation to engage in the revolution; but, March 23, 1822, a Greek fleet from Samos, under Logotheti, having appeared on the coasts, the peasants, who labored under the greatest oppressions, took up arms. Great disorders occurred, and the Turks, after having taken 80 hostages from among the richest inhabitants of the city, retired into the citadel. At this moment, the great Turkish fleet made its appearance. In order to punish Scio, the capudan pacha abandoned his plan of operations against the Morea, and landed (April 11th) 15,000 of the most barbarous of the Asiatic troops, after the Sciots had rejected the offer of amnesty. The islanders were beaten, and in a few days the paradise of Scio was changed into a scene of fire and blood. It was with great difficulty, and at the risk of their own lives, that the European consuls (among whom the courageous French consul Digeon was distinguished), and the captains of some European vessels, were able to save a few hundred Greeks. Part of the people escaped to their vessels; others continued the struggle of despair in the mountains. The European consuls, by means of a pastoral letter of the archbishop, and by the written assurance of the surviving hostages, that the Sciots might trust the offered amnesty, if they would deliver up their leaders and their arms, finally effected the submission of the peasants. Still, murders, burnings and pillaging did not cease. According to the Turkish lists, down to the 25th of May, 41,000 Sciots, mostly women and children, were sold into slavery. A similar fate was prepared for Ipsara, Tine and Samos. But the Ipsariots, having already made preparations to send their families to the Morea, hovered round the Turkish fleet with 70 small vessels, among which were several fire-ships, called *hephæstia*, which were as ingeniously constructed as they were skilfully directed. Forty-three Ipsariots and Hydriots devoted themselves to death, rowed with their *scampavias* (a kind of gunboats) into the midst of the fleet of the enemy, which still lay in the road of Scio; and in the night of June 18, 1822, captain George attached fire-ships to the ship of the capudan pacha and to another vessel of the line. The former blew up, with 2286 men; the latter was saved. The capudan pacha was mortally wounded, and carried on shore, where he died. The Turks were at first stupified; but their rage soon broke out, and the last traces of cultivation, the mastic villages, so lucrative to the Porte, were destroyed. In Constantinople, Turks bought Sciots merely for the purpose of putting them to death at pleasure. The merchants of Scio, resident at Constantinople, and the hostages which were carried thither, were executed in secret or in public, without any kind of legal process. Thus the Morea and the Archipelago were taught what fate they were to expect. The Porte, however, began to perceive that it was destroying its own resources by the system of devastation. The pacha of Smyrna, therefore, received strict injunctions from the sultan to maintain order and to protect the Greeks. In Scio, the new governor, Jussuf Bey, gave back the lands to those Greeks who returned. In Cyprus, where the murder of the Christians had been continued until the end of 1822, Salih Bey, a humane officer of the pacha of Egypt, finally protected the district under his command from utter devastation; and, in 1823, the new governor, Seid Mehemet, endeavored to restore order in the whole island. The insurgents also occupied the Turkish troops in Macedonia. The enormities of the Asiatic troops, who traversed this province, to join Khurshid's army, excited an insurrection among the mountaineers, who had previously remained quiet. Under the capitani Diamantis, Tassos and others, they occupied the passes of the Olympus, and, March 24, 1822, captured the im-

portant place of Cara-Veria, the ancient Berœa. But the pacha of Saloniki, Abbolubut, finally defeated them with his cavalry at Niausta; the peasants dispersed, and about 150 villages experienced the fate of Scio. 5000 Christian families perished, and the pacha boasted that he had murdered in one day 1500 women and children. Even the Porte disapproved these measures, and the pacha was condemned to be strangled; but, surrounded by his body-guard, in the fortress of Saloniki, he escaped the execution of the sentence. (The Porte afterwards, however, appointed him seraskier of Rumelia, and in November, 1823, he marched with 15,000 men from Larissa to Zeitun.) Whilst Scio was desolated, and Macedonia bled, the central government at Corinth, under Mavrocordato, president of the executive council, was engaged, in connexion with the provincial governments, in organizing the administration of the country, provisionally, by the law of April 30, 1822 (the first year of independence), introducing order into the army, raising a loan, promising the soldiers land (by the law of May 7, 1822, May 19, new style), and, as there existed no taxes except customs, in laying a tax on the productions of the soil; but they met with resistance in almost all their attempts, particularly from the old capitani, who had been entirely independent during the government of the Turks. Each desired to command and to fight on his own account, and for his own profit. Thus the avaricious and ambitious Colocotroni, the fierce Ulysses,* and the haughty Mavromichalis, and even Ypsilanti, yielded with reluctance to the new order of things. The deficiency of human language, which obliges us to use the same word for things which are very different, constantly creates misunderstanding, and we must warn our readers not to connect with the words *government*, *ministers*, *law*, &c., applied to Greece at this time, such ideas as they annex to the words when used of European or North American affairs. If a nation, which has been for centuries in a state of oppression and lawlessness, rises, it must undergo many changes before the elements of order are developed. Under the Turks, the Greeks had no connexion with each other; how could they be expected to form at once a peaceful whole? The bravest soldiers among them were the capitani from Maina and Suli, but these had been, mostly, *clephtes* or robbers, totally independent, and wished to continue the war independently, for their own interests, as they had previously done. Of this class is Colocotroni. Submission to any sort of national organization was foreign to their habits. The inhabitants of the Morea were mostly wretched peasants, who had always lived in such a state of bondage, that they were only fit to engage an enemy under shelter, or when their numbers were greatly superior, but could never be brought to fight in open combat on equal terms. They were, moreover, poor, and few among them could be induced to make any sacrifices. At the same time, they thought liberty delivered them from all taxes; and, indeed, what had they to pay? War, putting a stop to production, left the government without resources, and without the means of exercising authority. Add to this, that the Greeks were continually quarrelling among themselves. The editor was present at a fight between the capitano Niketas and some Moreots, for the possession of some cattle. Under these circumstances, the words *law* and *government* must be understood in a very restricted sense. The editor's Journal, above referred to, relates particularly to the state of Greece at this period. All that enabled the Greeks to continue their struggle was the wretchedly undisciplined character of their Turkish enemies. Mavrocordato had a difficult part to perform, because he had not obtained his dignity of *proëdros* on the field of battle. Yet, by the influence of Negris, he received the command of the expedition to Western Hellas (Epirus), with full civil and military power. The *proëdros*, with 2000 Peloponnesians and the corps of Philhellenes* (about 300 men, under general Normann, formerly a general in the Würtemberg service), joined, on June 8, the Albanian bands of the brave Marco Botzaris, for the purpose of covering Missolonghi, the strong-hold of Western Hellas, of relieving Suli, and capturing Arta. Here they had to contend with the pacha of Yanina, Omer Vrione, and the pacha of Arta, Ruchid, whilst the Turkish commander-in-chief (seraskier) Khurshid, who had made an unsuccessful attack on Thermopylæ in May, had forced his way (June 17) through Tricala to Larissa. Suli, in

* Ulysses even ordered a brave officer, the colonel Haverino Palasca, and a capitano, Alexis Nuzzo, sent by government to induce the wild capitano to act in concert with a general plan of operations, to be put to death.

* Those Europeans and Americans who had gone to Greece to serve in the insurrection.

Albania, was relieved; but, after the bloody battle of Peta (July 16, 1822), where the capitano Gozo treacherously fled, and the Philhellenists, who made the longest stand against the enemy, lost 150 men, with their artillery and baggage, Botzaris and Normann were obliged to throw themselves into the mountains. Mavrocordato in vain called the people to arms; the other commanders refused to assist him; general Varnakioti went over to the enemy, and the internal dissensions among the Albanians enfeebled the strength of the Greeks. The castle of Suli was surrendered to the Turks on Sept. 20. Part of the Suliots (1800 men, with their wives and children) took refuge under the protection of the British in Cephalonia; the rest fled to the mountains. Mavrocordato, with 300 men, and Marco Botzaris, with 22 Suliots, finally threw themselves (November 5) into Missolonghi. "Here," said the former, "let us fall with Greece." Omer Vrione now considered himself master of Ætolia, and advanced, with Ruchid, at the head of 11,000 men, to Missolonghi. Jussuf Pacha sent troops from Patras and Lepanto against Corinth, and Khurshid, who, in Larissa, had received reinforcements from Rumelia and Bulgaria, determined to advance from Thessaly, through Livadia (where the Greeks, June 19, 1822, had reduced the Acropolis by famine, after a siege of four months), against the isthmus; and then, after forming a union with Jussuf and Omer Vrione, to crush the insurgents in the Morea. His main body, 25,000 strong, composed principally of cavalry, had already passed Thermopylæ, which Ulysses had defended so valiantly in May and June, without opposition. On his march through Livadia, he laid every thing waste, proclaimed an amnesty, and occupied Corinth, which a priest of the name of Achilles, who afterwards killed himself, had basely surrendered on July 19; but when Khurshid attempted to penetrate the passes in person, he was three times repelled by Ulysses, near Larissa, where he died, November 26, just before the arrival of the capidgi bachi, who brought his death warrant. That body of cavalry, however, which had so rashly pushed forward without infantry, and was unable to obtain food or provender, perished in the defiles of the Morea. When it advanced against Argos (from which the central government had fled), formed a junction with 5000 men of Jussuf's army, and sent reinforcements to Napoli di Romania, the danger united all the capitani. Nicholas Niketas, who was on the point of taking Napoli di Romania by capitulation, Mavromichalis and Ypsilanti retreated to the heights of Argos, laying waste the open country; Ypsilanti, in the ruins of the castle of Argos, held the enemy in check; the Greek fleet prevented the relief of Nauplia, or Napoli di Romania, by the great Turkish fleet, and took an Austrian store-ship, bound to Napoli di Romania; Ulysses occupied the defiles of Geranion; Colocotroni hastened from Patras, which he was besieging, to the scene of danger, called the people to the standard of the cross, assumed the chief command, and, in the latter part of June, occupied the defiles between Patras, Argos and Corinth, by which he cut off the connexion of the Turks in Thessaly with Khurshid. The skirmishing began on all sides, and continued day and night, from August 1 to August 8. On the latter day, the Turkish commander-in-chief, Dram Ali (or Tshar Hadgi Ali Pacha), whose troops had nothing but horse-flesh to eat, offered to evacuate the Morea; but Colocotroni refused the offer. The pacha then determined to break through to the isthmus of Corinth; but Niketas fell upon the separate corps of the Turks, on the night of August 9, in the defile of Tretes; so that hardly 2000, without artillery or baggage, reached the isthmus, where Ypsilanti entirely destroyed them.* Another corps, which fled towards Patras, was destroyed by Colocotroni; the remaining corps was routed by the Mainots, August 26, near Napoli. Thus more than 20,000 Turks disappeared, in four weeks, from the Greek soil. Some thousands still held the isthmus and the Acrocorinthus, but were soon obliged to evacuate the isthmus, and were destroyed by Niketas, in the defiles, in an attempt to break through to Patras. 500 Turks remained in the Acrocorinthus until November, 1823. The conquerors and the Moreots now perceived, that they must not seek safety behind the isthmus, but must push the war under Olympus. The Turkish fleet, which had lain at anchor for four weeks in the gulf of Lepanto, and had attacked Missolonghi without success, set sail, September 1, with the plague on board. After an unsuccessful attempt to break through the line of 57 Greek brigs, which blockaded Nauplia, it finally came to anchor at the entrance of the Dardanelles, off Tenedos. November 10, 17 daring sailors, of the band of the

* Hence Niketas received the surname of *Turkophagos*, the Turk-eater.

40 Ipsariots, dressed like Turks, conducted two fireships under full sail, as if they were flying from the Greeks, whilst two Ipsariot vessels pursued them, firing on them with blank cartridges, into the midst of the Turkish fleet, and fastened one of them to the admiral's ship, the other to the ship of the capitana-bey. Both were soon in flames; the former narrowly escaped; the latter blew up with 1800 men; the capudan pacha, Cara Mehmet, however, got on shore, before the explosion took place. Three frigates were wrecked on the coast of Asia Minor; one vessel of 36 guns was captured; storms and terror destroyed a part of the Ottoman fleet, and of 35 vessels only 18 returned, much injured, into the Dardanelles. The 17 Ipsariots arrived safely at Ipsara, where the ephori rewarded their leaders, Constantine Kanaris and George Mniauly, with naval crowns. The Greeks were once more masters of the sea, and renewed the blockade of the Turkish ports, which Great Britain now formally acknowledged. The British government seemed to have changed their policy towards the Greeks, from the time of Canning's entrance into the ministry, and Maitland, lord high commissioner of the Ionian isles, displayed less hostility against them. Even Austria and France, who had previously protected neutral vessels against "the arbitrary and unlawful measure of the blockade," now seemed to acknowledge the right of blockade by the Greeks. Greek vessels delivered Missolonghi on the sea side, November 20. The Suliots maintained themselves in the defiles of the Chimæra, and the remains of the army of Mavrocordato on the coast of the gulf of Lepanto. The amnesty, proclaimed by Omer Vrione, met with no confidence among the mountaineers; had he not already betrayed two of his former masters? His expedition against Ætolia entirely failed. Wherever his troops appeared, the peasants burned their villages, collected in bands in the mountains, and continued the guerilla warfare.* Near Missolonghi, finally, which, from Nov. 7, 1822, to the assault of Jan. 6, 1823, he had repeatedly attacked, Omer Vrione was repulsed by Mavrocordato and Marco Botzaris, with great loss; he was obliged to raise the siege, lost his ordnance, and retreated to Vonitza. The most important consequence of this unsuccessful campaign of the Turks, was the fall of Napoli di Romania. (q. v.) On the day of St. Andrew, the patron of the Morea (November 30, old style, December 12, new style), a band of volunteers took the fort Palamidi by assault. This brought the city into the power of the Greeks, who observed the terms of the capitulation, and transported the Turkish garrison to Scala Nuova. The seat of government was to have been established in this bulwark of Peloponnesian independence, when the old discord among the capitani broke out anew, and Colocotroni became suspected of the design of becoming prince of the Morea under Turkish protection.

Meanwhile, Constantinople was disturbed by the riots of the janizaries. The unsuccessful campaign in the Morea, the disasters in Asia, the scarcity in the capital (caused by the interruption of importations by the Greeks), the severe sumptuary orders of the sultan, and the command to deliver up the gold and silver to the mint, the debasing of the coin, and the obstruction of commerce, caused general dissatisfaction among the Mussulmans. Halet Effendi, the faithful friend of the sultan from his youth, who had become obnoxious on account of his plans for quelling the mutinous spirit of the janizaries (who refused to march to the Morea) by means of Asiatic troops and European discipline, and on account of his influence, which excluded the grandees of the empire from the confidence of the sultan, fell a victim to the hate of the soldiery. Sultan Mahmud II (q. v.) found himself constrained to discharge the adherents of Halet—the grand-vizier Salih Pacha, the mufti, and other high officers. He hoped to save his friend by an honorable banishment to Asia (Nov. 10); but he was obliged to send his death warrant after him, and Halet's head, with those of his adherents, was exposed on the gates of the seraglio (Dec. 4, 1822). The hatti-sheriff, which appointed Abdullah Pacha, a friend of the janizaries, grand-vizier, concluded with the words, "Look well to your ways, for, God knows, the danger is great."

Adoption of a Constitution in Greece, and third unsuccessful Campaign of the Turks against the Greeks, in 1823. The central government of Greece, in which Mavrocordato and Negris were distinguished,

* The war, as we have already said, was not carried on by regular battles, but consisted of skirmishes, surprises, &c., as every insurrection of an undisciplined people must; and, generally speaking, it is the way in which men can most effectually defend their own soil against well appointed invaders. The Greeks were well fitted for this sort of war, by their uncommon activity. Their swiftness in running is such, that many of them can overtake a well mounted horseman in a long race.

aimed at two objects. Fully sensible of the truth of the words of a Greek author, "as all the states of Greece wished to rule, all have lost the sovereignty," they endeavored to establish union at home; on which, at the same time, they founded their hope that Europe would, at length, look with approbation and confidence on the restoration of an independent Greek state. In this view, the Greek government at Corinth issued a proclamation to the Christian powers (April 15, 1822); but the negotiations on the Greek affairs, at Vienna, and afterwards at Verona, took a turn unfavorable to the Greeks, or rather remained unfavorable, when the Porte, by its declarations of February 28 and April 18, 1822, seemed to be disposed to be more lenient. The "holy alliance" then thought that the continuance of the Porte as a legitimate power, and the acknowledgment of Greek independence, were incompatible; yet the powers thought themselves obliged to interpose with the sultan in favor of the civil and religious security of the Greeks. Count Metaxa was sent as envoy of the Greek government to the congress of Verona (see *Congress*); but he was only permitted to go to Roveredo. Jan. 2, 1823, he wrote from Ancona to pope Pius VII, describing the miserable condition of Greece, imploring his intercession with the monarchs, and declaring at the same time, that the Greeks were willing to submit their rights to the examination of the congress, and to be ruled by a Christian sovereign, under wise and firm laws, but would never again consent to any sort of connexion with the Turks. The government of Argos declared the same, in a memorial of Aug. 29, 1822, directed to the congress. The answer to these entreaties is contained in the following passage of the circular of Verona (Dec. 14, 1822): *Les monarques, décidés à repousser le principe de la révolte, en quelque lieu et sous quelque forme qu'il se montrât, se hatèrent de le frapper d'une égale et unanime réprobation. Mais écoutant en même tems la voix de leur conscience et d'un devoir sacré, ils plaidèrent la cause de l'humanité, en faveur des victimes d'une entreprise aussi irréfléchie que coupable* (The monarchs, decided to suppress the principle of revolt, in whatever place or under whatever form it might appear, hastened to condemn it with equal and unanimous disapprobation. But, open at the same time to the voice of their conscience and of a sacred duty, they have pleaded the cause of humanity in favor of the victims of an undertaking as inconsiderate as guilty). The dissensions in Greece, it cannot be denied, were a strong objection to the acknowledgment of Greek independence. Colocotroni refused the central government admission into Napoli di Romania, and deliberated, with other ambitious capitani in Tripolizza, on a division of the Morea into hereditary principalities.* The central government, however, succeeded in preventing the dangers of a civil war, and called a second national assembly at Astro, in January, 1823. In regard to the election of deputies, the laws of Nov. 21 and Dec. 3, 1822, had already established two divisions, that of *gerontes* or elders, for from 10 to 50 families, and that of senators according to eparchies. Mavrocordato principally contributed to the restoration of concord, at the time when the declaration of the congress of Verona was communicated by the British embassy at Constantinople to this effect: "The Greeks must submit to their lawful sovereign the sultan." At the same time, information was received of a new Turkish expedition, destined to attack the Morea by land and sea. The number of deputies was now increasing at Astro; even Ulysses and other capitani repaired thither, with their bands, from Tripolizza; so that the national assembly at Astro consisted of 100 deputies, at the opening of its sessions (March 14). Mavromichalis was elected president; Theodore Negris, secretary. Even Colocotroni submitted to the assembly. The members of the legislative and executive councils were then elected. Condurioti of Hydra was chosen president of the former; Petro Mavromichalis, bey of Maina, of the latter. Both bodies determined to raise from 40,000,000 to 50,000,000 of piastres for

* It has been one of the causes of the misfortunes of the Greeks, that the capitani, with little in view but their own interest, have been, generally speaking, the only leaders who coincided in spirit and feelings with the great body of the people. The other leading men, educated abroad, and imbued with foreign opinions, have, in many cases, shown great ignorance of the state and character of the people with whom they acted. The abortive trials to establish a form of government for Greece, at different times, have given proof of this. The ill success of these trials, however, has been, in no small degree, owing to a want of sound political elements in the people. The same cause has given rise to the difficulties which have so often obstructed the establishment of wise and settled forms of government in France and South America. On the other hand, the orderly character of the people in the North American colonies, and their long exercise, in fact, of the rights of freemen, gave success to their experiment when they instituted an independent government.

the purpose of levying a force of 50,000 men, and equipping 100 large men-of-war. The principles of the constituent resolutions of Epidaurus were adopted for all Greece, with some unimportant modifications, and eparchs substituted for provincial governments. The French military code was adopted, with some changes, and the preparation of a new criminal code decreed. The assembly then proclaimed the new constitution of Astro (April 23, 1823), and dissolved, after the national government established by it had gone into operation at Tripolizza (April 20). Thus order was, in some degree, restored, but not concord among the capitani. This produced several changes of the ministers and the presidents of the two councils. Mavrocordato was made president, and Colocotroni vice-president, and Demetrius Ypsilanti was removed, as unqualified for public affairs. The secretary Negris, also, received his discharge. The Greeks continued united only in refusing an amnesty, and such an independence as that of Moldavia and Walachia, offered to them by British agents. The British policy now permitted at least an indirect support of the cause of Greece, from Malta and the Ionian Islands. The French cabinet no longer attempted to prevent Frenchmen from participating in the cause of the Greeks. But no power was willing to declare itself openly in their favor, before Russia had manifested her sentiments. The emperor Alexander had broken off direct diplomatic relations with the Porte. He insisted upon the entire evacuation of Moldavia and Walachia.

The events of the year 1823 were not less bloody and confused than those of the preceding years. Whilst, in Thessaly and Epirus, there was a suspension of arms; and the Greek flag (light blue and white horizontal stripes) commanded the sea, the populace in Constantinople manifested their rage by setting fire to different parts of the city, because they were prevented from committing massacres. March 1, 1823, an attempt was made to pillage and burn the Greek suburbs; but the wind drove the flames against the Turkish quarters. Four times the sea of fire rolled against the Greek quarters, and four times a fresh north wind rolled it back against the Turkish houses. Pera was saved; but 6000 Turkish houses, part of the cannon foundery (Tophana), and part of the naval arsenal, were reduced to ashes. The Mussulmans finally cried out, "God is with the Giaours." The grand-vizier Abdullah was dismissed in consequence of this conflagration, and Ali Bey, a pacha hostile to the janizaries, succeeded him. These troops, therefore, meditated vengeance; and, July 13, a new fire broke out, which consumed 1500 private houses, and three frigates. Order was, however, restored by severe measures; more favorable news arrived from Asia; and the sultan resolved on a general war of extermination against the Greeks, on account of which he called all Mussulmans, from 15 to 60 years, to arms. On the other hand, Greece endeavored to organize an army and a financial system. The dissolved battalion of Philhellenists became the nucleus of the first Greek regiment. Mavrocordato was placed at the head of the land forces. The minister of the marine (Orlandi, a Hydriot) organized the navy, which consisted, in 1823, of 403 sail, with cannon. The largest (the Hercules) carried 26 guns. The rich Hydriot Miaulis was admiral; Manuel Tumbasis of Hydra, George Demitracci of Spezzia, and Nicolas Apostolos of Ipsara, vice-admirals. A Greek order of merit (a light blue cross) was established. The financial department met with great difficulties every where, particularly on the islands. The disputes of the government with the Hydriot navarchs, on the subject of arrears of pay and the booty of Napoli, which the capitani were unwilling to divide with the islanders, had a bad effect on the naval operations. The Greek fleet, however, gained a victory (March 22, 1823) over an Egyptian flotilla destined for Candia; but it was unable to prevent the landing of Turkish troops; and the daring expeditions of the Ipsariots and Samiots on the coast of Asia Minor were without important results. When the fleet of the capudan pacha finally appeared, in June, the Greek ships retired, and supplied Caristo and Negropont in Eubœa, Patras, Coron and Modon in the Morea, and Lepanto, with fresh troops and provisions. The land forces of the Greeks were now systematically distributed. Mavrocordato was at the head of the whole. He had prevented the trial of Colocotroni, who was accused of treachery, and won over that capitano by promoting his election to the vice-presidency and to the post of second in command. Of the forces, the command in chief in Western Hellas was given to the Suliot Marco Botzaris; in Eastern Hellas Ulysses commanded. The Suliots were faithful and trusty allies. The Albanian tribes, who had caused the defeat of Omer Vrione by their desertion of him,

were less to be relied on. These tribes sold themselves to the highest bidder; some bands accepted the offers of the pacha of Scutari, who marched against the Greeks in 1823. The insurrection of the inhabitants of Eastern Thessaly had obliged Mehemed Pacha (the murderer of Ali), the second successor of the seraskier Khurshid, who had collected the ruins of Khurshid's army after the defeat at Larissa, to retreat from the southern part of Thessaly. In his rear, Saloniki and Seres were threatened by the Greek officer Diamantis, who had taken possession of the peninsula of Cassandra (Feb. 23, 1823). But the troops from Rumelia soon drove him back. The army under the seraskier of Rumelia (25,000 strong), after five months' preparation, finally opened the campaign, in June, from Larissa. It advanced with caution, in two masses, towards Livadia. But the Greeks, under Mavromichalis and Mavrocordato, instead of waiting for them behind the isthmus, took a position near Megara, and Colocotroni received a command over the forces of Ulysses and Niketas, with whose bands the Peloponnesian army united near Platæa. From this place they advanced against the enemy, towards the end of June. After some fighting in detail, Ulysses defeated one of the main bodies of the Turks, under Mehemet Pacha, at Thermopylæ. He then joined the army under Colocotroni, who attacked (July 7) the Turkish camp near the monastery of St. Luke (between the cities of Thebes and Livadia), which was captured by Ulysses and Niketas, after a bloody fight. The Turks retreated with great loss. Ulysses overtook them (July 17), and routed them in the plains of Cheronea. But the seraskier collected new forces, and advanced again, whilst, at the same time, Jussuf and Omer Vrione, supported by the fleet of the capudan pacha, off Patras, were destined to advance on Missolonghi, and the pacha of Scutari was to enter the Morea through Western Greece, by Vrachori, Vonitza and Salona. But the attack of the seraskier on Volos and the peninsula of Tricori failed; Jussuf's march was delayed by the desertion of 8000 Albanians, and the vanguard of the pacha of Scutari (who, with 20,000 men, partly Albanians, had occupied the heights of Agrapha, and threatened Ætolia) was surprised at midnight (Aug. 20, 1823), in the camp of Carpinissi, by Marco Botzaris. Whilst the mountaineers, from Thessaly and Epirus, attacked the camp on four sides, on a signal given by Botzaris, the brave commander himself penetrated, with 500 Suliots, to the tent of the pacha; but, at the moment of making the pacha of Delvino prisoner, he received a mortal wound, and his brother Constantine completed the victory. The Turks lost all their artillery and baggage, and the dying Marco exclaimed, at the moment of victory, "Could a Suliot leader die a nobler death?"* The Albanians of the pacha dispersed; he himself returned to Scutari, in consequence of the desertion of the Montenegrins to the Greeks. At the same time, the Turkish fleet, again having the plague on board, left (Aug. 30) the gulf of Patras, and returned to the Archipelago, avoided the Greek islands, delivered Saloniki from its blockade, and returned, in October, to the Dardanelles, after a few indecisive engagements with the Greeks. But bloody quarrels soon broke out between the Hydriots and Spezziots, relative to the division of the booty taken from some vessels. While Livadia and the Morea were threatened, the inhabitants of Athens had fled to the island of Salamis; but Gouras still maintained possession of the Acropolis. The members of government, with the deliberative council, were also at Salamis, from whence they returned to Argos in November, 1823. Mavrocordato conducted a division of the Hydriot fleet to the gulf of Lepanto, in November, and compelled the Barbary fleet, which was blockading Missolonghi, to withdraw. The Acrocorinthus was taken, in November of the same year, by the Greeks, and the last attack of Jussuf Pacha, supported by Mustapha Pacha, on Anatolico and Missolonghi, where Andreas Metaxa commanded, entirely failed, in consequence of the defeat of Mustapha in November, 1823. Mustapha Pacha retreated to Yanina. The campaign was finished; but the partisan war continued in Thessaly and Epirus, and Greek vessels advanced as far as the gulf of Smyrna. The Porte, though much exhausted, still had greater resources for the next campaign (1824) than the Greeks. The peace with Persia (concluded July 28, 1823), and the voluntary submission of the rebellious pacha of St. Jean d'Acre, enabled the Porte to send into Greece the troops from Asia, and those previously stationed in Moldavia and Walachia, which were now evacuated. In Constantinople, the influence of the janizaries on the decrees of the divan had ceased. By the

* Marco Botzaris, a Suliot, served in the French army, returned in 1820 to Epirus, where Ali Pacha restored Suli to him, that he might assist him against the Porte.

appointment of Galib Pacha as grand-vizier (the fifth since 1821), and of Sadik as reis effendi, in December, 1823, the more moderate party obtained the ascendency. On the other hand, the dissensions among the Greeks daily increased.

A Russian *chargé d'affaires* in Constantinople, Mr. de Minziaky, tried to restore, in January, 1824, the connexions between the cabinet of St. Petersburg and the Porte, which had been broken off since 1821. The principal subject of negotiation was the complete evacuation of the two principalities of Walachia and Moldavia by the Turkish troops, in conformity with the treaties of Kainardgi, Jassy and Bucharest. The British ambassador, lord Strangford, and the Austrian internuncio, the baron von Ottenfels, supported the demands of Russia. Lord Strangford was treated with great regard by the Porte; for it was owing to British influence that the Porte had been able to conclude its last treaty of peace with the court of Persia (Jan. 28, 1824). But the support which certain societies in England, and individuals, like lord Byron, had given the Greeks, by means of loans, by sending arms, and by assistance in person, made the Porte indignant; and it required (April 9), that the British government should forbid their subjects to take any part in the affairs of the Greeks. In the mean while, the British officers who had fought under the Greek standard, had been recalled to England. The good understanding with Russia appeared still more complete, when a great number of neutral transport ships, Russian, Austrian and others, were hired by the capudan pacha, who sailed, April 28, out of the Dardanelles to destroy Ipsara and Samos. At the same time, Dervish, pacha of Widden, as commander-in-chief of the Ottoman troops, received an order to enter the Morea, whilst the pacha of Negropont, on the coast of Attica, and Omer Vrione (who was afterwards pacha of Saloniki), were to open the campaign on the west coast of Greece. The Porte had succeeded, too, in inducing Mohammed Ali, the viceroy of Egypt, to send from his troops, which had been trained in the European discipline by French officers, 20,000 men, under the command of Ibrahim Pacha, his son, besides a fleet with transport ships, consisting of hired Russian, Austrian, Spanish and Italian vessels, to assist the grand-signior in reducing the Greeks to submission. A fire in Cairo delayed, for some months, the departure of this expedition. In the mean time, after the glorious issue of the campaigns of 1823, dissensions had broken out anew in Greece. The party of Mavrocordato, which had taken the place of the heads of the *Hetaireia*, was composed of Hydriot merchants, and the most enlightened men of the nation. It endeavored to establish an orderly and legal administration, and to regulate the finances. Mavrocordato was president of the legislative body; but, retiring from the military party, which had the preponderance in the Morea, he went towards Western Greece. The heads of that military party, the capitani, appeared to wish to take the places of the former Turkish pachas, and oppressors of the country. One of the most eminent of this party was Colocotroni, who, through the fame of his victories (in 1822), was the most powerful in the executive council. From Tripolizza, in the midst of the peninsula, his faction extended itself on all sides. Panos, his son, commanded at Nauplia (Napoli di Romania), the seat of government. The garrison of the Acrocorinthus consisted of the adherents of that bold, proud and rich general. After Colocotroni, came Mavromichalis, formerly bey of the Mainots, and now the nominal president of the executive council. Negris, the former minister of foreign affairs, had joined Ulysses, who maintained himself in Athens and Eastern Greece, almost independently of the central government. These capitani raised, without regard to rules and orders, all that they wanted for themselves and their soldiers; so that only in the marine at Hydra, and in Western Greece, where Mavrocordato commanded, a well ordered government was maintained. In Missolonghi, lord Byron was taking an active part. He and colonel Stanhope organized the artillery. Byron himself established schools and printing-offices. In the mean time, the legislative senate at Kranidi (on the eastern shore of the gulf of Argolis) endeavored to check the arbitrary proceedings of the executive council. The report of the causes of complaint against the president, Mavromichalis, and other counsellors (Dec. 31, 1823), disclosed such striking instances of arbitrary and selfish conduct, that the senate dissolved the existing executive council, and named, as the members of the new, the Hydriot George Conduriotti as president, and the Spezziot Panajotis Botassis as vice-president. Both were good patriots, and the most influential men of their islands, but without distinguished talents. John Coletti was the third, and Nicholas Londos

the fourth member. The fifth place, which Anagnostis Spiliotakis received afterwards, had been destined for Colocotroni, who, notwithstanding lord Byron's mediation, persisted in refusing to recognise the senate and the executive council. The latter now declared Napoli di Romania (March 14, 1824) the capital of Greece, and the seat of the central government. But Panos closed the gates. He was therefore treated as a rebel, and Napoli invested by sea and land. The garrison of the Acrocorinthus and several capitani (Niketas and others) surrendered to the government. Colocotroni himself evacuated Tripolizza (April 15). Hereupon the senate and (May 22) the executive government took Argos for their place of session. At length, the accession of the garrison of the chief fort of Napoli to the cause of the government, occasioned the conclusion of a treaty with Colocotroni, who submitted with all his followers, under the security of a general amnesty. Panos now gave up Napoli and the citadel Palamedes (19th of June), to which the senate and the government immediately transferred themselves. A general amnesty terminated the civil war. During this time, the Greeks in Western Greece were laboring to improve the fortifications of Anatolico, and of Missolonghi, the bulwark of Peloponnesus. A conspiracy was discovered in this town to deliver up the place to the pacha Jussuf. The Suliots began to commit great excesses, being excessively discontented with lord Byron's new regulations, and with the influence of foreigners in general. A great number of them were sent out of the place. These, under the guidance of a certain Karaiskaki, took possession (April 12) of the fort Wassiladi. The people took no part in this rebellion; and a body of troops, under the command of Botzaris, Sturnaris and Trokas, defeated the insurgents, and recovered Wassiladi; upon which the traitors fled to Omer Vrione. This insurrection frustrated the siege of Lepanto, which had been undertaken. Lord Byron's health suffered from these events, and he died after a sickness of ten days (April 19, 1824). Easter, generally a season of festivity, was solemnized by a general mourning for 21 days. The heart of the poet remains in Missolonghi, and his child was adopted as a daughter of Greece. The campaign was now to begin. The Greeks were divided among themselves. Their connexion with England was broken off, and the lord high commissioner of the Ionian Islands did not permit the money loaned to be deposited for any time in Zante. The Turkish commander also met with great obstacles: the pacha of Saloniki would not obey; the pachas of Scodra and Yanina, exhausted by their late losses, were not able to join him immediately with fresh troops. He remained, therefore, for more than a month, inactive at Larissa. The capudan pacha attempted a landing on the island of Skiathos, in which he failed; but he threw some thousand janizaries into the fortress of Negropont, where Ulysses and the distinguished Diamantis had defeated the Turks several times in the winter. Dervish now first entered the field. Pacha Bekir, who commanded under him, was beaten (June 1) near Zeituni, by Ulysses and Niketas. But another corps joined the Turks in Negropont, and took possession of the province of Attica. Gouras, an officer under the command of Ulysses, was obliged to return to the citadel of Athens. At the same time, Ishmael Gibralter, admiral of the Egyptian fleet, had subdued Candia. The governor, Tumbasis, saved only a few of the old men, women and children, and sent them to Hydra. Some bands of Candiots scattered themselves among the mountains. Ishmael Gibralter then undertook the attack of the island of Kassos. The brave inhabitants drove back the enemy, June 8; but on the 10th they were attacked by a greater force, at a different point of the island, where they had not expected it. Their obstinate resistance ended in their destruction. The enemy carried away immense booty. Whilst this was happening, Khosru, the capudan pacha, was making preparations, on the island of Mitylene, for an attack on Ipsara and Samos. 20,000 soldiers from Asia, destined for the invasion, encamped on the coast of Smyrna, where, being unfurnished with supplies, they committed the greatest ravages, and murdered the defenceless Greeks. The small but strongly fortified rocky island of Ipsara had made itself formidable to the Porte by the number of its vessels and fireships, in which the most daring of the islanders carried terror and destruction into the Dardanelles. Khosru possessed exact information of the fortifications of the island. Ishmael Pliassa, nephew of the well known Ali Pacha of Yanina, commanded under him 14,000 choice troops, mostly Albanians. But before Khosru invaded the island, he offered pardon and protection to the Ipsariots three times. They rejected all his proposals. 5000 Greeks and Albanians took possession of the most im-

portant points; even the women prepared themselves for the combat. Khosru left the shores of Mitylene early on July 3d, with two ships of the line, six frigates, ten corvettes, several brigs and galliots, a great number of newly-built gun-boats, and more than 80 European transport-ships. His fleet surrounded the island. The men-of-war began to fire upon the town and the forts. Whilst the principal attack appeared to be made here, a landing was effected on the opposite coast, upon a sandy point of land, where an Albanese battalion, under the traitor Goda, deserted the battery, after a short resistance. The Turks took by storm the heights back of the city. They were not able to maintain themselves there. The primates and ephori had the old men, women and children put on board the vessels in the harbor. Some vessels sunk, others were taken by the Turks. Some fugitives were received by two French frigates; the rest escaped, under the guidance of Apostolis, to Hydra. In the mean time, the city was attacked on all sides; the Greeks fought from street to street, from house to house; the work of destruction was kept up through the whole night. On the morning of July 4, they held only two small forts and the convent of St. Nicholas. After a hard struggle, these brave men resolved to die all together in their last fort, Tabia. While the Turks were storming the walls, they set fire to the mine, which had been prepared; the earth shook, and Ipsara became the grave of its own heroes and the conquerors. This blow opened the eyes of the Greeks. The people and the authorities rose up for united resistance. Hydra and Spezzia manned their ships. Ipsara was retaken by the brave Miaulis (July 15), and the ships there saved. The enemy was repulsed by inferior forces at Samos, Cos and Chios; he suffered some loss at Candia, and the Greeks opposed him at St. Rumili, Trypiti, Mirabello and Lassidi. Equal success attended the Greeks upon the main land. Gouras conquered the barbarians at Marathon. The Turkish general-in-chief, Dervish Pacha, beaten in July, August and September, at Gravia, at Amplani, in the province of Phocis, retreated, with the loss of his baggage, to Larissa. His plan of joining Omer Vrione, at Salona, was thus wholly defeated. In Western Greece, Mavrocordato's vigorous measures frustrated all the plans of the bold and artful Omer Vrione, who had invaded, for the third time, Acarnania and Ætolia. The Greeks then undertook the offensive, and pressed upon Arta. In the mean time, the authorities at Nauplia made loud complaints against the agents of some Christian powers in the Archipelago, who kindled the flame of discord, and checked the improvement of the internal administration. Nevertheless, order was constantly increasing in the Grecian government. The taxes were raised according to a just distribution, and the public lands regularly leased. The public credit was confirmed by a loan. Trade again revived, and the Greek flag was to be seen in Ancona, Leghorn, Marseilles, and even on the banks of the Thames. The government began again to organize an army according to the rules of European discipline. The French military code was introduced in Greece. The administration of justice received a fixed character. A lower court of justice and a court of appeals were held at Missolonghi. The discussions before the courts were public. Freedom of the press was every where allowed. Four newspapers appeared twice a week:—in Missolonghi, the Grecian Chronicle and the Telegraph; at Hydra, the Friend of Law (the official paper); and at Athens, the Ephemerides. Education was also provided for. In the mean time, the second part of the bloody campaign began. The Egyptian fleet set sail from Alexandria, July 19, comprising 9 frigates, 14 corvettes, 40 brigs and galliots, and 240 transports, with 18,000 land forces. Ibrahim Pacha was to bring reinforcements to Candia, and then invade the Morea. The Greek government had put themselves in a hostile position with regard to the European powers. The secretary of state, Rhodios, in a letter to Canning, declined the proposal of a treaty with the Porte. On the other hand, England, through their lord high commissioner of the Ionian Islands, sir Frederic Adam, forced the Greek government to revoke (September 15) the proclamation issued June 7, in which they treated the European transports employed by the enemy, not as neutral, but hostile vessels. The Greek government issued a manifesto, in which they complained greatly of the shameful avarice of the Christian merchants, who violated so openly the law of neutrality, in favor of the Turks. The English government then acknowledged the right of blockade, properly exercised by the Greek government, and the Austrian internuncio issued a command to the consuls of his government to prevent all letting out of ships contrary to the neutrality. Some Christian captains, how-

ever, particularly the French, did subsequently let their ships to the Egyptians, and carried Christian captives from Greece as slaves to Africa—a proceeding which was denounced in the French chamber of peers (1826), by Chateaubriand, and then prohibited by law. Meanwhile, the Egyptian and the Turkish fleet united in the gulf of Bodroun (September 4), and some battles were now fought with the Greek fleet. The battle at Naxos (September 10) lasted the whole day. It was, perhaps, the first during the war that deserved the name of a naval engagement. The intrepid Kanaris blew up, with his fire-ships, an Egyptian frigate of 44 guns, and a brig. The Greeks lost ten small ships. At length, the Ottoman fleet broke off the engagement, and retired to Mitylene, with the loss of several transport-ships. Khosru then turned back to Constantinople, with 15 sail, and Ibrahim Pacha, with the rest of the fleet, to the gulf of Bodroun. He supplied the islands anew with troops and provisions, particularly Candia, which his father already regarded as a part of his viceroyalty. Miaulis soon after attacked him off Candia. Ibrahim lost a frigate, 10 small vessels, and 15 transport-ships. Weakened by the plague, which had appeared on board the ships, he drew back to the harbor of Rhodes, where the well known admiral Ishmael Gibralter died. His plan of attacking the Morea was frustrated for this year. After such exertions on the part of the Greek fleet, the insolent ambition of the military faction once more disturbed the harmony of the peninsula. When the elections for the third term of the government began, in October, the executive council at Napoli di Romania consisted of 63 members. Mavrocordato resigned his place as president of the senate, and Panuzzo Notaras became his successor. Colocotroni and his followers were disappointed in the choice of the executive council. The former members were reëlected. But unfortunate events checked the activity of the government. A contagious fever broke out in Napoli, of which the vice-president, Botassis, and Manuel Tumbasis, died. The president, Conduriotti, went, therefore, to Hydra. At the same time, a civil war arose (November, 1824). Colocotroni had openly declared against the reëlection of the executive council, and had drawn the military commanders to his side. The generals Kanellas, Papaganopulos, Andreas Londos and Notarapulos immediately left the siege of Patras, which had been intrusted to them. Their troops dispersed. They, with their followers, placed themselves under the insurgent standard at Tripolizza, where Panos Colocotroni took the command of them. Conduriotti then turned back to Napoli di Romania (December 9), and summoned Gouras, Tassos and other commanders, from Attica to Corinth. Coletti received the chief command; Christos and Maurogeni appeared before Tripolizza. The rebels were beaten in several battles. Panos Colocotroni fell, and his followers were dispersed. The well known Amazon Bobolina, a follower of Colocotroni, fell by the dagger of a Greek, as it is said, the lover of her daughter, whose hand she had refused him. Ulysses, who had formed a secret union with the Turks at Negropont, was defeated by Gouras, taken prisoner, and confined in a tower, built by himself, for the defence of Athens. In attempting to escape from it, he fell to the bottom, and was killed. Colocotroni, the father, saw himself deserted by all, and surrendered in December, 1824. The other leaders of the rebellion fled to the Ionian Islands. Some surrendered; others were seized and (together with the elder Colocotroni) carried to a convent, where they were judged by a commission. The Mainot bey Pietro Mavromichalis was acquitted. The government now labored to secure the obedience of the armies by law, and made preparations to invest Patras, Modon and Coron anew. Omer Vrione entered into a negotiation with the Greeks, but it was broken off (1825), and he received the pachalic of Saloniki. The disastrous issue of the campaign of 1824, by sea and land, excited in Constantinople again the hatred and anger of the factious. Hussein Aga, commander of the troops of the Bosphorus, the aga of the janizaries, the mufti, and Janib Effendi (a man 76 years of age, the most obstinate follower of the old Ottoman policy), united for the ruin of the grand-vizier. This faction would permit no kind of intervention of the Christian powers in the internal affairs of the Porte, and demanded loudly that, before the Porte evacuated the two principalities, Russia should restore the fortresses in Asia. The grand-signior saw himself obliged to dismiss the grand-vizier, Ghalib Pacha, who was universally esteemed, although not very energetic. His successor, Mehemet Selim, pacha of Silistria, was a creature of Janib Effendi. Hitherto, the English envoy had urged the evacuation of the principalities; but, being put off continually with promises,

he at last left Constantinople (Oct. 18, 1824), having shortly before effected the conclusion of a treaty between the Porte and the king of Sardinia, and obtained some commercial privileges. He went, the following year, as British minister to Petersburg. The Porte felt constantly more sensibly the consequences of the war. It lost the revenue which had come from the provinces in rebellion. The tribute which the Peloponnesus alone used to pay, amounted yearly to 35,000,000 Turkish piastres. The grand-vizier determined to lay an extraordinary tax of 13,000,000 piastres upon Moldavia and Walachia, as a compensation for the occupation of the same since 1821. Most of the boyards withdrew themselves by flight. In vain the hospodars represented the unhappy condition of the provinces, which could hardly pay the customary tribute. The Turkish commanders took away all the money and other valuables which they found in the public treasuries or among the possessions of the rich. Some Turkish troops now withdrew from the provinces, and Minziacky, who appeared as the Russian agent, announced the approach of a Russian ambassador, the marquis de Ribeaupierre, with full powers; but new troops soon marched again into the principalities; for more than 100,000 Russian soldiers remained on the frontiers, ready for instant service. The campaign of 1825 was opened in the Morea by the landing of Ibrahim Pacha. Reschid Pacha besieged Missolonghi at the same time, and the capudan pacha aided both by his fleet. While these dangers threatened Greece, her ruin was accelerated by the capitani. Ibrahim Pacha, before mentioned, was permitted to land (Feb. 22, 1825), with 4500 men, between Coron and Modon, and was strengthened in the beginning of March, so that his force amounted to 12,000 men. His army, owing to their European tactics, French leaders, the use of bayonets, and a disciplined cavalry, was far more to be dreaded than the undisciplined host of Turks. Thus Ibrahim began the siege of Navarino, the key of the interior of the Peloponnesus. In vain Miaulis attacked with his fleet that of the enemy, on the night of the 12th of May, when he burned an Egyptian frigate, two corvettes, three brigs and many transport-ships. In vain Mavrocordato did every thing, by personal exposure, to animate the courage of the garrison of Navarino, which was reduced to extremity. Conduriotti found no obedience as he approached for the relief of the place. The inactivity of the capitani, who would give no aid to the Hydriots and the government, was the cause of the capitulation of Navarino; after which Ibrahim pressed on, without resistance, to Tripolizza. In this danger, the government saw themselves compelled to pardon the old Colocotroni, and, after receiving a solemn promise of fidelity from him, to give him the command of the Peloponnesus. This happened in the last of May, 1825. In the mean time, Reschid Pacha forced his way into Acarnania and Ætolia, after he had beaten the Greeks at Salona. April 22, the third siege of Missolonghi and Anatolico began. The capudan pacha did not arrive sufficiently soon to support the attack on the side of the sea. He lost several ships in May, near capo d'Oro, in an engagement with the Greek admiral Sactouri, and reached Modon at the end of this month. Ibrahim had already taken Calamata, and occupied Tripolizza, which the Greeks, in their retreat, set on fire. He pressed on, destroying every thing, and reached even Argos. Napoli di Romania itself was threatened by him. But, after the battle of the mills, at the distance of two leagues from the capital, he was obliged to draw back to Tripolizza, in the midst of repeated attacks from Colocotroni's army. This continued to be the centre of his enterprises. Not one Greek village obeyed his command to submit and receive his protection, so that he laid waste every thing, put to death the men, and sent the women and children as slaves to Egypt. In the defence of Missolonghi, the spirit of the Greeks appeared more clearly than ever. The garrison refused every exhortation to surrender. Noto Botzaris stood first among the brave. The Turks, with 35,000 land forces and 4000 sea forces, were wholly defeated (Aug. 2, 1825), after a contest which lasted several days. The Turks lost 9000 men. During the struggle, Miaulis arrived, burned several Turkish ships, and forced the fleet to retire. The siege was raised Oct. 12, 1825, four months and a half after the opening of the trenches. Ibrahim Pacha spread more and more widely the terror of his arms. The government found itself in great danger. It had lost, almost entirely, the confidence of the auxiliary societies, even in England, because the money from the English loan had not been properly laid out. The English party then exercised much influence over the Greek government, through their secretary of state, Mavrocordato; and, after an interview with the British commo-

dore (Hamilton), they determined to throw themselves on the protection of England. But before the Greek deputy arrived in London, the British government (Sept. 30, 1825) issued a decided declaration of neutrality. The whole state of European politics forbade any single power from promising direct intervention. Yet the English government permitted their consul at Alexandria to forbid British ships to carry ammunition from Egypt to Greece for the assistance of the pachas. England even seemed to recognise the right of search on the part of the Greeks. The English declaration of neutrality appeased the divan, and the new English ambassador (Stratford Canning) set out, at last, upon a journey to Constantinople; but he stopped a long time on the way, and had an interview (January, 1826) with Mavrocordato, and other Greek statesmen, at Hydra, in order to inform himself of the general state of affairs. He then went to Smyrna, and sailed from that place through the Dardanelles (January 15), and arrived at Constantinople in the last of February. About this time (March, 1826), the duke of Wellington, as envoy extraordinary at St. Petersburg, and lord Strangford, then resident minister there (who had formerly been minister to Constantinople), discussed the affairs of Greece with the Russian cabinet; for, at the end of the year 1825, the idea of restoring independence to the Greek states seemed to be gaining strength in the principal European cabinets. The unsuccessful issue of the Turkish-Egyptian campaign, begun under such favorable auspices, contributed much to this. The capudan pacha had received the command of the Egyptian fleet at the end of August, in Alexandria, where the brave Kanaris (August 10) had, with three fire-ships, in vain forced his way into the harbor, with the intention of burning the Egyptian fleet; the pacha had also landed fresh troops at Navarino (August 5); he had afterwards directed his efforts against Missolonghi, in order to invest this place on the sea side. Reschid Pacha thus began, in connexion with Ibrahim, a winter campaign. Yet this did not effect any thing decisive. The affairs of Greece appeared to be hastening to ruin. The Greek fleet (73 men-of-war and 23 fire-ships) arrived too late before Navarino. The government had hardly 6000 men under arms. The capitani squandered the money with which they were to provide troops. General Roche, manager of the French committee for the assistance of the Greeks, worked openly and secretly against the measures of the English party, which had the upper hand in the government. The members of the senate and of the executive council had no confidence in each other. The secretary of state, Mavrocordato, who labored, with little aid but that of his own foresight and prudence, to maintain order, was, for this reason, held in ill will by all parties, and had little influence. The islanders presented the last bulwark for the defence of the Morea, but were obliged also to provide for their own security. Notwithstanding this, their fleet succeeded in entering Missolonghi (November 24), now besieged for the fourth time, and in providing it with ammunition and provisions, after the garrison had again repulsed an attack made by sea and land. At the same time, Gouras had advanced from Livadia to Salona, and had expelled the Turks from this important point (November 7), after which he attacked Reschid Pacha's besieging army in the rear. A body of troops, also, sent by Ibrahim Pacha against Corinth, was wholly destroyed by Niketas. Hereupon the provisional government, in December, 1825, called for a voluntary contribution for the equipment of a new naval force at Hydra, in order to save Missolonghi. Strengthened by the accession of these vessels, Miaulis appeared, in January, 1826, in the waters of Missolonghi, and successfully encountered the capudan pacha on the 8th of this month. In the mean time, Reschid and Ibrahim Pacha were making arrangements for a new siege. Ibrahim, as governor of the Morea, had taken possession of Patras with this view, after the brave Jussuf Pacha had been appointed governor of Aidin (Magnesia) in Natolia. The capudan pacha appeared anew before Missolonghi. The attempts of the Grecian fleet to supply it again with provisions and ammunition failed; the capudan pacha (January 27) summoned the authorities of the town to surrender, if they did not wish the place to be taken by storm. They refused the offer. Soon after, there was an engagement between the fleets, in the gulf of Patras, on the 27th and 28th of January, when the Greek fire-ships, under Kanaris, destroyed a frigate and many small vessels. The capudan pacha soon gave up his command, after a disagreement with Ibrahim Pacha (who had desired his recall by the divan), and went by land from Yanina to Constantinople. In consequence of that battle, the Greeks succeeded in furnishing Missolonghi with provisions and ammunition,

sufficient for a few weeks. A later attempt (February 12) was frustrated by the Turkish-Egyptian fleet. Commissioners were sent, at the end of the year 1825, from the divan to Greece. Hussni Bey and Nedschib Effendi (the agent of the viceroy of Egypt) entered the camp at Missolonghi, to await the fall of this place, and to take their measures according to circumstances. Soon after, Reschid Pacha left Acarnania, and went to Livadia, in order to occupy Gouras and colonel Fabvier, who had trained a body of 1000 Greeks in the European discipline. Ibrahim then conducted the siege alone. He had 25,000 men, among them about 9000 regular troops, and 48 cannon, bought in France, with which Pierre Boyer (a former Bonapartist, and a general well known by his cruelties committed in Egypt, St. Domingo and Spain) bombarded Missolonghi, from February 24. After the bombardment had continued several days, Ibrahim repeatedly offered the commander of the fortress large sums if he would surrender the place. He was willing even to permit the garrison to take the cannon and all the movable property with them. His proposals were rejected, and the garrison prepared themselves for death or victory. Ibrahim assaulted the works of Missolonghi from February 28 to March 2. On this day, he attacked the place by sea and land, but was wholly repulsed, with the loss of 4000 men; so that Missolonghi was, for the fifth time, freed by Greek valor, when it had but a few days' provision. Ibrahim now directed his attacks against the outworks of Missolonghi on the sea side. He forced his way, with gun-boats and floating-batteries, into the lagoons. March 9, 1826, he stormed the little island of Wassiladi, important as a fishing place, where 110 men met the death of heroes. A bomb, which fell into the powder-room of the fort, and kindled the ammunition, decided the fate of this place. Then Ibrahim took, by capitulation (March 13, 1826), the fortified island of Anatolico, near Missolonghi, after he had stormed a fortified monastery, called Kundro, which protected the island, where a garrison of 400 men were cut to pieces. After these misfortunes, Missolonghi, the bulwark of the Peloponnesus, fell gloriously, April 22, 1826. The foundation of an Egyptian-African military state now seemed to be laid in Europe. Ibrahim had removed the capudan pacha, Jussuf Pacha and Reschid Pacha. He was in possession of Modon, Coron, Navarino and Patras. If he should succeed in gaining Napoli di Romania, he would be master of the islands of the Archipelago. The Porte would then be wholly unable to keep its mighty satrap in subjection; and the viceroy of Egypt owed all this to French artillery officers. This danger roused the attention of the governments and people of Europe. The fate of Missolonghi, of whose garrison 1800 men, under Noto Botzaris and Kitzos Isavellas, cut their way to Salona and Athens, while the rest buried themselves voluntarily under the ruins of the place, excited every where the liveliest interest. In France, this interest was loudly and actively expressed. The Philanthropic Society to aid the Cause of the Greeks, comprised among its members Châteaubriand, Choiseul, Dalberg, Matth. Dumas, Fitz-James, Lafitte, Lainé, Alex. de Lameth, Larochefoucault-Liancourt, Cas. Perrier, Sebastiani, Ternaux, Villemain, and many others. They had contributed, in February, 60,000 francs, to furnish supplies to Missolonghi. They obtained at Amsterdam, for the same object, 30,000 francs. The German Eynard contributed 12,000. The duke of Orleans subscribed, several times, considerable sums. 40 ladies of high rank made contributions individually, and it was soon the custom, in all the drawing-rooms in Paris, for the lady of the house to make a collection for the Greeks. Then followed Germany. King Louis of Bavaria signed the Greek subscription, and permitted his soldiers, with colonel Heidegger at their head, to fight for the cause of Greece. Poetry, too, lent her aid. New societies for assisting the Greeks were formed; for example, in Saxony. All coöperated with the noble Eynard. The Greek orphans were educated in Germany, Switzerland and France. Thus, at last, when the voice of lamentation was loudest in the land, deliverance was slowly approaching the Greeks. Wellington had, by Canning's order, subscribed at Petersburg (April 4, 1826) the protocol which provided for the interference of the three great powers in favor of the Greeks. The emperor of Russia (q. v.) wished first to arrange his own difficulties with the Porte. This was done by the treaty of Ackerman (Oct. 6, 1826), and England concluded with him and France, at London (July 6, 1827), the treaty for the pacification of Greece. Canning wished to decide the question between Greece and Turkey without involving Russia in a quarrel with the Porte, and thereby endangering the peace of Europe. His death frustrated, in part, his noble design. In the mean time, the Egyptian army

overran almost all parts of the Morea, and changed it to a desert, without obtaining submission from a single village. Families from all parts of Greece pressed forward together under the walls of Napoli di Romania, and suffered all the horrors of poverty and hunger, rather than enter into a treaty with their Mussulman oppressors. Despair drove many of these unhappy people to piracy; but most of the corsairs, in the Greek seas, were composed of criminals and persons banished from the Ionian Islands, Dalmatia and Italy, who did not even spare the Greek flag. New bands of warriors came forth from the mountains, and Colocotroni several times attacked Tripolizza, which was defended by 3000 Egyptians, under Soliman Bey (La Sève, the French renegade). The influence of the climate and disease had weakened the Egyptian army, yet Tripolizza could not be taken. In the mean time, an assembly of the people, convoked at Megara, in January, 1826, proposed several measures for the improvement of the internal administration, particularly in regard to the administration of justice and the public revenue. At the same time, an expedition was fitted out for Negropont, and support was rendered to the insurrection of the Greeks, which had again broken out in Candia (1825), where Carabusa was taken by them. Want of money and provisions, and the dissensions between the commanders; the mistrust of the palikaris, who had been deceived by their officers; and the ingratitude of the Greeks towards the Philhellenes, or foreign officers in their service, were the causes that nothing important was accomplished. Owing to these circumstances, Athens, after the army which should have relieved it had fled in a dastardly manner, capitulated to Reschid Pacha (June 7, 1827). In vain did lord Cochrane (who had long been detained in England by the defective construction of the steam vessels, for which the Greeks had paid so dear) at last arrive in Greece, and take the chief command of the sea forces, while general Church stood at the head of the land forces. The Turks remained in possession of the whole of Eastern and Western Hellas. The distress was increased by a violent struggle of parties in Napoli di Romania itself. Here Grivas, being in possession of the fortress called Palamedes, began to cannonade the city, in order to compel the payment of arrears. The national government fled to the island of Ægina. They now cast their eyes to Russia. They chose count Capo d'Istria (q. v.) as their president. This statesman received his discharge from the Russian service July 13, 1827, but could not enter upon his high office until Jan. 22, 1828. Meanwhile the ambassadors of the three powers had, on the 16th of August, presented to the Porte the treaty concluded at London, for the pacification of Greece, and waited for an answer till the 31st. "Greece" they said, "shall govern itself, but pay tribute to the Porte." Europe had now more reason than ever to demand from the Porte the independence of Greece, by which piracy in the Grecian and Turkish seas might be prevented; an African slave-holding and piratical state should not be allowed to rule the beautiful Archipelago of Europe; and order might take the place of bloody anarchy, which the Porte had neither sagacity nor strength to suppress. The Greek government immediately proclaimed (August 25) an armistice in conformity to the treaty of London. But the reis effendi rejected the intervention of the three powers (August 31). The Greeks then commenced hostilities anew, and the Turkish-Egyptian fleet (Sept. 9) entered the bay of Navarino. A British squadron appeared in the bay on the 13th, under admiral Codrington. To this a French squadron, under admiral Rigny, and a Russian, under count Heyden, united themselves on the 22d. They demanded from Ibrahim Pacha a cessation of hostilities. He promised this, and went out with part of his fleet, but was forced to return into the bay. As he now continued the devastations in the Morea, and gave no answer to the complaints of the admirals, the three squadrons entered the bay, where the Turkish-Egyptian fleet was drawn up in order of battle. The first shots were fired from the Turkish side, and killed two Englishmen. This was the sign for a deadly contest (Oct. 20, 1827), in which Codrington nearly destroyed the Turkish-Egyptian armada of 110 ships. One part was burned, another driven on shore, and the rest disabled. None struck their flag. The news of the victory was received with exultation in Europe. An involuntary suspension of hostilities now ensued, during which the depredations of pirates became more serious. The admirals of the three united squadrons, therefore, sent a warm remonstrance to the legislative council of the Greeks, and, after a number of capital punishments, the safety of the seas was restored, particularly after the British had destroyed the head-quarters of the corsairs

(Karabusa, in Candia, Feb. 28, 1828). The Greeks now resumed the offensive against the Turks; but their attempt upon Scio (where they vainly besieged the citadel, from November, 1827, till March 13, 1828) was productive of nothing but injury to the inhabitants. Enraged at the battle of Navarino, the Porte seized all the ships of the Franks in Constantinople, detained them from Nov. 2 to Nov. 19, and, on the 8th, stopped all communication with the ministers of the allied powers, till indemnification should be made for the destruction of the fleet. At the same time, it prepared for war. Since the abolition of the janizaries (q. v.), in June, 1826, the sultan had exerted himself, with great zeal, to establish a new army, trained in the European discipline. He conducted their exercises in person, and used all the means in his power to inflame the passions of the Moslems. For this reason, the Russian ambassador, Ribeaupierre, left Constantinople on the 4th of December, 1827; the French, Guilleminot, and the British, Stratford Canning, on the 8th. Upon this the Porte adopted conciliatory measures, and sent a note, on the 15th, to count Ribeaupierre, who was detained in the Bosphorus by contrary winds; but the hatti-sheriff addressed to the pachas (Dec. 20), demanding war, and heaping many reproaches on Russia, forbade the idea that the intentions of the Porte were friendly. From all parts of the kingdom, the Ayans were now called to Constantinople (a measure quite unusual), and discussed with the Porte the preparations for war. All the Moslems, from the age of 19 to 50, were called to arm. On the 30th, Mahmoud, on hearing that Persian Armenia had fallen into the power of Russia, misled by the artful representations of one part of this intolerant and disunited people, caused all the Catholic Armenians to be driven from Galata and Pera, so that within 14 days (January, 1828) 16,000 persons were obliged to emigrate to Asia in the most deplorable condition. In the mean time, the president of the Greeks, count Capo d'Istria, appointed the able Tricoupi his secretary of state, and established a high national council, called *Panhellenion*, at Napoli di Romania; Feb. 4, 1828, took measures for instituting a national bank; and, Feb. 14, put the military department on a new footing. The improvements, however, could go on but slowly. Without the assistance of France and Russia, each of which lent the young state 6,000,000 francs (as is represented in the Courier of Smyrna, or, as others state, paid a monthly subsidy of 500,000 francs), nothing could have been effected. The attempts at pacification were fruitless, because the Porte rejected every proposal, and England appeared to disapprove the battle of Navarino. Codrington was recalled, and Malcolm took his place. In this state of uncertainty, Ibrahim was allowed to send a number of Greek captives as slaves to Egypt. In March, 1828, the war between Russia and Turkey broke out, and gave the Porte full occupation. In the mean time, the French cabinet, in concurrence with the English, to carry into execution the treaty of London, sent a body of troops to the Morea, whilst the British admiral Codrington concluded a treaty with the viceroy of Egypt, at Alexandria (August 6), the terms of which were that Ibrahim Pacha should evacuate the Morea with his troops, and set at liberty his Greek prisoners. Those Greeks who had been carried into slavery in Egypt, were to be freed or ransomed. 1200 men, however, were to be allowed to remain to garrison the fortresses in the Morea. To force Ibrahim to comply with these terms, the French general Maison arrived, on the 29th of the following August, with 154 transport-ships, in the Morea, in the bay of Coron, near Petalidi. After an amicable negotiation, Ibrahim left Navarino, and sailed (October 4) with about 21,000 men, whom he carried with the wreck of the fleet to Alexandria; but he left garrisons in the Messenian fortresses, amounting to 2500 men, consisting of Turks and Egyptians. Maison occupied the town of Navarino without opposition. He then attacked the Turkish fortresses in Messenia. The garrison made no resistance, and, on the other hand, the commanders would not capitulate. The French, therefore, almost without opposition, took possession of the citadels of Navarino (October 6), of Modon (on the 7th), and of Coron (on the 9th). The garrisons were allowed free egress. Patras, with 3000 men, capitulated (October 5) also, without resistance; and the flags of the three powers, parties to the treaty of London, waved with the national flag of Greece, on the walls of the cities. Only the garrison of the castle of the Morea, on the Little Dardanelles, north of Patras, and opposite Lepanto, rejected the capitulation of Patras. They murdered the pacha, and the French general Schneider was obliged to make a breach before the Turks surrendered at discretion (October 30). The Turks were all now carried to Smyrna by the French admiral

Rigny. The commanders of Coron, Modon and Patras, Achmet Bey, Mustapha and Jacobi, fled to France, to escape the anger of the sultan. The gulf of Lepanto was declared neutral; yet the fort of Lepanto, in Rumelia, was not prevented from taking the customary tolls. Nothing hostile was undertaken against the Turks by the French out of the Morea, because the sultan would, in that case, have declared war against France. England and France carefully avoided such a result, that they might be able to mediate between the Porte and Russia. To defend the Morea, however, from new invasions from the Turks, the three powers at London, by their ministers, Aberdeen, Polignac and Lieven, agreed to send a manifesto to the Porte (Nov. 16, 1828) to this effect: that "they should place the Morea and the Cyclades under their protection till the time when a definitive arrangement should decide the fate of the provinces which the allies had taken possession of, and that they should consider the entrance of any military force into this country as an attack upon themselves. They required the Porte to come to an explanation with them concerning the final pacification of Greece." The French agent, Jaubert, carried this note to Constantinople. The Greeks, in the mean time, continued hostilities. The Greek admiral Cochrane came, after an absence of eight months (September 30), on board the new Greek steam-ship Hermes, at Poros; and Demetrius Ypsilanti, having under him Colocotroni, Tsavellas, Dentzel, Bathros and others, forced his way into Hellas Proper (Livadia), at the head of 5000 men, beat the Turks at Lomotico (November 3), took Salona (December 3), then Lepanto, Livadia and Vonizza. Reschid Pacha had been recalled to Constantinople. An insurrection had broken out again in Candia, which occasioned the massacre of many Greeks in Kanea (August 14). Haji Michalis, a Moreot, who perished afterwards in battle, excited this unfortunate contest. Mustapha Pacha, who commanded the Egyptian troops at Candia, could with difficulty check the anger of the Turks against the Greek inhabitants. This massacre induced the English to close the port of Kanea. The Greeks took possession, however, of all the open country of Candia. The Russian admiral Ricord, with one ship of the line and three frigates, at Tenedos, had blockaded the Dardanelles, from the 14th of November, 1828, in order to prevent supplies of provisions and military stores from reaching Constantinople. The Greeks now fitted out a great number of privateers. The sultan, on this account, banished from Constantinople all the Greeks and Armenians not born in the city or not settled there, amounting to more than 25,000 persons. On the 29th, he announced in all the mosques, that the Mussulmans should remain all winter under arms and in the field, which had never till now been the case. At the same time, he called all the men, from 17 to 60 years of age, to arms. Meantime the French were preparing to return to Toulon. A third of the troops, in January, 1829, left the Morea, where diseases and privations had destroyed many men. At this time, a scientific expedition of 17 Frenchmen, in three sections, under the direction of the royal academy, was prepared, by the French minister of the interior, to visit the Morea. The French government ransomed several hundred Greek slaves in Egypt, and the king of France undertook the education of the orphan children. Thus, after struggling for seven years, Greece was placed under the protection of the three chief European powers. Mahmoud, however, still declined to recall the edict of extermination, which he had pronounced when he commanded Dram Ali, a few years before, to bring him the ashes of the Peloponnesus. Ibrahim had wantonly burned down the olive groves as far as his Arabians spread, and the Greeks were sunk in the deepest misery and confusion. After unnumbered difficulties, the greatest obstacles to a well ordered government were in part overcome by Capo d'Istria. For this object, he divided (April 25, 1828) the Greek states into 13 departments, seven of which formed the Peloponnesus (280,000 inhabitants, 8543 square miles); the eighth, the Northern Sporades (6200 inhabitants, 106 square miles); the ninth, the Eastern Sporades (58,800 inhabitants, 318 square miles); the tenth, the Western Sporades (40,000 inhabitants, 169 square miles); the eleventh, twelfth and thirteenth, the North, Central and South Cyclades (91,500 inhabitants, 1176 square miles): the whole amount, therefore, was 476,500 inhabitants and 10,312 square miles. The first diplomatic agent to the Greek government, the British plenipotentiary, Dawkins, delivered his credentials to the president Nov. 19, 1828, and the French colonel Fabvier returned from France to the Morea, to organize the Greek army. The French envoy, Jaubert, delivered the protocol of the conference of the three great powers to the Porte in January, 1829. The ver-

bal answer of the reis effendi was, that the Porte wished for peace, and would appoint negotiators on the arrival of the French and English plenipotentiaries; but that Russia could not be admitted to join in the mediation, nor should this act be considered as a renunciation of the sultan's rights upon the Morea. This answer was the foundation for the conference of the ministers of England, France and Russia (March 22, 1829), the protocol of which sets forth what course the powers intend further to pursue respecting the Porte. It was agreed that ambassadors from Great Britain and France should immediately proceed to Constantinople, and open a negotiation for the pacification of Greece, in the name of the three powers. The first subject proposed for the consideration of the Porte was the boundary of Greece. A line, beginning at the gulf of Volo, running thence to the head of the Othryx, following the course of that river to the summit east of Agrapha, which forms a junction with the Pindus, descending the valley of Aspropotamos by the south of Leontis, traversing the chain of the Macrinoros, and terminating at the gulf of Ambracia, was proposed as the northern boundary of Greece; the islands adjacent to the Morea, Eubœa or Negropont, and the Cyclades, were likewise to form a part of the new state. It was also to be proposed, that the Greeks should pay an annual tribute of 1,500,000 piastres; the first year's tribute, however, to be not less than a fifth, nor more than a third, of this amount, and to be gradually increased for four years, till it should reach the maximum: a joint commission of Turks and Greeks was to determine the indemnification of the Turks for the loss of property in Greece; the allied powers to appoint a committee of appeal, in case the former committee could not agree: Greece should enjoy a qualified independence, under the sovereignty of the Porte: the government to be under an hereditary Christian prince, not of the family of either of the allied sovereigns: at every succession of the hereditary prince, an additional year's tribute to be paid: mutual amnesty to be required, and all Greeks to be allowed a year to sell their property and leave the Turkish territories. The ambassadors were also to require a prolongation of the armistice already declared by the Turks, and a like cessation of arms from the provisional government of Greece, and the recall of the troops, which had gone beyond the line drawn as above from Volo to Arta. The three powers were to guaranty all these points. Though Russia was to have no minister present at these negotiations, they were to be conducted in her name, as well as in those of France and England. It was near the middle of July, before sir Robert Gordon and count Guilleminot (the two ambassadors) arrived at Constantinople. Their reception deviated from former usages, particularly in the omission of the humiliating ceremonies to which Christian ambassadors were formerly obliged to submit, which would have been somewhat out of season at this time, when Diebitsch had already descended the southern slope of the Balkan. The history of their negotiations is of no importance, because count Diebitsch signed, with the Turkish plenipotentiaries, a treaty, by the 6th article of which the sultan formally acceded to the treaty of July 6, 1827. (See *Russia*, and *Turkey*.) The protocol of the conference of March, 1829, could be considered by the Greeks only as a calamity.

The situation of the president, Capo d'Istria, had been extremely difficult, as the reader can easily imagine. He was without means, in a land torn by discord; yet his attention had been directed to every thing useful—the suppression of piracy; the formation of a regular army; the establishment of courts of justice; of schools of mutual instruction; of a system of coinage; of means for collecting the revenue, and providing for the subsistence of the wretched remnants of the population. In November, 1828, he proposed to the Panhellenion, to take immediate measures for calling together the fourth national assembly. The assembly met at Argos, and the president, in a long address (July 23, 1829), gave an account of the state of the country and of his measures. He directed the attention of the assembly particularly to the organization of the forces and the revenue.* He says in the speech, "The decree re-

* The following account of the Greek land and sea forces is contained in the Austrian Observer of March 21, 1830, a paper which, as the semi-official journal of the Austrian cabinet, was, of course, always hostile to the Greek insurrection, but which generally gave truer accounts of the actual state of things in that unfortunate country, than were contained in those European papers which were favorable to the cause of humanity and liberty. Many of the commanding officers are foreigners; a great part of them French. General Church and Demetrius Ypsilanti, the commanding officers in Eastern and Western Hellas, had then resigned. The Greek land forces amounted to 13,789 men. The navy had greatly declined, consisting only of one frigate of 64 guns, one cor-

specting the organization of the regiments, the edict relating to the marine service, and the measures to establish a national bank and a general college, were the first steps towards the regulation of the interior. The Archipelago has been freed from pirates; our warriors are again united under their standards; one division, under the command of admiral Miaulis, has assured the free navigation of the Archipelago, and conveyed to our distressed brethren in Scio every consolation which it was in our power to offer. A second division, under vice-admiral Sactouri, was destined for the blockade, which the admirals of the allied powers compelled us to abandon." The address further refers to the plague brought by the army of Ibrahim Pacha, which extended from the islands to the Peloponnesus; to the expulsion of this pacha; the efforts of admiral Codrington, and the landing of the French; adding, "The Greeks of the continent, watching earnestly to see the borders of the Peloponnesus passed, manifested their wishes in this regard. We ourselves hoped to see them accomplished, for we were far from apprehending the diplomatic act which decided it otherwise." It acknowledges, with warm gratitude, the succors of the French in men and money, and alludes, in general terms, to the conferences with the ambassadors of the allied powers at Poros. A statement of receipts and expenditures, from January, 1828, to April 30, 1829, is also given. It is evident, from this address, that, since the protocol of the conference of March 22, 1829, the military operations of the Greeks, both by sea and land, had been arrested by the interposition of the allies. In January, however, general Church had taken the town of Vonitza, and the citadel surrendered in March; as did the castle of Romelia, to Augustin Capo d'Istria, the brother of the president, March 26. On February 9, Mahmoud, pacha of Livadia, with 3500 men, attacked the Greeks, commanded by the chiliarch Vasso, in their camp near Tolanti. The pacha was defeated. Livadia and Thebes, where Omer Pacha commanded, were evacuated soon after by the Ottoman troops. Lepanto surrendered, April 22, and Missolonghi and Anatolico on May 29. After the former had surrendered, 3000 Greeks marched to reinforce the corps then besieging Athens; but the operations were soon after arrested, in deference to the wishes of the allied powers. Immediately after the meeting of the assembly at Argos, general Church resigned his commission as commander-in-chief of the forces of Greece. Such was the state of things when the peace between Russia and the Porte was signed at Adrianople, Sept. 14, 1829, and ratified by the Porte, Sept. 20. The conferences between the ministers of the three powers, at London, had now for their object to select a prince to wear the crown of Greece. It was offered to prince Leopold of Saxe-Coburg, who had been the husband of the late princess Charlotte, daughter of George IV, Feb. 3, 1830, and was accepted by him, as "sovereign prince of Greece," February 20. However, he resigned this honor in a declaration dated May 21, 1830. The two reasons which the prince alleges for his resignation are, the unwillingness of the Greeks to receive him, and their dissatisfaction at the settlement of the boundaries. He says that the answer of the president of Greece to the communication of his appointment, in his judgment, announces a forced submission to the allied powers, and even that forced submission is accompanied by reservations of the highest importance. The president of Greece states, that the provisional government, according to the decrees of the council of Argos, has no power to convey the assent of the Greek nation; and the government reserves to itself the power of submitting to the prince such observations as they cannot conceal from him, without betraying their trust towards Greece and the prince. In regard to the boundaries, his language is, that the uncompromising determination expressed by the Greek senate, to retain possession of the provinces which the allied powers wish to exclude from the limits of the new state, will oblige him either to compel his own subjects, by force of foreign arms, to submit to the cession of their estates and properties to their enemies, or to join with them in resisting or evading a part of that very treaty which places him on the throne of Greece. That one or the other alternative will be forced upon him is certain, because the part of the country referred to (Acarnania and a part of Ætolia, which is now to be given up to the Turks) is, together with the fortresses, in the peaceable possession of the Greeks. It is the country from which Greece can best supply herself with timber for building ships.

vette of 26, three steamers (of which two carry 8, and one 4 guns), nine brigs of from 4 to 12 guns, five gunboats, and 28 smaller vessels and transports.

It is the country which has furnished the best soldiers during the war. The chief military leaders of the Greeks have been of Acarnanian or Ætolian families. Subsequently to the arrival in Greece of the protocol of the 22d March, 1829, and the publication of the assent of the Turks to the excluded frontier in the treaty of Adrianople, all the families which had survived the war returned, and commenced rebuilding their houses and towns, and cultivating their lands. These people will never submit again to the Turkish yoke without resistance, and the other Greeks will not, cannot abandon them to their fate.* The British journals loudly reproached the prince for his resignation, ascribing it to fright at the picture which the president, Capo d'Istria, drew of the state of the country, or to the hope of becoming regent of the British empire, in case of the accession of the minor princess Victoria. It is hardly necessary, however, to look for motives beyond the distaste which a man of good feelings would naturally feel to assuming the government of a nation contrary to their will, and becoming, as he must become in such case, a tyrant. Since the resignation of Leopold, several princes have been proposed as candidates for the throne of Greece, without its ever seeming to have occurred to the powers that a Greek might be raised to that honor, or that it would be worth while to pay any attention to the wishes of the nation. According to the latest accounts, it seems that prince Paul of Würtemberg† is the most prominent candidate. By the protocol of Feb. 3, 1830, the boundary of Greece was settled as follows: On the north, beginning at the mouth of the Aspropotamos (Achelous), it runs up the southern bank to Angelo Castro; thence through the middle of the lakes Sacarovista and Vrachori to mount Artoleria; thence to mount Axiros, and along the valley of Culouri and the top of Œta to the gulf of Zeitun. Acarnania and a great part of Ætolia and Thessaly are thus excluded from the Greek state, and a Turkish barrier interposed between Greece and the Ionian Islands. Candia, Samos, Psarra, &c., are not included. The population of the state is estimated at about 635,000: 280,000 in the Peloponnesus; 175,000 in the islands; 180,000 on the Greek main-land.—Anderson's *Observations on the Peloponnesus and the Greek Islands, made in* 1829 (Boston, 1830). For further information, we refer the reader to *Greece in* 1823 *and* 1824, by colonel Leicester Stanhope (Philadelphia, 1825); also, the *Picture of Greece in* 1825 (2 vols., New York, 1826); the *History of Modern Greece, with a View of the Geography, Antiquities and present Condition of that Country* (Boston, 1827); the *Historical Sketch of the Greek Revolution*, by Samuel G. Howe (New York, 1828); *Travels in Greece*, by J. P. Miller (Boston, 1828); *Visit to Greece and Constantinople, in the Years* 1827 *and* 1828, by H. A. V. Post (New York, 1830); Raffenel's (editor of the *Spectateur Oriental* at Smyrna, continued afterwards by Tricorni) *Histoire des Evènemens de la Grèce* (Paris, 1822); *Considérations sur la Guerre actuelle entre les Grecs et les Turks, par un Grec* (Paris, 1821); colonel Voutier's (who fought, in 1821 and 1822, in Greece) *Mémoires sur la Guerre actuelle des Grecs* (Paris, 1822); Agratis' *Précis des Opérations de la Flotte Grecque, durant la Révolution de* 1821 *et* 1822 (Paris, 1822), (chiefly after the log-book of the Hydriot Jacob Tumbasis, who commanded a fleet, and fell in an engagement, in 1822); several publications by eye-witnesses, interesting as historical memoirs, by Müller, Lieber, &c. Ed. Blaquière wrote, on the spot, the *Greek Revolution, its Origin and Progress, together with some Remarks on the Religion*, &c., *in Greece* (London, 1824), with plates. Maxime Raybaud, an officer in the corps of Philhellenes, published *Mémoires sur la Grèce pour servir à l'Histoire de la Guerre de l'Indépendance*, 1821 *et* 1822, with topographical maps, (Paris, 1825, 2 vols.). See, also, Pouqueville's *Histoire de la Régénération de la Grèce*, &c., or the History from 1740 to 1824, with maps (Paris, 1824, 2d ed., 1826, 4 vols.); Villemain's *Lascaris* (Paris, 1826); *La Grèce en* 1821 *et* 1822; *Correspondence politique, publiée par un Grec* (Paris, 1823). The *Courier de Smyrne* is often

* The correspondence of prince Leopold with the ministers, and with president Capo d'Istria, is highly interesting, as showing the arbitrary spirit with which the powers of Europe have been disposed to act towards Greece. It is to be found in the American papers of the middle of July, 1830.

† Prince Paul (Charles Frederic Augustus) is the brother of the king of Würtemberg; born Jan. 19, 1785; married, 1805, to Charlotte (Catharine), princess of Saxe-Altenburg, born 1787. He has four children. His eldest daughter is married to the grand-prince Michael, brother to the emperor of Russia: his eldest son Frederic (Charles Augustus) was born Feb. 21, 1808. Prince Paul William of Würtemberg (the traveller), who returned Nov. 29, 1830, to New Orleans, from a journey into the western regions of North America, is the son of Eugene Frederic Henry, the second brother of the reigning king of Würtemberg.

quoted as an authority in regard to Greek affairs. Of its trustworthiness we may judge from a letter addressed by count Capo d'Istria, March 12, 1830, to the French resident, baron de Rouen, in which he mentions the publication of two decrees, attributed to the Greek government, which are mere forgeries, and requests that proper measures may be taken to compel the editor to avow their falsehood.

Modern Greek Language (called *Romaic*) *and Literature.* The manly attitude, assumed by the Greeks since 1821, has attracted attention to their language, which, even in its degeneracy, recalls the beauties of the ancient tongue. Grateful for the culture bestowed on it, the Greek language seems to have preserved its purity longer than any other known to us; and even long after its purity was lost, the echo of this beautiful tongue served to keep alive something of the spirit of ancient Greece. All the supports of this majestic and refined dialect seemed to fail, when the Greeks were enslaved by the fall of Constantinople (A. D. 1453). All the cultivated classes, who still retained the pure Greek, the language of the Byzantine princes, either perished in the conflict, or took to flight, or courted the favor of their rude conquerors, by adopting their dialect. In the lower classes, only, did the common Greek survive (the κοινη, δημωδης, απλη, ιδιωτικη διαλεκτος) the vulgar dialect of the polished classes, the traces of which occur, indeed, in earlier authors, but which first appears distinctly in the sixth century. This Greek *patois* departed still more from the purity of the written language, which took refuge at court, in the tribunals of justice, and the halls of instruction, when the Frank crusaders augmented it by their own peculiar expressions, and the barbarians in the neighborhood engrafted theirs also upon it. This popular dialect first appears as a complete written language in the chronicles of Simon Sethos, in 1070—80. After the Ottomans had become masters of the country, all the institutions which had contributed to preserve a better idiom perished at once. The people, left to themselves, oppressed by the most brutal despotism, would finally have abandoned their own dialect, which became constantly more corrupt, had not the Greeks possessed a sort of rallying point in their church. Their patriarch remaining to them at the conquest of their capital (Panagiotacchi, who was appointed, in 1500, interpreter of the sultan), they turned to him as their head, and saw, in the synod of their church, his senate, and in the language of the works of the fathers of the church, and the Old and New Testaments, a standard which tended to give a uniform character to the different dialects. Neglected and exposed to the vicissitudes of fortune, destitute of a creed which could elevate their moral sentiments, thwarted in all their pursuits, urged by the state of things around them to indolent voluptuousness or vindictive malice, the impoverished institutions for instruction were of little efficiency. As the proper guardians of morality and education, the clergy and monks were themselves ignorant and corrupt. The debasement of this fine dialect continued till the middle of the last century; for the few writers of that period disdained to use the language of the people, and resorted to the ancient Greek, then, unhappily, an extinct dialect. The Greek spirit, not yet extinguished by all the adversities the nation had undergone, finally revived with increased vigor; for the mildest of climates, ever maintaining and cherishing a serenity of feeling, the imperishable heritage of hallowed names and associations, and even the love of song, kept alive some sparks of patriotic sentiment. With Rhizos, we may divide this revival into three distinct periods. The first, from 1700 to 1750, gave the Fanariots influence and efficiency in the seraglio, especially after Mavrocordato (Alex.) became dragoman of the Porte, and his son first hospodar of Moldavia and Walachia. During the second period, from 1750 to 1800, the Greeks resorted for instruction to the universities of the west, and returned thence to their native country. Naturally inclined to commerce, they soon manifested a dexterity and shrewdness, which enabled many to amass considerable wealth. Kept together by external pressure, it became necessary for them to rely on their own countrymen. Necessity taught them the value of education, and their admission to the administration of the government of Moldavia and Walachia raised their views to political life. They became desirous of making nearer approaches to the more civilized nations of Europe, so as not to remain behind in the general progress. The Greeks began to pay more attention to their mother tongue, and this tendency was increased by intercourse with the more refined West, by means of more frequent visits from intelligent men of that quarter to the ruins of Grecian greatness. The patriarch (Samuel Eu-

gene Bulgaris Theotocos) of Corfu, and the unfortunate Rhigas, may be mentioned as eminent at this period. But in the third period, from 1800 to the present time, this increase of the means of education first exerted a powerful influence on the nation, which, favored by external circumstances, now really began to be conscious of the oppression under which they suffered. Schools were formed at Odessa, Venice, Vienna, Jassy, Bucharest, and in the Ionian Islands, most of which have since ceased to exist. Even in Constantinople, in the reign of Selim III, some Fanariots (q. v.), especially the noble prince Demetrius Merousi, who founded a national academy at Kuru Tschesme in 1805, rendered great services to the modern Greek language and literature. Gratitude to the mother was, with the rest of Europe, a motive for attention to the daughter; and the language gained alike by the influence of the natives and of foreigners. The works printed at Jassy, Bucharest (where Spiridon Valetas, the ornament of the court in that place, translated, under the name of Aristomenes, the celebrated treatise of Rousseau, *Sur l'Inégalité des Conditions*), Venice and Leipsic were, at first, mostly theological; but, with the increase of industry and commerce, particularly among the Hydriots, and of the wealth of individuals, the circulation of books was also enlarged by the assistance of foreign and cordial friends of the nation. The language itself, which in its degradation was not destitute of melody and flexibility, gained energy and vivacity from their efforts, although the attempts of some individuals to bring it nearer to the ancient classic dialect, did violence to its idiomatic character. (See *Coray.*) The attempt to bring the existing idiom nearer the Byzantine Greek and the language of the patriarchs, made by the Athenian Codrica,—the warm adversary of Coray,—Jacobakis Rhizos, and many others, was more rational; and the periodical Ἑρμης λογιος, established at Vienna by the influence of Coray, with the other similar works which it called into existence, was not without effect. But every attempt will be vain to deprive the modern Greek language of its peculiar character, especially after a conflict which has excited so violently the feelings of the nation. The wealth of the modern Greek language, which former dictionaries show but very imperfectly, because it can only be fully exhibited by the assistance of many glossaries —Vendoti, Mod. Gr. Ital. and French (Vienna, 1790); Weigel, Mod. Gr. Germ. and Ital. (Leipsic, 1796); Cumas, Mod. Gr. Russ. and French (Moscow, 1811); Vlani, Mod. Gr. and Ital. (Venice, 1806); Schmidt's Mod. Gr. and Germ. Dict. (Leipsic, 1825), —would have been more fully displayed by the large dictionary, intended to fill six folio volumes, the superintendence of which was undertaken at Constantinople in 1821, by the patriarch Gregory (q. v.), but which was interrupted by the murder of the old man, April 22, 1821, with the destruction of so many institutions of learning fostered by him.* For acquiring a knowledge of the language itself, which differs from the ancient chiefly in the formation of the tenses and in the terminations of the nouns, the means have now increased. The grammar of Christopylus, published in Vienna in 1805, which considers the modern Greek as Æolic-Doric, Schmidt's Modern Greek Grammar (Leipsic, 1808), and another German and Greek grammar, by Bojadschi (Vienna, 1821 and 1823), besides Jules David's very valuable *Méthode pour étudier la Langue Grecque Moderne* (Paris, 1821), and a Συνοπτικος παραλληλισμος της ἑλληνικης και γραικικης γλωσσης (Paris, 1820), W. Münnich's Mod. Greek Grammar (Dresden, 1826), Von Lüdemann's Manual of the Mod. Greek Language (Leipsic, 1826), furnish important assistance. German philologists, such as Friedemann and Poppo, have, moreover, considered the relations of the modern Greek to the ancient. A work which is highly important for the language, as it exists, is the Remarks of H. Leake on the Languages spoken in Greece at the present Day, to be found in his Researches in Greece (1814). (See also the *Diction. Français Grec Moderne précédé d'un Discours sur la Grammaire et la Syntaxe de l'une et l'autre Langue par Grég. Zalicoglos*; Paris, 1824.) The literature of the modern Greeks, which had consisted chiefly of translations from the French, could not very much elevate the spirit of the people, as the matter presented was, in most cases, uncongenial to their character; but after the noble Coray, and others of similar sentiments, had devoted themselves to its improvement, a higher activity was perceptible. The school at Scio (unhappily destroyed by the massacre of April 11, 1822), which had existed since 1800; the academy at Yanina, whose director, Athanasius Psali-

* The first and second volumes of this *Ark of the Greek Language*, appeared at Constantinople in 1819, etc. from the press of the patriarch in the Fanar.

da, was regarded as the first modern Greek scholar; and the academy founded by the French on the Ionian Islands, were points of union for the Greek youth, not without influence on the Greek people. Under the protection of England, and lord Guilford's wise care, the Greek spirit was gradually developed. An Ionic Greek university was opened at Corfu, by the direction of Canning, May 19, 1824. It consists of four faculties, for theology, law, medicine and philosophy. Its chancellor was lord Guilford. The lectures are in the modern Greek language. The most distinguished professors are, Bambas of Scio, Asopios, and Piccolo (who delivers lectures on modern philosophy). In Paris, a distinct professorship of the modern Greek has existed for several years, and M. Clonaris delivers a course of very popular lectures on it. Those delivered by Jacobakis Rhizos Nerulos, at Geneva, were printed in a French translation (Geneva, 1827). In Munich, a professorship was afterwards established. In Vienna, Petersburg, Trieste, wealthy Greeks afforded important aid to the literature of their countrymen. In Odessa, a Greek theatre has existed for several years, where ancient Greek tragedies, translated into the modern language, delight the spectators. Such experiments were followed by original productions of Jacobakis Rhizos (Aspasia and Polyxena), of Piculos, and by translations of modern dramatic works by Oiconomos, Coccinakis, &c. The inspiring strains of Rhigas (q. v.) and Polyzois roused the military spirit of their countrymen. Christopylus, in the style of the Teian bard, pours out his cheerful strains; nor must Kalbo and Salomo of Zante be forgotten; the tone of the productions of Jannacateky Tianites, of Constantinople, is more melancholy. Sakellario's muse is grave (Vienna, 1817), and Perdicari's, satirical. As an *improvisatore*, Nicolopylus met with applause at Paris. Andreas Mustoxidi (q. v.), historian of the island of Corfu, is an ornament of modern Greek literature, equally distinguished as an Italian author, by his Life of Anacreon. Among the multitude of translators engaged on political works, Iskenteri, who translated Voltaire's *Zadig* into modern Greek, is highly esteemed. Bambas, Cumas (the translator of Krug's System of Philosophy), Alexandridis, Anthimos Gazis, Ducas, Gubdelas, Codricas, Condos, Mich. Schinas, Spyridon Tricoupi, Solyzoides, were names distinguished before the beginning of the late desolating troubles. The *Melissa* (the Bee), a modern Greek journal, published by Spyridon Condos and Agathophron, in Paris, in 1821, was discontinued when the contributors engaged in the war of liberty. On the whole, about 3000 works in the modern Greek language have appeared within 50 years. Fauriel, a Frenchman, collected all the popular modern Greek songs (Paris, 1824—25, 2 vols.), and in them has given the public a commentary on the events of the day. For more minute information, we refer to Iken's *Hellenion* and *Leucothea*, and to the periodicals. Consult Jul. David's Comparison of the Ancient and Modern Greek Languages (translated from the modern Greek by Struve, Berlin, 1827); Minoides Minas, *Traité sur la véritable Prononciation de la Langue Grecque* (Paris, 1827). Coray's system is at present generally adopted, to enrich and ennoble the modern Greek language from the treasures of the ancient Greek, avoiding the too difficult inflections, and removing the Germanisms and Gallicisms introduced by translations.

Greek Church; that portion of Christians who conform, in their creed, usages and church government, to the views of Christianity introduced into the former Greek empire, and perfected, since the 5th century, under the patriarchs of Constantinople, Alexandria, Antioch and Jerusalem. Christendom, which, with difficulty, had been brought to a state of concord in the 4th and 5th centuries, already contained the germ of a future schism, by reason both of its extent, as it embraced the whole east and west of the Roman empire, and of the diversity of language, modes of thinking and manners, among the nations professing it. The foundation of a new Rome in Constantinople; the political partition of the Roman empire into the Oriental, or Greek, and the Occidental, or Latin; the elevation of the bishop of Constantinople to the place of second patriarch of Christendom, inferior only to the patriarch of Rome, effected in the councils of Constantinople, A. D. 381, and of Chalcedon, A. D. 451; the jealousy of the latter patriarch towards the growing power of the former,—were circumstances, which, together with the ambiguity of the edict known under the name of the *Henoticon*, granted by the Greek emperor Zeno, A. D. 482, and obnoxious to the Latins on account of the appearance of a deviation from the decrees of the council of Chalcedon, produced a formal schism in the Christian church. Felix II, patriarch of Rome, pronounced sentence

of excommunication against the patriarchs of Constantinople and Alexandria, who had been the leading agents of the Henoticon, A. D. 484, and thus severed all ecclesiastical fellowship with the congregations of the East, attached to these patriarchs. The sentiments of the imperial court being changed, the Roman patriarch Hormidas was able, indeed, to compel a reunion of the Greek church with the Latin, in 519; but this union, never seriously intended, and loosely compacted, was again dissolved by the obstinacy of both parties, and the Roman sentence of excommunication against the Iconoclasts among the Greeks, A. D. 733, and against Photius, the patriarch of Constantinople, A. D. 862. The augmentation of the Greek church, by the addition of newly converted nations, as the Bulgarians, excited anew, about this time, the jealousy of the Roman pontiff; and his bearing towards the Greeks was the more haughty since he had renounced his allegiance to the Greek emperor, and had a sure protection against him in the new Frankish-Roman empire. Photius, on the other hand, charged the Latins with arbitrary conduct in inserting an unscriptural addition into the creed respecting the origin of the Holy Ghost, and in altering many of the usages of the ancient orthodox church; for example, in forbidding their priests to marry, repeating the chrism, and fasting on Saturday, as the Jewish sabbath. But he complained, with justice, in particular, of the assumptions of the pope, who pretended to be the sovereign of all Christendom, and treated the Greek patriarchs as his inferiors. The deposition of this patriarch, twice effected by the pope, did not terminate the dispute between the Greeks and Latins; and when the patriarch of Constantinople, Michael Cerularius, added to the charges of Photius, against the Latins, an accusation of heresy, in 1054, on account of their use of unleavened bread at the communion, and of the blood of animals that had died by strangulation, as well as on account of the immorality of the Latin clergy in general, Pope Leo IX, having, in retaliation, excommunicated him, in the most insulting manner, a total separation ensued of the Greek church from the Latin. From this time, pride, obstinacy and selfishness frustrated all the attempts which were made to reunite the severed churches, partly by the popes, in order to annex the East to their see, partly by the Greek emperors (equally oppressed by the crusaders and Mohammedans), in order to secure the assistance of the princes of the West. Neither would yield to the other in respect to the contested points, on which we have touched above. While the Catholic religion acquired a more complete and peculiar character under Gregory VII, and through the scholastic philosophy, the Greek church retained its creed, as arranged by John of Damascus, in 730, and its ancient constitution. The conquest of Constantinople by the French crusaders and the Venetians, A. D. 1204, and the cruel oppressions which the Greeks had to endure from the Latins and the papal legates, only increased their exasperation; and although the Greek emperor Michael II (Palæologus, who had reconquered Constantinople in 1261) consented to recognise the supremacy of the pope, and by his envoys and some of the clergy, who were devoted to him, abjured the points of separation, at the assembly, at Lyons, A. D. 1274; and though a joint synod was held at Constantinople, in 1277, for the purpose of strengthening the union with the Latin church, the mass of the Greek church was nevertheless opposed to this step; and pope Martin IV, having excommunicated the emperor Michael, in 1281, from political motives, the councils held at Constantinople, in 1283 and 1285, by the Greek bishop, restored their old doctrines and the separation from the Latins. The last attempt was made by the Greek emperor John VII (Palæologus, who was very hard pressed by the Turks), together with the patriarch Joseph, in the councils held, first at Ferrara, in 1438, and the next year at Florence, pope Eugene IV presiding; but the union concluded there had the appearance of a submission of the Greeks to the Roman see, and was altogether rejected by the Greek clergy and nation, so that, in fact, the schism of the two churches continued. The efforts of the Greek emperors, on this point, who had always had most interest in these attempts at union, ceased with the overthrow of their empire and the conquest of Constantinople by the Turks, A. D. 1453; and the exertions of the Roman Catholics to subject the Greek church, effected nothing but the acknowledgment of the supremacy of the pope by some congregations in Italy (whither many Greeks had fled before the Turks), in Hungary, Galicia, Poland and Lithuania, which congregations are now known under the name of *United Greeks*. In the 7th century, the territory of the Greek church embraced, besides East Illyria,

Greece Proper, with the Morea and the Archipelago, Asia Minor, Syria, with Palestine, Arabia, Egypt, and numerous congregations in Mesopotamia and Persia; but the conquests of Mohammed and his successors have deprived it, since 630, of almost all its provinces in Asia and Africa; and even in Europe the number of its adherents was considerably diminished by the Turks in the 15th century. On the other hand, it was increased by the accession of several Sclavonian nations, and especially of the Russians, who were compelled by the great prince Wladimir, in the year 988, to adopt the creed of the Greek Christians. To this nation the Greek church is indebted for the symbolical book, which, with the canons of the first and second Nicene, of the first, second and third Constantinopolitan, of the Ephesian and Chalcedonian general councils, and of the Trullan council, holden at Constantinople in 692, is the sole authority of the Greek Christian in doctrinal matters. After the learned Cyrillus Lascaris, patriarch of Constantinople, had atoned, with his life, for the approach to Protestantism perceptible in his creed, A. D. 1629, an exposition of the doctrine of the Russians was drawn up, in the Greek language, by Pet. Mogislaus, bishop of Kiev, 1642, under the title the Orthodox Confession of the Catholic and Apostolic Church of Christ, signed and ratified, 1643, by all the patriarchs of the Greek church, to whom had been added, in 1589, the fifth patriarch of Moscow. It was printed in Holland, in Greek and Latin, 1662, with a preface by the patriarch Nectarius of Jerusalem. In 1696, it was published by the last Russian patriarch, Adrianus of Moscow; and, in 1722, at the command of Peter the Great, by the holy synod; it having been previously declared to be in all cases valid, as the ritual of the Greek church, by a council at Jerusalem, in 1672, and by the ecclesiastical rule of Peter the Great, drawn up, in 1721, by Theophanes Procowicz. Like the Catholic, this church recognises two sources of doctrine, the Bible and tradition, under which last it comprehends not only those doctrines which were orally delivered by the apostles, but also those which have been approved of by the fathers of the Greek church, especially John of Damascus, as well as by the seven above-named general councils. The other councils, whose authority is valid in the Roman Catholic church, this church does not recognise; nor does it allow the patriarchs or synods to introduce new doctrines. It treats its tenets as so entirely obligatory and necessary, that they cannot be denied without the loss of salvation. It is the only church which holds that the Holy Ghost proceeds from the Father only, thus differing from the Catholic and Protestant churches, which agree in deriving the Holy Ghost from the Father and the Son. Like the Catholic church, it has seven sacraments—baptism, chrism, the eucharist preceded by confession, penance, ordination, marriage and supreme unction; but it is peculiar, 1. in holding that full purification from original sin in baptism requires an immersion three times of the whole body in water, whether infants or adults are to be baptized, and in joining chrism (confirmation) with it as the completion of baptism; 2. in adopting, as to the eucharist, the doctrine of transubstantiation, as well as the Catholic views of the host; but it orders the bread to be leavened, the wine to be mixed with water, and both elements are distributed to every one, even to children, before they have a true idea of what sin is, the communicant receiving the bread broken in a spoon filled with the consecrated wine; 3. all the clergy, with the exception of the monks, and of the higher clergy chosen from among them, down to the bishops inclusive, are allowed to marry a virgin, but not a widow; nor are they allowed to marry a second time; and therefore the widowed clergy are not permitted to retain their livings, but go into a cloister, where they are called *hieromonachi*. Rarely is a widowed clergyman allowed to preserve his diocese; and from the maxim, that marriage is not suitable for the higher clergy in general, and second marriage at least is improper for the lower, there is no departure. The Greek church does not regard the marriage of the laity as indissoluble, and frequently grants divorces; but is as strict as the Catholic church with respect to the forbidden degrees of relationship, especially of the ecclesiastical relationship of godparents; nor does it allow the laity a fourth marriage. It differs from the Catholic church in anointing with the holy oil, not only the dying, but the sick, for the restoration of their health, the forgiveness of their sins, and the sanctification of their souls. It rejects the doctrine of purgatory, has nothing to do with predestination, works of supererogation, indulgences and dispensations (to the living; but a printed form for the forgiveness of sin is sometimes given to the de-

ceased, at the request and for the comfort of the survivors); and it recognises neither the pope nor any one else as the visible vicar of Christ on earth. It moreover allows no carved, sculptured or molten image of holy persons or subjects; but the representations of Christ, of the virgin Mary and the saints, which are objects of religious veneration in churches and private houses, must be merely painted, and, at most, inlaid with precious stones. In the Russian churches, however, works of sculpture are found on the altars. In the invocation of the saints, and especially of the virgin, the Greeks are as zealous as the Catholics. They also hold relics, graves and crosses sacred; and crossing in the name of Jesus, they consider as having a wonderful and blessed influence. Among the means of penance, fasts are particularly numerous with them, at which it is not lawful to eat any thing but fruits, vegetables, bread and fish. They fast Wednesday and Friday of every week; and, besides, observe four great annual fasts, viz., 40 days before Easter, from Whitsuntide to the days of St. Peter and Paul; the fast of the virgin Mary, from the 1st to the 15th of August; and the apostle Philip's fast, from the 15th to the 26th of November; besides the day of the beheading of John, and of the elevation of the cross. The services of the Greek church consist almost entirely in outward forms. Preaching and catechising constitute the least part of it; and, in the 17th century, preaching was strictly forbidden in Russia, under the czar Alexis, in order to prevent the diffusion of new doctrines. In Turkey, preaching was confined almost exclusively to the higher clergy, because they alone possessed some degree of knowledge. Each congregation has its appointed choir of singers, who sing psalms and hymns. The congregations themselves do not, like us, sing from books; and instrumental music is excluded altogether from the Greek worship. Besides the mass, which is regarded as the chief thing, the liturgy consists of passages of Scripture, prayers and legends of the saints, and in the recitation of the creed, or of sentences which the officiating priest begins, and the people in a body continue and finish. The convents conform, for the most part, to the strict rule of St. Basil. The Greek abbot is termed *higumenos*, the abbess *higumene*. The abbot of a Greek convent, which has several others under its inspection, is termed *archimandrite*, and has a rank next below that of bishop. The lower clergy, in the Greek church consists of readers, singers, deacons, &c., and of priests, such as the popes and protopopes or arch priests, who are the first clergy in the cathedrals and metropolitan churches. The members of the lower clergy can rise no higher than protopopes; for the bishops are chosen from among the monks, and from the bishops, archbishops, metropolitans and patriarchs. In Russia, there are 31 dioceses. With which of them the arch-episcopal dignity shall be united, depends on the will of the emperor. The seats of the four metropolitans of the Russian empire are Petersburg, with the jurisdiction of Novgorod; Kiev, with that of Galicia; Kasan, with that of Svijaschk; and Tobolsk, with that of all Siberia. The patriarchal dignity of Moscow, which the patriarch Nikon (died in 1681) was said to have abused, Peter the Great abolished, by presenting himself before the bishops, assembled, after the death of Adria, 1702, to choose a new patriarch. with the words, "I am your patriarch;" and, in 1721, the whole church government of his empire was intrusted to a college of bishops and secular clergy, called the *holy synod*, first at Moscow, now at Petersburg. Under this synod now stand, beside the metropolitans, 11 archbishops, 19 bishops, 12,500 parish churches, and 425 convents, 58 of which are connected with monastic schools for the education of the clergy, and, for the better effecting of this object, are aided by an annual pension of 300,000 rubles from the state. The Greek church, under the Turkish dominion, remained, as far as was possible under such circumstances, faithful to the original constitution. The dignities of patriarch of Constantinople, Alexandria, Antioch and Jerusalem still subsist. The former, however, possesses the ancient authority of the former archbishop of Constantinople; takes the lead as œcumenical patriarch, in the holy synod at Constantinople, composed of the four patriarchs, a number of metropolitans and bishops, and 12 principal secular Greeks; exercises the highest ecclesiastical jurisdiction over the Greeks in the whole Turkish empire, and is recognised as head of the Greek church, by the (not united) Greeks in Galicia, in the Bukowina, in Sclavonia and the Seven Islands. The other three patriarchs, since almost all the people in their dioceses are Mohammedans, have but a small sphere of action (the patriarch of Alexandria has but two churches at Cairo), and live, for the most part, on the aid afforded them

by the patriarch of Constantinople. This patriarch has a considerable income, but is obliged to pay nearly half of it as a tribute to the sultan. The Greeks, under the Turkish government, are allowed to build no new churches, have to pay dearly for the permission to repair the old ones, are not allowed to have steeples or bells to their churches, nor even to wear the Turkish dress, generally perform religious service by night, and are moreover obliged, not only to pay tolls, from which the Turks are free, but the males also pay to the sultan, after their 15th year, a heavy poll tax, under the name of *exemption from beheading*. For a long time, the attachment of this church to old institutions has stood in the way of all attempts at improvement. Such attempts have given rise to a number of sects, which the Russian government leaves unmolested. As early as the 14th century, the party of the Strigolnicians seceded from hatred of the clergy, but, as they had no other peculiarity, soon perished. The same was done, with more success, by the Roskolnicians (i. e., the apostates), about 1666. (See *Roskolnicians*.) This sect, which, by degrees, was divided into 20 different parties, by no means forms a regular ecclesiastical society, with symbols and usages of its own, but consists of single congregations, independent of each other, which are distinguished from the Greek church by preserving, unaltered, the ancient Sclavonian liturgy, &c.; have a consecrated clergy; and, having retired from early persecution, have become numerous in the eastern provinces of the Russian empire. The different parties conform, more or less, to the peculiarities attributed to the Roskolnicians in general, such as declaring the use of tobacco and of strong drinks sinful, fasting yet more strictly than the orthodox church, refusing to take oaths; and are, from a fanatical spirit similar to that of the former Anabaptists, inclined to rebellion against their rulers. Pugatschew, himself a Roskolnician, found most of his adherents among them in his rebellion. At present, they have relaxed much of their strictness on these points, as well as their fantastic notions with respect to marriage, dress, the priesthood and martyrdom, and seem to be gradually merging among the orthodox. The Philippones (q. v.) were exiled Roskolnicians, who settled in Lithuania and East Prussia, under Philip Pustoswiæt. Farther removed from the belief of the Greek church are the Duchoborzy, a sect settled on the steppes (q. v.), beyond the Don, which rejects the doctrine of the Trinity, and receives the Gospels only, has no churches nor priests, and regards oaths, as well as warfare, unlawful. Antitrinitarians, of a similar kind, are the *Russian Jews*, as they are called in the government of Archangel and Katharinoslav, of whom it is only known that they worship neither Christ nor the saints, reject baptism, and have no priests nor churches. (Respecting the ancient schismatic and heretical religious parties in Asia and Africa, that have proceeded from the Greek church, see *Copts*, *Abyssinia*, *Jacobites*, *Nestorians*, *Maronites*, *Armenians*.)

Greek Fire. (See *Fire, Greek*.)

Green, a river of Kentucky, which rises in Lincoln county, and flows into the Ohio, 61 miles above the Wabash, 173 below Louisville. Its course for about 150 miles is westerly; it afterwards has a course N. by W. Its whole length is upwards of 200 miles, and it is navigable for boats, at some seasons, nearly 150. The tract through which it flows, called the *Green river country*, is remarkable for its fertility, beautiful scenery and stupendous caves, in which are found great quantities of nitre.

Green Bank; one of the banks near the island of Newfoundland, 129 miles long and 48 wide. Lon. 53° 30′ to 55° 50′ W.; lat. 45° 30′ to 46° 50′ N.

Green Bay, or Puan Bay; bay on W. side of lake Michigan, about 100 miles long, but in some places only 15 miles, in others from 20 to 30, broad. It lies nearly from N. E. to S. W. At the entrance of it from the lake is a string of islands extending N. to S., called the *Grand Traverse*. These are about 30 miles in length, and serve to facilitate the passage of canoes, as they shelter them from the winds, which sometimes come with violence across the lake. Green Bay is termed by the inhabitants of its coasts, the *Menominy bay*. The country around is occupied chiefly by the Menominy Indians.

Green Bay; a post-town, military post, and seat of justice for Brown county, Michigan, at S. end of Green Bay, near the entrance of Fox river; 180 S.W. Michilimackinac, 220 N. by W. Chicago, 366 E. Prairie du Chien, by the Fox and Ouisconsin rivers, W. 972. Lon. 87° 58′ W.; lat. 45° N. Here is a settlement, extending about four miles.

Green Cloth; a board or court of justice, held in the counting-house of the king's household, composed of the lord steward and officers under him, who sit daily. To this court is committed the

charge and oversight of the king's household in matters of justice and government, with a power to correct all offenders, and to maintain the peace of the verge, or jurisdiction of the court royal, which is every way about 200 yards from the last gate of the palace where his majesty resides. Without a warrant first obtained from this court, none of the king's servants can be arrested for debt.

Greene, Nathaniel, a major-general in the American army, was born, May 22, 1742, near the town of Warwick in Rhode Island. His father was an anchor smith, and, at the same time, a Quaker preacher, whose ignorance, combined with the fanaticism of the times, made him pay little attention to the worldly learning of his children, though he was very careful of their moral and religious instruction. The fondness for knowledge, however, of young Greene was such, that he devoted all the time he could spare to its acquisition, and employed all his trifling gains in procuring books. His propensity for the life of a soldier was early evinced by his predilection for works on military subjects. He made considerable proficiency in the exact sciences; and, after he had attained his twentieth year, he added a tolerable stock of legal knowledge to his other acquisitions. In the year 1770, he was elected a member of the state legislature, and, in 1774, enrolled himself as a private in a company called the Kentish Guards. After the battle of Lexington, the state of Rhode Island raised what was termed an army of observation, in order to assist the forces collected in Massachusetts, for the purpose of confining the British within the limits of Boston, and chose Greene its commander, with the title of major-general. His elevation from the ranks to the head of three regiments, may give some idea of the estimation in which his military talents were held. June 6, 1775, he assumed his command before the lines of Boston; and, not long afterwards, general Washington arrived, to take the command in chief of the American forces. Between these two distinguished men an intimacy soon commenced, which was never interrupted. Greene accepted a commission from congress of brigadier-general, although, under the state, he held that of major-general; preferring the former, as it promised a larger sphere of action, and the pleasure of serving under the immediate command of Washington. When the American army had followed the enemy to New York, after the evacuation of Boston, they encamped, partly in New York and partly on Long Island. The division posted upon the island was under the orders of Greene; but, at the time of its unfortunate affair with the enemy, he was suffering under severe sickness, and general Sullivan was in command. When he had sufficiently recovered his health, he joined the retreating army, having previously been promoted to the rank of major-general, and was appointed to command the troops in New Jersey destined to watch the movements of a strong detachment of the British, which had been left in Staten island. December 26, 1776, when Washington surprised the English at Trenton, Greene commanded the left wing of the American forces, which was the first that reached the town, and, having seized the enemy's artillery, cut off their retreat to Princeton. Next summer, sir William Howe having embarked with a large force at New York, for the purpose of landing on the eastern shore of the Chesapeake, and thence marching to Philadelphia, Washington hastened to oppose him; and, September 11, the battle of the Brandywine took place, in which the Americans were defeated. In this affair, Greene commanded the vanguard, together with Sullivan, and it became his duty to cover the retreat, in which he fully succeeded. After general Howe had obtained possession of Philadelphia, the British army, in consequence of this victory, encamped at Germantown, where an attack was made upon it by Washington, October 4, 1777, in which Greene commanded the left wing. The disastrous issue of this attempt is well known; but it has been asserted, that the left wing was the only part of the American army which had the good fortune to effect the service allotted it that day. The next service upon which general Greene was engaged, was that of endeavoring to prevent lord Cornwallis from collecting supplies, for which he had been detached into the Jerseys, with 3000 men; but, before Greene could bring him to an action, he had received reinforcements, which gave him so great a superiority, that the American general was recalled by the commander-in-chief. In March of the following year, Greene, at the solicitation of Washington, accepted the appointment of quarter-master-general, on two conditions; that he should retain his right of command in time of action, and that he should have the choice of two assistants. At the battle of Monmouth, in the ensuing month of June, he led the right wing of the second line, and mainly contributed to the partial success of the Americans. Af-

ter this, he continued engaged in discharging the duties of his station until August, when he was sent to join Sullivan, who, with the forces under his command, aided by the French fleet under D'Estaing, was preparing to make an attempt upon Newport in Rhode Island, then in possession of the enemy. The command of the left wing of the troops was assigned to Greene. The enterprise, however, failed, in consequence of some misunderstanding between Sullivan and D'Estaign; and the consequent retreat of the American army was covered by Greene, who repulsed an attack of the enemy with half their number. When general Washington, alarmed for the safety of the garrisons on the North river, repaired to West Point, he left Greene in command of the army in New Jersey. The latter had not been long in that command, before he was attacked, near Springfield, by a force much superior to his, under sir Henry Clinton; but the enemy were repulsed, though they burned the village. This affair happened June 23. October 6, he was appointed to succeed the traitor Arnold in the command at West Point. In this station, however, he continued only until the 14th of the same month, when he was chosen by general Washington to take the place of general Gates, in the chief direction of the southern army. From this moment, when he was placed in a situation where he could exercise his genius without control, dates the most brilliant portion of Greene's career. The ability, prudence and firmness which he here displayed, have caused him to be ranked, in the scale of our revolutionary generals, second only to Washington. December 2, 1780, Greene arrived at the encampment of the American forces at Charlotte, and, on the 4th, assumed the command. After the battle of the Cowpens, gained by Morgan, January 17, 1781, he effected a junction with the victorious general, having previously been engaged in recruiting his army, which had been greatly thinned by death and desertion; but the numbers of Cornwallis were still so superior, that he was obliged to retreat into Virginia, which he did with a degree of skill that has been the theme of the highest eulogy. He, soon afterwards, however, returned to North Carolina, with an accession of force, and, March 15, encountered Cornwallis at Guilford courthouse, where he was defeated; but the loss of the enemy was greater than his, and no advantages accrued to them from the victory. On the contrary, Cornwallis, a few days afterwards, commenced a retrograde movement towards Wilmington, leaving many of his wounded behind him, and was followed for some time by Greene. Desisting, however, from the pursuit, the latter marched into South Carolina, and a battle took place, April 25, between him and lord Rawdon, near Camden, in which he was again unsuccessful, though again the enemy were prevented by him from improving their victory, and, not long after, were obliged to retire. May 22, having previously reduced a number of the forts and garrisons in South Carolina, he commenced the siege of Ninety-Six, but in June the approach of lord Rawdon compelled him to raise it, and retreat to the extremity of the state. Expressing a determination "to recover South Carolina, or die in the attempt," he again advanced, when the British forces were divided, and lord Rawdon was pursued, in his turn, to his encampment at Orangeburg, where he was offered battle by his adversary, which was refused. September 8, Greene obtained a victory over the British forces under colonel Stewart, at Eutaw Springs, which completely prostrated the power of the enemy in South Carolina. Greene was presented by congress with a British standard and a gold medal, as a testimony of their sense of his services on this occasion. This was the last action in which Greene was engaged. During the rest of the war, however, he continued in his command, struggling with the greatest difficulties, in consequence of the want of all kinds of supplies, and the mutinous disposition of some of his troops. When peace released him from his duties, he returned to Rhode Island; and his journey thither, almost at every step, was marked by some private or public testimonial of gratitude and regard. On his arrival at Princeton, where congress was then sitting, that body unanimously resolved, that "two pieces of field ordnance, taken from the British army at the Cowpens, Augusta, or Eutaw," should be presented to him by the commander-in-chief. In October, 1785, Greene repaired, with his family, to Georgia, some valuable grants of lands near Savannah having been made to him by that state. He died June 19, 1786, in his 44th year, in consequence of an inflammation of the brain, contracted by exposure to the rays of an intense sun. General Greene possessed, in a great degree, not only the common quality of physical courage, but that fortitude and unbending firmness of mind, which are given to few, and which enabled him to bear up against the most cruel reverses, and struggle perseveringly with,

and finally surmount, the most formidable difficulties. He was ever collected in the most trying situations, and prudence and judgment were distinguishing traits in his character. In his disposition, he was mild and benevolent; but when it was necessary, he was resolutely severe. No officer of the revolutionary army possessed a higher place in the confidence and affection of Washington, and, probably, none would have been so well calculated to succeed him, if death had deprived his country of his services during the revolutionary struggle.

Green Gage; a variety of the plum, the *reine claude* of the French, usually considered the most delicious of all. It is large, of a green or slightly yellowish color, and has a juicy, greenish pulp, of an exquisite flavor.

Greenland (*Groenland*); an extensive country of North America, belonging to Denmark, the extent of which is unknown. Since lieutenant (now captain) Parry advanced from Baffin's bay into Lancaster sound (1819), it has been supposed to be an island. As far as it is now known, it extends from lat. 59° 38′ to 78° N. Its southern point is cape Farewell. On the western coast lie Davis's straits and Baffin's bay. It is divided into two parts by a chain of mountains passing through the middle of the country from north to south. Greenland was settled 800 years ago, by two colonies from Norway and Denmark, of which the one occupied the eastern, the other the western coast. Their intercourse was carried on by sea, the mountains rendering any communication by land impossible. A Runic stone found in Greenland in 1824 (now in the museum of northern antiquities at Copenhagen) proves the early discovery of Greenland from Scandinavia. The western colony, after numerous vicissitudes, still exists. The population in the southern part to the river Frith (68°), amounted, in 1811—13, to 3583: northern Greenland contained only 3000 natives. From 67° to 69°, the country is uninhabited. The fate of the eastern colony, which in 1406 consisted of 190 villages, and had a bishop, 12 parishes and two monasteries, is unknown. Up to that time, 16 bishops had been sent from Norway in regular succession; the 17th was prevented by the ice from reaching the land. Danish sailors, in the 16th and 17th centuries, attempted, without success, to land on the eastern coast. Attempts made in 1786 and 1829, by the command of the Danish government, failed. This lost East Greenland, Von Egger, in his Prize Essay (1794), maintains, is the country now called *Julianenshaab*, on the western coast; but a manuscript now in the library at Dresden, maintains that the old settlement of Osterbygde was actually on the eastern coast of Greenland.* A traveller of the 14th century, Nicolas Zeno, describes Greenland as it existed in his time. In 1818, England sent an expedition to the Polar sea, because the ice at the north pole was said to have decreased, and a north-west passage was believed practicable; the ships returned, however, without accomplishing any thing. Captain Scoresby found the eastern coast free from ice in 1822; he sailed along it from 75° to 69°, and examined it with care (see his *Journal of a Voyage to the Northern Whale-Fishery*, &c., 1822). To this traveller we are indebted for the latest and most correct accounts of East Greenland, which refute Egger's opinions. He found fields producing luxuriant grass, but no inhabitants. He met, however, with some houses, containing household utensils and hunting apparatus, and a wooden coffin. The English captain Sabine describes the eastern coast of Greenland (see his *Experiments to determine the Figure of the Earth*, &c.), from 72° to 76° N. latitude. He also found it impossible, on account of the permanent mass of ice, to approach the eastern coast north of 74°; his examinations proved that there was no current which carries the ice from those coasts towards the south. The western coast was also cut off, in the middle of the 14th century, from its usual intercourse with Norway and Iceland, by a dreadful plague, called the *black death*. In the reign of queen Elizabeth, Frobisher and Davis again discovered this coast of Greenland. From that time, nothing was done to explore this country, until the Danish government, in 1721, assisted a clergyman, Hans Egede, with two ships, to effect a landing in 64° 5′, and establish the first European settlement, Good Hope (*Godhaab*), on the river Baal. Egede found the country inhabited by a race of people which had probably spread from the west over Davis's straits, and which resembled the Esquimaux of Labrador in their language and customs. In 1733, the Moravian Brothers were induced by count Zinzendorf to attempt the establishment of

* The Paris *Archives du Christianisme* says, that an expedition, which left Copenhagen in May, 1830, has found the long lost colony, professing the Christian religion, and speaking the Norwegian of the 10th century.

settlements and missions on these inhospitable shores. There are now on the western coast of Greenland twenty settlements, of which the most southerly, Lichtenau, is situated in 60° 34′ N. latitude. Near it is the second settlement, Juliana's Hope (*Julianen shaab*): in the vicinity, the ruins of an old Icelandic and Norwegian church are still visible. Farther to the north lie Frederic's Hope, Lichtenfels, Good Hope, New Herrnhut, Zuckerhut, Holsteinburg, Egedesminde, Christian's Hope, Jacobshaven, Omenack and Upernamick, in 72° 32′ N. latitude, the most northern settlement, now occupied only by Greenlanders. The governor of South Greenland has his seat in Good Hope, and the governor of North Greenland is stationed at Guthaven, on the island of Disco, in 70° N. latitude. There are five Protestant churches on the coast, in which the gospel is preached in the Danish and Greenlandish dialects. The Moravian Brothers have three houses of public worship in Lichtenau, Lichtenfels and New Herrnhut. The natives, called by the oldest Icelandish and Norwegian authors, *Skrellings*, belong to the Esquimaux family, which is spread over all the northern part of America, to the western coast. They are remarkable for their diminutive stature; their hair is dark, long, stringy, eyes black, heads disproportionately large, legs thin, and complexion a brownish yellow, approaching to olive green. This, however, is partly owing to their filthy manner of living, and partly to their food and occupations, as they are constantly covered with blubber and train oil. The women, being employed, from early youth, in carrying heavy loads, are so broad shouldered, as to lose all feminine appearance. Their dress contributes to this effect; they wear the skins of seals and reindeer. The short coats, the trowsers and boots of both sexes, are all made of the same material. In extremely cold weather, they wear a shirt made of the skins of birds, particularly those of the sea-raven, the eider duck, &c. In winter, they live in houses of stone, with walls two feet in thickness, covered with brushwood and turf, and with an entrance so small, that it can be passed only on the hands and feet. Windows are seldom met with in these huts; those which they have are made of the intestines of whales and seals. The height of the house never exceeds six feet; it is 12 feet wide, and of about the same length. It consists of one room only, with a raised platform on one side, covered with seal-skin, which serves the double purpose of a bed and a table. Lamps, supplied with train-oil, are kept constantly burning, as much for the sake of warmth as of light. The smell from so many oil lamps, together with that of the fish, raw skins and greasy inhabitants, is hardly to be endured by unaccustomed nostrils; and the filthy condition of the huts breeds immense quantities of vermin. When the snow melts, which is generally the case in May, the roof of the house generally sinks in, and the Greenlander then spreads a tent, which is covered with seal skin, and surrounded with a curtain of the intestines of whales; the interior is arranged like the winter establishment. Their utensils and tools are simple, but ingeniously contrived. They consist of bows and arrows, lances, javelins and harpoons. Their canoes are made of laths, bound by whalebone, and covered with dressed seal-skin. They show a wonderful skill in managing them, even in the most boisterous weather. They also use sledges, drawn by dogs, in which they sometimes go from 30 to 40 miles from the land on the frozen sea. The swiftness of these animals is such, that in 9 or 10 hours, they accomplish a distance of about 60 miles. The language of the Greenlanders is the same as that spoken by the Esquimaux in Labrador, and on the shores of Hudson's bay. Traces of it are also said to be found on the north-west coast of America, as far as Nootka sound. The variety in the forms of the verbs, in combination with the pronouns, is a remarkable peculiarity of this language. The superstitious Greenlanders pay great respect to their *angekoks* or sorcerers, who are at the same time their priests and physicians. They have but very rude notions of a Supreme Being. During the prevalence of the north-east winds, the cold is often so great, that the mercury sinks to 48° below the freezing point of Fahr. The west winds coming from Davis's straits are always damp, and accompanied by thaws. The basis of the mountains and rocks is a fine-grained granite, with gneiss, mica slate, hornblende and whitestone. Many interesting and uncommon minerals are found—magnetic iron ore, gadolinite, zircon, schorl, tourmaline, the finest garnets, sodalite, iolite, and hypersthene of a beautiful light blue. Among the animals are the polar fox, the white hare, the reindeer, the white bear, the arctic fox, the walrus, various kinds of seals, and the narval. The Greenland whale (see *Whale*, and *Whale-Fishery*) is found in great numbers

and of an enormous size. Of the birds, the principal is the cinereous eagle; the snowy owl, and others of the falcon tribe, inhabit the high rocks; the water-fowl are numerous. A species of mosquito is exceedingly troublesome in the warm weather. The exports are whalebone, oil, skins and furs, eider down, the horns of the narval, &c. The imports are provisions, gunpowder, cotton and linen goods, iron and glass wares, &c. In the inlets and bays which intersect the coast of Greenland, immense masses of ice are accumulated during a series of years, which, being loosened during the heat of summer, lose their points of support from the shore, and plunge into the ocean with a thundering noise. Being afterwards set adrift by the currents, they embarrass the navigation of the Polar seas, and become the terror of the mariner. Those masses of ice are formed both of fresh and of salt water, and sometimes rise more than 500 feet above the surface of the water. The salt water ice occurs in immense fields, of many thousand fathoms in length and breadth, divided by fissures, but following close on each other. When the wind begins to blow, and the sea to rise in vast billows, the violent shocks of those masses of ice against each other, fill the mind with astonishment and terror. The coasts of Greenland are surrounded by many thousand islands of different sizes, on which the native inhabitants frequently fix their residence, on account of their good situation for sea game.

Green Mountains; a range of mountains, commencing in Canada, and extending south through Vermont, Massachusetts and Connecticut. They divide the waters which flow into the Connecticut from those which flow into lake Champlain and the Hudson. Among the highest summits in Vermont are Mansfield mountain, Camel's rump, and Killington peak. West rock, near New Haven, Conn., is the southern termination of the chain. The natural growth upon these mountains is hemlock, pine, spruce, and other evergreens, and they derive their name from their green appearance. There are many fine farms among these mountains, and much of the land upon them is excellent for grazing.

Greenock; the chief seaport of Scotland, on the south bank of the river Clyde, which has in front an extensive and beautiful bay. The manufactories of the place are sugar-houses, rope-walks, soap and candle works, tan works, potteries, bottle and crystal works, hat manufactories, extensive founderies and manufactories of steam engines and chain cables; to these may be added ship-building, which is carried on to a great extent. The herring-fishery is the oldest branch of the industry of the place. The harbors are very spacious, and are frequented by vessels from all quarters of the world. The dry docks are elegant and commodious; the one lately erected, near the custom-house, is considered the first in the kingdom. Population in 1828, over 25,000. Lon. 0° 18′ 58″ W.; lat. 55° 57′ 2″ N.

Greenstone. (See *Hornblende.*)

Greenville College, pleasantly situated, 3 miles from Greenville, Tennessee, was incorporated in 1794. The college hall is a neat building, about 60 feet long, and 25 wide, of 2 stories. The college has a library of about 3500 volumes, a small philosophical apparatus, and funded property to the amount of about $6000.

Greenwich; a market-town of England, in Kent, on the southern bank of the Thames, formerly the seat of a palace in which the kings of England occasionally resided. It was built by Humphrey, duke of Gloucester, and called *Placentia.* Henry VII enlarged it, and his son, Henry VIII, finished it. Queen Elizabeth and queen Mary were born within its walls, and Edward VI died here. King Charles II took the greater part down, and commenced a new palace on its site, a part of which forms one wing of the present hospital. This consists, at present, of four extensive piles of building or wings, entirely detached from each other, but so connected by the conformity of their dimensions, their figures, and the general arrangement of their decorations, as to form a complete whole. The principal front, which is nearly all of Portland stone, faces the Thames on the north. The two northern wings are separated by a square of 270 feet wide; the two southern are connected by two colonnades, 115 feet asunder, supported by 300 double columns and pilasters; while a spacious avenue through the hospital from the town, divides these squares from each other, and thus also divides the whole of the northern half of the building from the whole of the southern. In the middle of the great square is a statue of George II, sculptured by Rysbrach. Extending 865 feet along the front, the intervening bank of the Thames is formed into a terrace, with a double flight of steps to the river in the middle. The pensioners to be received into the hospital must be aged and maimed seamen of the navy, or

of the merchant service, if wounded in battle, and marines and foreigners who have served two years in the navy. The total expense of the establishment is £69,000 per annum, which is appropriated to the support of about 3000 seamen on the premises, and 5400 out-pensioners. Connected with this establishment is a naval asylum, designed for the support and education of the orphan children of seamen. On a rising ground in the park, 160 feet above low water mark, and commanding a rich and varied prospect, stands the royal observatory, celebrated by the great names with which it is associated. The private buildings are handsome, but the streets are in general irregular. Population of the parish in 1821, 20,712; 5½ miles E. London bridge. The longitude in English geography is calculated from the meridian of Greenwich. Lat. 51° 29′ N.

Greffier; formerly, in the United Provinces, the first secretary of state; in France, the clerk of a court of justice. (For the etymology of the word, see *Count.*)

Grégoire, Henry, count, former bishop of Blois, whose civil, literary and religious career has been characterized by love of liberty, active philanthropy, inflexible integrity and ardent piety. He was born at Vetro in 1750; he was a member of the states-general in 1789, and was one of the five ecclesiastics present at the session of the Tennis Court. In the constituent assembly, he was distinguished for the boldness of his opinions on civil and religious liberty, and for the eloquence by which he supported them. At this early period, he began his efforts in favor of the Jews and blacks, which place him high among the friends of humanity. He was the first among the clergy to take the constitutional oath. In the convention, Grégoire advocated the abolition of royalty (September, 1792), but endeavored, at the same time, to save the king, by proposing that the punishment of death should be abolished. His absence on a mission with three members of the convention, prevented him from voting on the trial of the king; but he refused to sign the letter of his three colleagues to that body, demanding the sentence of death. In the reign of terror, when the bishop of Paris abdicated his dignity, and several of the clergy abjured the Christian religion in the presence of the convention, the bishop of Blois had the courage to resist the storm of invectives from the tribunes, and threats from the Mountain. "Are sacrifices demanded for the country?" he said; "I am accustomed to make them. Are the revenues of my bishopric required? I abandon them without regret. Is religion the subject of your deliberations? It is an affair beyond your jurisdiction. I demand the freedom of religious worship." At a later period, we find him in the senate, forming one of the minority of five, opposing the accession of the first consul to the throne, and alone in opposing the obsequious address of that body to the new sovereign. In 1814, he signed the act deposing the emperor, and, in 1815, refused, as member of the institute, to sign the *additional act.* On the restoration of the Bourbons, he was excluded from the institute, and from his episcopal see; and, on his election to the chamber of deputies in 1819, he was excluded from a seat by the royalist majority. Since this unmerited indignity, this venerable philanthropist and scholar has devoted himself to his literary and benevolent labors. Died in 1831.

Gregorian Calendar. (See *Calendar.*)

Gregory, bishop of Neocæsarea, in which place he was born, of pagan parents, was called, on account of the many miracles which he is said to have performed, *Thaumaturgus* (the worker of miracles). He was distinguished for his eloquence, and was a pupil of Origen. He died about 270. His works were published (in Greek and Latin) by Vossius, with scholia, Mayence, 1604, 4to.

Gregory of Nazianzen, a celebrated teacher of the Greek church, born about 328, at Arianzo, near Nazianzum, in Cappadocia, was at first presbyter and afterwards bishop of Nazianzum. He was the intimate friend of Basil, and a violent enemy of the Arians. Among his pupils in eloquence, Jerome was the most distinguished. He died about 390, and left many works, of which a complete edition (Greek and Latin) was published at Paris, 1609, 2 vols. folio.

Gregory of Tours (his proper name was *George Florentinus*) was born in Auvergne (539), made bishop of Tours in 573, showed great firmness in the dreadful times of Chilperic and Fredegonde (q. v.), and died Nov. 27, 593. Besides his eight books on the virtues and miracles of the saints, he left *Historiæ Eccles. Francorum Libri X.*, which he brought down to the year 591, and which, notwithstanding its marvellous tales and its want of method, has much interest, as being the only historical work of the time.

Gregory I, pope; called also the *Great.* He was born at Rome, of a noble

family, about 544; and, having received an education suitable to his rank, he became a member of the senate, and filled other employments in the state. Italy was then subject to the emperors of the East, and Justin II appointed him to the important post of prefect or governor of Rome; which, after having held it for some time with great reputation, he resigned. The death of his father put him in possession of great wealth, which he expended in the foundation of monasteries and charitable institutions. Disgusted with the world, he took the monastic vows himself, and became a member of one of his own establishments. Pope Pelagius II sent him on an embassy to Constantinople, and made him papal secretary after his return to Rome. On the death of pope Pelagius, in 590, he was chosen his successor. He displayed great zeal for the conversion of heretics, the advancement of monachism, and the rigid enforcement of celibacy among the clergy. His contest for ecclesiastical superiority with John, patriarch of Constantinople, laid the foundation of the schism between the Greek and Latin churches, which has subsisted to the present day. The conversion of the Anglo-Saxons to Christianity was a project honorable to his zeal and abilities. (See *Augustin, St.*) He died in March, 604. The works ascribed to this pope are very numerous, and have been frequently published. The most complete edition is that of the Benedictines of St. Maur (Paris, 1705, 4 vols. folio), under the superintendence of father Denis de St. Martha, who, in 1697, published a life of St. Gregory the Great. His genuine writings consist of a treatise on the Pastoral Duty, Letters, Scripture Commentaries, &c.

Gregory of Nyssa; born at Nyssa, in Cappadocia, younger brother of Basil the Great, celebrated as an ardent defender of the Nicene creed, and also for his eloquence. He died in his native city, of which he was bishop, some time after 394. Editions of his works were published at Paris in 1573 and 1605, and 1615 and 1638 (3 vols. folio).

Gregory VII (Hildebrand). The year and the place of the birth of this great pope are uncertain. Some accounts say that he was born at Sienna, others at Soana, in Tuscany; others still, at Rome. It is, however, certain, that he lived at Rome when a child, and went to France when a young man, where he became connected with the monastery at Cluny, and returned to Rome in 1045. His history becomes more known after the time of his return to the monastery of Cluny, where Leo IX saw him on his journey through France. He returned with this pope to Rome, and from that time, although in the back ground, he played an important part; and by the influence which great minds always exercise over ordinary men, he directed the measures of Leo and several following popes. On the death of Alexander II (1073), cardinal Hildebrand was raised to the papal chair. He now labored with the greatest energy to accomplish those plans for which he had prepared the way by the measures which the preceding popes had adopted through his influence. It was the object of his ambition not only to place the whole ecclesiastical power in the hands of the pope, but to make the church entirely independent of the temporal power. He wished to found a theocracy, in which the pope, the vicar of God, should be the sovereign ruler, in political as well as ecclesiastical matters—a bold idea, which he probably conceived in consequence of the wretched state of all civil authority. He therefore prohibited the marriage of priests, and abolished lay investiture, the only remaining source of the authority of princes over the clergy of their dominions. In 1074, he issued his edicts against simony and the marriage of priests, and, in 1075, an edict forbidding the clergy, under penalty of forfeiting their offices, from receiving the investiture of any ecclesiastical dignity from the hands of a layman, and, at the same time, forbidding the laity, under penalty of excommunication, to attempt the exercise of the investiture of the clergy. The emperor Henry IV refused to obey this decree, and Gregory took advantage of the discontent excited by the despotic character and youthful levity of the emperor, among the people and princes of Germany, to advance his own purposes. In 1075, he deposed several German bishops, who had bought their offices of the emperor, and excommunicated five imperial counsellors, who were concerned in this transaction; and when the emperor persisted in retaining the counsellors and supporting the bishops, the pope, in 1076, issued a new decree, summoning the emperor before a council at Rome, to defend himself against the charges brought against him. Henry IV then caused a sentence of deposition to be passed against the pope, by a council assembled at Worms. The pope, in return, excommunicated the emperor, and released all his subjects and vassals from their oath of allegiance. The

emperor soon found all Upper Germany in opposition to him, at the very moment that the Saxons in Lower Germany renewed the war against him; and when the princes assembled at Oppenheim came to the determination of proceeding to the election of another emperor, he yielded, almost unconditionally; he was obliged to consent to acknowledge the pope, whom they were to invite into the empire, as his judge, to abandon his excommunicated counsellors, and to consider himself as suspended from the government. To prevent being deposed by the pope, Henry IV (q. v.) hastened to Italy, where he submitted, at Canossa (1077), to a humiliating penance, and received absolution. In the mean time, his friends again assembled around him, and he defeated his rival, Rodolph of Suabia. He then caused the pope to be deposed by the council of Brixen, and an antipope, Clement III, to be elected in 1080, after which he hastened to Rome, and placed the new pope on the throne. Gregory now passed three years as a prisoner in the castle of St. Angelo, but could never be induced to compromit the rights of the church. He was finally liberated by Robert Guiscard, a celebrated Norman prince, whom he had made duke of Apulia; but the Romans compelled him to quit the city, because it had been plundered by the soldiers of Robert. Gregory then retired to Salerno, under the protection of the Norman prince, where he died, in 1085. By the celibacy (q. v.) of the clergy, Gregory aimed at increasing their sanctity, and making them entirely independent of family connexions. The same measure prevented the possessions of the church from becoming mere feudal dependencies on temporal princes, which would have been the natural course, if the clergy had become parents, and, of course, desirous of transmitting the estates which they enjoyed to their children. Matilda, countess of Tuscany, whom he induced to bequeath her almost regal possessions to the papal see, was his chief support. Most Protestant writers have accused him of insatiable ambition; but the impartial historian, who considers the spirit of his whole life, studies his letters, and observes that his severity towards himself was as great as towards others, will judge differently. Gregory must be considered as a great spiritual conqueror, who rendered the clergy independent of the temporal power, and secured their safety amid the scenes of violence with which Europe was filled; thereby rendering them capable of advancing the progress of civilization, which was in great danger of being swallowed up in barbarism. The papal power, which he rendered independent of the imperial, was, for ages, the great bulwark of order amid the turbulence of the semi-civilized people of Europe. In capaciousness and boldness of mind, he may be compared to Napoleon. His system undoubtedly became unsuitable, like all other systems, to the wants of a more advanced age; and the good of mankind, in the progress of time, required that the temporal powers should become again independent of the Roman see.

Gregory, James, a mathematician and philosopher, the inventor of the reflecting telescope, was born at Aberdeen in 1638, and received his education at the Marischal college. In 1663, he published *Optica promota, seu abdita Radiorum reflexorum et refractorum Mysteria, Geometrice enucleata* (4to), explaining the idea of the telescope which bears his name; and, in 1664, visited London for the purpose of perfecting the mechanical construction of the instrument. Disappointed by the difficulty of getting a speculum ground and polished of a proper figure, he suspended his design, and set off on a tour to Italy. He staid some time at Padua, where he published, in 1667, a treatise on the Quadrature of the Circle and Hyperbola (reprinted at Venice, in 1668, with additions). On his return to England, he was chosen a fellow of the royal society, whose Transactions he enriched by some valuable papers. He was chosen professor of mathematics in the university of St. Andrew's, and, in 1674, was invited to fill the mathematical chair at Edinburgh, whither he removed; but, in October, 1675, while pointing out to his pupils the satellites of Jupiter, he was struck with a total blindness, and died a few days after, in the 37th year of his age.

Gregory, David; nephew of the preceding, and the heir of his splendid talents, and emulator of his fame. The subject of this article was educated at Edinburgh, where, in 1684, he was elected professor of mathematics; and the same year he published a mathematical treatise from his uncle's papers, with important additions of his own. His lectures first introduced into the schools the Newtonian philosophy. In 1691, he was chosen professor of astronomy at Oxford, though he had the celebrated Halley for his competitor—a circumstance which laid the foundation of a friendly intimacy between these mathematicians. In 1695, he published, at Oxford, *Catoptricæ et Dioptricæ Sphericæ Ele-*

menta (8vo.), in which he considers those branches of optics chiefly as respects the construction of telescopes, particularly those of his uncle and sir Isaac Newton. In 1697, he gave the first demonstration of the properties of the Catenarian Curve; and in 1702 appeared his most celebrated production, *Astronomiæ Physicæ et Geometricæ Elementa* (folio). The object of this work is to explain Newton's geometry of centripetal forces, as far as his discoveries are founded on it; and to exhibit in a more familiar form the astronomical part of the *Principia*. In 1703, he published an edition of the books of Euclid, in Greek and Latin; and he afterwards engaged with doctor Halley in editing the Conics of Apollonius. He died Oct. 10, 1710.

Gregory, patriarch of the Eastern Greek church, a victim of the fanatical policy of the Porte, was born in 1739, and educated in Dimitzana, a town in Arcadia in the Morea. He studied in several monasteries, finally on mount Athos (q. v.), lived as a hermit, was made archbishop at Smyrna, and, in 1795, patriarch of Constantinople. When the French occupied Egypt, in 1798, the Greeks were accused of treating secretly with them, and the rabble demanded the head of the patriarch, who, in fact, by his pastoral letters, dissuaded the Greeks from taking up arms for the French. Selim III himself declared Gregory to be innocent, but banished him for security to mount Athos. He was soon after restored to his former dignity. But in 1806, when the progress of the Russian arms, and the appearance of an English fleet before Constantinople, renewed the fury of the Mussulmans against the Greeks, and the life of the patriarch was threatened, although his exhortations had again prevented the Greeks from any hostile movements, Selim banished him a second time to mount Athos. After an interval, Gregory was a third time appointed patriarch. The apostolic virtues of love, charity and humility, gained this prelate universal esteem; he lived very simply, was strict with regard to the morals of the Greek clergy, and spent his income for benevolent objects, bestowing charity on the poor, without regard to the religion which they professed, promoting schools, the art of printing in Constantinople, and the publication of useful books. In particular, he promoted the establishment of schools of mutual instruction in Scio, Patmos, at Smyrna, Athens, Sparta (Misitra), and in Candia. His sermons and pastoral letters manifest his piety, tolerance, and knowledge of mankind. He translated the epistles of the apostle Paul into modern Greek with a commentary. He constantly exhorted his brethren to obedience and patient submission to the will of God. But, in 1821, when the Greek insurrection broke out in the Morea, his native country, he became an object of suspicion to the Porte, and nothing but the hope of preventing the massacre of all the Greeks at Constantinople, which had already been determined upon, could induce him to excommunicate (21st March, 1821) Ypsilanti, Suzzo and all the insurgents, as the divan demanded, with threats. At the same time, he issued a pastoral letter to the clergy, declaring submission to the Porte to be the duty of the faithful. After the execution of the prince Morousi, the grand-vizier confided to Gregory the custody of the family of this prince. Without his knowledge, but perhaps by the assistance of a priest in the patriarchal palace, the family escaped on board a vessel, which, by the aid of the Russian ambassador, took them to Odessa. The old man did not doubt that this would decide his fate. He immediately went to the grand-vizier, the furious Benderli Ali Pacha, to inform him of the event. The vizier laid all the blame on him; but he was neither imprisoned nor subjected to trial. The grand vizier had determined to intimidate the Greeks by an act of violence unprecedented in Turkish history. They had already been exposed, for several weeks, to the fanatical rabble of Constantinople, which prevented the greater part of them from attending church on the first day of the Easter festival (April 22). The patriarch read the high mass surrounded by his bishops, with the usual ceremonies; but, as he left the church, the janizaries surrounded him, and seized the bishops. A natural respect prevented them from laying hands on the venerable old man; but their commander, having reminded them of the order of the grand-vizier, they seized the patriarch, in his robes of office, and hanged him before the principal gate of the church. Three bishops and eight priests of the patriarchate, shared the same fate; they were all hanged before the gates of the churches or the palace, in their canonical robes. The body was not cut down till the 24th, when it was given up to the lowest of the Jews, who dragged it through the streets, and threw it into the sea; but, being prevailed upon by a sum of money, they did not sink it, so that some Greek sailors recovered it during the night, and carried it to Odessa. Here, with the permission of the emperor, the martyrdom of the patriarch was

celebrated by the Russian archimandrite Theophilus, with a magnificent funeral. This act of barbarity towards an old man of eighty years, was followed by the destruction of many churches, and the most savage treatment of the Greeks in Constantinople; but instead of exciting fear, it had the opposite effect. The enthusiasm of the Greeks for their religion and freedom was increased, the war was carried on with more animosity, and reconciliation became more difficult, and, after some additional atrocities, impossible. (See *Greece*, *Revolution of Modern.*)

Greifswalde; a town in Hither Pomerania, belonging, since the war of 1815, to Prussia. Lat. 54° 4′ 35″ N.; lon. 13° 33′ 23″ E. Population in 1822, 8080. From 1648 to 1815, it belonged to Sweden, except that from 1715 to 1721 it was in the possession of Denmark. In 1455, Wratislaus IX, duke of Pomerania, founded the university here. It does not flourish like the other Prussian universities, and contains only 130 students; for the government does not see fit to support it as they do the others, and, at the same time, does not wish to break up so ancient an establishment. It is one of the few German universities which have a right to assist in choosing the professors. The university of Greifswalde nominates new professors, and the king appoints. The town is well built.

Grenada. (See *Granada.*)

Grenada, New; formerly a viceroyalty of South America, called the *New Kingdom of Grenada*, now forming the greater part of the republic of Colombia; bounded N. by the Caribbean sea and Guatimala, E. by Venezuela and Guiana, S. by the Amazon and Peru, and W. by the Pacific ocean. Lat. 6° S. to 12° N.; 1200 miles in length, and 276 in mean breadth. This country, together with Venezuela, was formerly called *Terra Firma.* It was formerly divided into three audiences, Panama, Santa Fé and Quito, and subdivided into twenty-four provinces; but a new division has been made since New Grenada and Venezuela have been united, and formed into a republic. There are universities at Santa Fé de Bogota, Quito, and Popayan. The principal rivers are the Magdalena, Cauca, Apure, Meta, Putumayo and Caqueta. New Grenada abounds in the most sublime mountain scenery. The great chain of the Andes traverses this country from north to south, and within the audience of Quito are found the lofty summits of Chimborazo, Pinchinca, Cotopaxi, &c. The mountains of this country are extremely rich in gold and silver, and have also mines of platina, copper, lead and emeralds. The value of gold and silver produced annually is stated at £650,000 sterling. There are two mints, at Santa Fé and Popayan. (For further information, see *Colombia*, and *Venezuela.*)

Grenade; a hollow sphere of iron, differing from a bomb by the smallness of its diameter. The smallest grenades, or those thrown by the hand, are called *hand grenades;* they are from 2½ to 3½ inches in diameter. The fusee is calculated to burn from 12 to 15 seconds, so that time is allowed for throwing them. The short distance to which they can be thrown, and the danger of accidents, have occasioned them to be disused. The small grenades are now only employed for what are called, in French, *perdreaux*, several of them being fastened to a board, and thrown from mortars. The grenades in general use are thrown from howitzers, and are of very different sizes, from 2 to 20 pounds weight. They are chiefly calculated to act against cavalry and distant columns, where they may do great harm. In the battle of Wagram, one grenade killed and wounded 40 men. As the utility of large grenades at sea is acknowledged, but objections exist to the use of howitzers of large calibre, the U. States introduced the use of oval grenades in 1815, which may be fired from 12 and 24 pounders. The English imitated this, and made the grenades with a spiral thread on the surface, that the opposition of the air might give them a rotatory motion, and thus more certainty of direction. Grenades are often thrown from cannons. During the siege of Gibraltar, they were thrown 3000 yards upon the Spanish works.

Grenadier; originally a soldier destined to throw the hand grenades. (See *Grenade.*) Soldiers of long service and acknowledged bravery were selected for this service, so that they soon formed a kind of *élite.* They were the first in the assaults. When hand grenades went out of use, the name *grenadier* was preserved, and the troops so called generally formed one battalion of a regiment, distinguished by the height of the men and a particular dress, as, for instance, the high bear-skin cap. This continues to be the case in most armies. In the Russian and Prussian armies, the grenadiers form whole regiments belonging to *corps d'armée* of the guards. With the French, the grenadier company is (and was under Napoleon) the first of each battalion. The dragoons among them also had grenadier companies, which were afterwards united

under the name of *grenadiers à cheval*, a kind of cavalry between cuirassiers and dragoons, and belonging to the guards; and the dragoons again had *compagnies d'élites*.

Grenoble; an old city, situated in the former province of Dauphiny, now capital of the department of the Isère, 113 leagues S. E. from Paris; lat. N. 45° 11′ 42″; lon. E. 5° 43′ 57″; with 22,149 inhabitants. It is the see of the suffragan bishop of Lyons, the seat of several tribunals, and the head-quarters of a military division. Grenoble is a fortified place. An old fortress called the *Bastile*, on a hill of the same name, commands the whole city. It contains several noble edifices; among others, the palace of the last constable of France, Lesdiguières. Here is also a law school, a royal college, and a public library with 55,000 volumes and valuable manuscripts. Grenoble is the centre of a great manufacture of gloves, and contains tanneries and important distilleries. Commerce is facilitated by the Isère. A number of distinguished men have been natives of this place; for instance, Bayard, Condillac, Mably, Vaucanson, &c. The bridge over the Drac is a single arch 120 feet high, and of 140 feet span. Grenoble is a very old place, and of Gallic origin. In the time of the Allobroges, it was called *Calaro*, which name it retained under the Romans, until Gratian enlarged it, and called it *Gratianopolis*. Remains of antiquity which have been discovered here, leave no doubt respecting its origin. It has been the see of a bishop since the 4th century. Grenoble was the first city of importance, which opened her gates to Napoleon, on his return from Elba. The emperor, as his handful of troops were preparing for the attack on the garrison of Grenoble, advanced alone, and, uncovering his breast, said aloud to the soldiers, *S'il est parmi vous, s'il en est un seul qui veuille tuer son général, son empereur il le peut, le voici.* He was answered by cries of *Vive l'empereur*, and joined by the soldiers.

Grenville (William Wyndham Grenville), lord, son of George Grenville, who was chancellor of the exchequer at the time of the passing of the stamp act (1764), was born in 1759, educated at Eton and Oxford, and early brought forward in public life by his friend William Pitt. He entered parliament in 1785, and was speaker of the house of commons when, in 1789, he was made secretary of the home department. In 1790, he was created a peer, by the title of baron Grenville, and the next year became secretary of foreign affairs, and continued in this post till 1801, when he retired with Mr. Pitt, on the king's refusal to make the concessions in favor of the Catholics, which had been promised by the ministry. On the death of Pitt, in 1804, lord Grenville became first lord of the treasury, at the head of the coalition ministry, and incurred the public reproach by holding, at the same time, the place of auditor of the exchequer, that is, auditor of his own accounts. In 1809, the resignation of lord Castlereagh and Mr. Canning having left lord Liverpool the only secretary of state, official letters were addressed to earl Grey and lord Grenville, proposing the formation of a combined ministry. Earl Grey declined all union at once. Lord Grenville went to London, but, on the next day, also declined the proposed alliance. He has always been consistent on one subject, that of concessions to the Catholics, of which he has ever been the constant advocate.

Gresham, sir Thomas, a merchant of London, was born in 1519, and educated at Gonville hall, in Cambridge. His father was agent of the king's money affairs at Antwerp; and, his successor having brought them into a bad condition, young Gresham was sent over, in 1552, to retrieve them. He acquitted himself so well, that in two years he paid off a heavy loan, and raised the king's credit considerably. On the accession of Elizabeth, he was deprived of his office; but it was soon restored to him, with that of queen's merchant, and he was also knighted. In 1566, he planned and erected a *burse* or exchange, for the merchants of London, in imitation of that of Antwerp. In 1570, queen Elizabeth, visiting the new building, solemnly proclaimed it the *royal exchange;* which name its successor, since the fire of London, still continues to bear. The troubles in the Low Countries interrupting the loans from Antwerp to the crown, sir Thomas induced the moneyed men in London to join in a small loan, which was the commencement of the great advances since made from the same body. He founded a college in London, notwithstanding the opposition of the university of Cambridge, and devised his house for habitations and lecture-rooms for seven professors, on the seven liberal sciences, who were to receive a salary out of the revenues of the royal exchange. Gresham college has since been converted into the modern general excise-office; but the places are still continued, with a double salary for the loss of the apartments, and the lectures

are now given in the royal exchange. He died suddenly in 1579, at the age of sixty.

Gresset, Jean Baptiste Louis, an agreeable French poet, born at Amiens, 1709, entered the order of the Jesuits in his 16th year, and left it 10 years afterwards, on account of the attention excited by his poem *Ver-Vert*. In Paris he had the good fortune to increase this reputation; and, in 1748, he was elected a member of the academy. He lived at Amiens, where he filled an office in the financial department, and where he married a rich lady. After the death of Louis XV, he visited Paris, and was chosen to congratulate Louis XVI, in the name of the academy, on his accession to the throne. The court and the city were both desirous of beholding the man who had been so successful in delineating them. But the expectation which had been formed from his earlier works, was far from being answered by his academical discourse in reply to the inaugural address of Suard, and in which he painted the follies of the capital. His pictures were distorted and exaggerated. He died soon after, in 1777, without leaving any children. His agreeable manners, and his integrity of character, gained him distinguished friends. Louis XVI granted him, in 1775, letters of nobility. His *Ver-Vert* is distinguished for wit, vivacity and interest, and its value appears the more remarkable from the poverty of the subject. Gresset has written much that is good, and some things merely passable.

Gresson; the loftiest summit of the Vosges, 4002 feet high.

Gretna Green, or Graitney; a village and parish in Scotland, in Dumfries, on Solway frith, eight miles north of Carlisle. It is the first stage in Scotland from England, and has for more than 70 years been famous as the place of celebration of the marriages of fugitive lovers from England. According to the Scottish law, it is only necessary for a couple to declare before a justice of the peace, that they are unmarried, and wish to be married, in order to conclude a lawful marriage. It has been calculated that about 65 marriages take place here annually. A blacksmith was a long time the justice of the peace. His usual fee was 15 guineas.

Grétry, André Ernest Modeste, a French composer of music, born at Liege, 1741, showed as early as his 4th year his sensibility to musical rhythm. At this age, being left one day alone, the noise of water boiling in an iron pot excited his attention; he began to dance to the sound, which resembled that of a drum. He then wished to discover the origin of this bubbling in the vessel, and he overturned it into a hot coal fire. The explosion was so quick, that, rendered senseless by the steam and smoke, he fell to the ground much burnt. This accident brought on a long illness, and weakened his eyes for life. In 1759, Grétry went to Rome to perfect himself in music. Having, while at Rome, exhibited some Italian scenes and symphonies, he was engaged by the manager of the theatre, Alberti, to set to music two *intermezzi*. His first effort met with great success. The praise which he obtained from Piccini was the most flattering to him. Being well received and esteemed in the capital of Italy, Grétry pursued his studies there, until he became desirous of making himself known at Paris. On his way to France, he stopped at Geneva, and set to music the opera Isabella and Gertrude, which was brought out at Paris. The success of this production determined him to go to Paris, to find a theatre and performers worthy of him. Here he was obliged, for two years, to struggle against numerous difficulties, before he obtained from Marmontel the Huron, the text and music of which were both written in six weeks. The piece was performed in 1769, with complete success. The *Lucile*, a comedy in one act, which appeared soon after, was received with still greater applause. He now devoted himself exclusively to the theatre, and composed 40 operas, of which *Le Tableau parlant*, *Zémire et Azor*, *L'Ami de la Maison*, *La fausse Magie*, *Le Jugement de Midas*, *L'Amant Jaloux*, *Les Événemens imprévus*, *Colinette à la Cour*, *La Carevane*, *Raoul*, *Richard Cœur-de-Lion*, *Anacréon chez Policrate*, are still played with applause. Grétry, like Pergolesi, took declamation as the guide of musical expression. He was inferior to Gluck in depth, and he could never arrive at the fulness of Mozart. In 1790, he published his *Mémoires ou Essais sur la Musique*. The first volume contains an account of the musical career of the author. He wrote *La Vérité* and *Reflexions d'un Solitaire*. He died in 1813, at Erménonville, in Rousseau's hermitage.

Greville, Fulk (lord Brooke); an accomplished courtier and ingenious writer, and a great encourager of learning and learned men. He was born in 1544, at Beauchamp court, Warwickshire, the family seat, then in the possession of his father, sir Fulk Greville. He entered Trinity college, Cambridge, which he

afterwards quitted for Oxford; and, having made the tour of Europe, presented himself at court, where he soon rose high in the favor of Elizabeth. James also distinguished him by his favor; but the jealousy of Cecil induced Greville to retire from public life, till the death of that statesman restored him to the court. He now rose rapidly, filling in succession the posts of under treasurer and chancellor of the exchequer, and, in 1620, obtained a barony. Under Charles I, he continued to enjoy the royal countenance till the 30th of September, 1628, when, conversing with an old servant of the family, respecting certain dispositions in his will, the latter, considering his legacy disproportioned to his services, replied to him with great insolence, and, on receiving a reprimand, stabbed him in the back, and he expired immediately; the assassin instantly committed suicide with the same weapon. Lord Brooke was the founder of a historical lecture at Cambridge, and enjoyed the friendship of sir Philip Sidney, Spenser, Jonson, Shakspeare, and most of the master spirits of the age. The bent of his own genius evidently led him to the study of poetry and history. An octavo volume of his miscellaneous writings was printed in 1670, and there is also extant a life of his friend Sidney, by his hand. The envy of Cecil, who denied him access to the necessary records, prevented his carrying into execution an intention he had formed of writing a history of the wars of the Roses.

Grey, lady Jane; a young and accomplished female of royal descent, whose disastrous fate, as the victim of an unprincipled relative's ambitious projects, has created an extraordinary interest in her favor. She was the daughter of Henry Grey, marquis of Dorset, afterwards duke of Suffolk, by the lady Frances, daughter of Charles Brandon, duke of Suffolk, and Mary, younger sister of Henry VIII, in whose reign lady Jane was born, according to the common account, in 1537. She displayed much precocity of talent; and to the usual accomplishments of females, she added an acquaintance with the learned languages, as well as French and Italian. Roger Ascham has related, that, on making a visit to Bradgate hall, he found lady Jane, then a girl of fourteen, engaged in perusing Plato's Dialogue on the Immortality of the Soul, in the original Greek, while the rest of the family were hunting in the park. She owed her early proficiency in literature, in some measure, to her learned tutor, Aylmer, afterwards bishop of London; and from him she imbibed an attachment to Protestantism. The Oriental as well as the classical languages are said to have been familiar to her, and she is represented as having been altogether a young person of uncommon genius and acquirements. But the latter are less singular than might be supposed by those who do not take into account the general taste for the cultivation of Greek and Roman lore, which prevailed among both sexes for some time after the revival of literature in Europe. Lady Jane Grey was a woman of talents, but not a prodigy; and Mrs. Roper, the interesting daughter of sir Thomas More, with lady Burleigh and her learned sisters, may be adduced as rivals in erudition of the subject of this article. The literary accomplishments of this unfortunate lady, however, do less honor to her memory than the spirit with which she bore the annihilation of her prospects of sovereignty, and the disgrace and ruin of the dearest object of her affections. The tale of her elevation and catastrophe has been often related, and has furnished a subject for dramatic composition. The most material circumstances are her marriage with lord Guilford Dudley, fourth son of the duke of Northumberland, in May 1553; which, though it originated in the ambitious projects of her father-in-law, was a union of affection. The duke's plan was, to reign in the name of his near relation, in whose favor he persuaded king Edward VI, on his death-bed, to settle the succession to the crown. On the decease of the king, lady Jane had the good sense to refuse the proffered diadem; but, unfortunately, she afterwards consented to accept it, being influenced by the importunities of her husband. Her pageant reign had lasted but nine days, when Mary, the late king's elder sister, was acknowledged queen; and Jane exchanged a throne for a prison. She and her husband were arraigned, convicted of treason, and sentenced to death; but their doom was suspended, and they might, perhaps, have been allowed to expiate their imprudence by a temporary confinement, but for the ill-advised insurrection under sir Thomas Wyat, in which the duke of Suffolk, lady Jane's father, was weak enough to participate. The suppression of this rebellion was followed by the execution of lady Jane Grey and her husband. Mary suspended the execution of her cousin three days, to afford time for her conversion to the Catholic faith; but the queen's charitable purpose was defeated by the con-

stancy of lady Jane, who defended her opinions against the arguments of the Romish divines sent to reason with her, and prepared herself with firmness for her approaching fate. She was beheaded on Tower-hill, February 12, 1554, her husband having previously suffered the same day. A book, entitled The precious Remains of Lady Jane Grey (4to.), was published directly after her execution; and letters and other pieces ascribed to her may be found in Fox's Martyrology.

Grey, Charles, earl, a distinguished whig and parliamentary orator in England, was born in 1764, and was educated at Eton and Cambridge. On leaving the university, he travelled on the continent, and, soon after his return to England, was returned to parliament, by family interest, for the county of Northumberland, before he had reached his twentieth year, but, of course, did not take his seat till he became of age. He afterwards represented the borough of Appleby, till he succeeded to the peerage. He had not been long in the house, before he became conspicuous for his industry and his ability in debate. He was a warm Foxite, and became a member of the whig club, and of the society of Friends of the People. He was one of the most zealous opposers of Pitt's war against France, and declared in parliament that the discomfiture of the duke of Brunswick by the French army, was a triumph of every friend of liberty. On the death of Pitt, the whigs having come into power, Mr. Grey (then lord Howick) was made first lord of the admiralty, and, on the death of Fox, secretary of state for foreign affairs. The dissolution of this ministry soon followed, and lord Howick not long after was transferred to the upper house by the death of his father, but for many years took little part in public affairs, and resided in retirement on his estates in Northumberland. On the resignation of lord Castlereagh and Mr. Canning, which was soon followed by that of the duke of Portland, the [illegible] of the ministers made overtures to lord Grenville and earl Grey, which were declined. Lord Grey opposed the restrictions on the regency of the prince of Wales; and when those restrictions expired, in 1812, the offer of a seat in the ministry was renewed, and again rejected. In the trial of the unfortunate queen Caroline, lord Grey was one of the most active and zealous of the peers in her behalf; and to his eloquence and zeal, the result of the trial is in a great measure owing. He has always advocated reform and the emancipation of the Catholics. In domestic life, earl Grey appears in the most exemplary light. Madame de Staël used to speak in terms of the highest admiration of the family scene at Fallowden house. On the 16th of Nov., 1830, the duke of Wellington announced his resignation of the office of first lord of the treasury, and earl Grey was immediately appointed his successor. He is therefore, at present, prime minister of England. (See *Great Britain.*)

Greyhound (*canis graius*, Linnæus). This variety of the canine race is distinguished by a greater length of muzzle than any other dog, a very low forehead, occasioned by the want of frontal sinuses, short lips, thin and long legs, small muscles, contracted belly, and semipendent ears. There are several sub-varieties described by naturalists, as the Irish greyhound, the Scotch, the Russian, the Italian and the Turkish, all which, though differing in size and intelligence, possess the general characteristics of the variety. The common greyhound is of a beautiful and delicate formation, and is universally known as the fleetest of this race of animals. We have no information when the name *greyhound* was introduced, the former appellation of *gazehound* being very applicable to a dog which hunts by sight and not by smell. Its derivation is evidently from *Graius*, Grecian. The greyhound has been for many centuries in the highest estimation, and in ancient times was considered as a most valuable present. The ardor and velocity of the greyhound in pursuit of its game, have always been a matter of admiration to sportsmen, and of various opinions as to the difference of speed between a well bred greyhound and a race-horse. It has, by the best judges, been thought, that upon a flat, the horse would be superior to the dog; but that in a hilly country, the latter would have the advantage. The natural simplicity and peaceable demeanor of the greyhound has sometimes induced a doubt, whether the instinctive sagacity of this particular variety is equal to that of some others of the species; but, from numerous observations, it appears that it possesses this attribute in a high degree. Greyhound pups, during the first seven or eight months, are extremely uncouth, awkward and disproportioned, after which period they begin to improve in form and sagacity. They reach their full growth at two years. The distinguishing traits of superiority are supposed to consist in a fine, soft, flexible skin, with thin

silky hair, a great length of nose, contracting gradually from the eye to the nostril, a full, clear and penetrating eye, small ears, erect head, long neck, broad breast, width across the shoulders, roundness in the ribs, back neither too long nor too short, a contracted belly and flank, a great depth from the hips to the hocks of the hind legs, a strong stern, round foot, with open uniform clefts, fore legs straight, and shorter than the hinder. According to the quaint description given in a work printed in 1496, by Wynken de Wode, a greyhound should be

> Headed lyke a snake,
> Neckyed lyke a drake,
> Fottyed lyke a catte,
> Taylled lyke a ratte,
> Syded lyke a teme,
> And chyned lyke a beme.

Greyhounds bred in countries where the ground is chiefly arable, were formerly supposed superior in speed and bottom to those produced in hilly situations; that opinion, however, is completely superseded, and the contrary proved to be the case. If fed with coarse food, greyhounds are peculiarly liable to cutaneous and other affections.

Greywacke, or Grau Wacke, is a name originally applied by Werner to a fragmented or recomposed rock, consisting of mechanically altered portions or fragments of quartz, indurated clay slate and flinty slate, cemented by a basis of clay slate,—the imbedded particles not exceeding a few inches in diameter, and sometimes becoming so minute as to be no longer visible, when the rock was denominated *grau wacke slate*. As this formation came to be examined more extensively in other countries, the term *greywacke* was extended so as to embrace nearly all fragmentary rocks, whose mechanical structure comes within the above description, however diversified the ingredients may be in their nature or dimensions, or whatever may be the nature of the cement, whether siliceous or argillaceous, provided only they are anterior to the new red sandstone and coal formation. The reason of this extension was, that the greywacke of Werner was found to pass by insensible degrees into rocks, which, notwithstanding they were obviously produced by the same causes, and occupied the same relative situations with his rock, were, nevertheless, excluded from coalescing with it by the too limited character of his definition. So much diversity, however, exists among the varieties of this rock, that it has been found convenient to distinguish them by separate names. Thus we have *greywacke slate* when the ingredients are very comminuted, *greywacke* when they are of middling size, *pudding-stone* when they are rounded, *conglomerate* when they are from four or five inches in diameter to the size of a man's head and larger, *gritstone* when the concretions are hard and siliceous and the paste siliceous also, and *old red sandstone* when colored red by the peroxide of iron. The fragments which compose the rocks of this formation, are evidently the debris of the primary rocks that have been broken down by some powerful catastrophe, and mixed with more recent beds at the period when they were forming. They occupy a place next to the primitive rocks, often in an alternating series with mountain limestone, and beneath that class of rocks denominated *secondary*, between the formation of which and the greywacke a considerable period must have elapsed, as the fragments of the latter invariably consist of lower rocks, and never of the upper strata. Greywacke but very rarely contains organic remains; but the limestones and slates, with which it alternates, present them in considerable quantity, and such as belong to genera almost exclusively unknown at present, and which never occur in the upper strata. Though the gold of Hungary and Siberia is found in this rock, still it cannot be said to be prolific in metals or other useful minerals. When fine grained, it forms a valuable building stone. It is the material of which the fortifications at Quebec in Lower Canada are chiefly constructed. Greywacke is very extensively distributed in Europe. It forms the eastern declivity of the mountains of Brazil, and abounds throughout the chain of the Alleghanies. The variety termed *conglomerate*, occurs extensively in the vicinity of Boston and upon the island of Rhode Island; at the latter locality, it occurs in connexion with the anthracite coal. The old red sandstone forms an extensive deposit in the valley of the Connecticut, from Deerfield, Mass., to Long Island sound, and again in New Jersey, bordering upon the Hudson river. The finer varieties of it are much employed in building, under the name of *freestone*. A quarry of it exists at Chatham, directly upon the banks of the Connecticut, which gives employment to nearly 200 men.

Gridley, Jeremiah, a celebrated lawyer of Massachusetts before the revolution, was born about the year 1705, and receiv-

ed his degree at Harvard college in 1725. His first occupation in Boston was that of an assistant in the public grammar school, in which capacity he continued for several years, during which he studied theology, and occasionally preached. He afterwards devoted himself to the law, in which profession he became eminent. Soon after he was admitted to the bar, he instituted a weekly newspaper, called the Rehearsal. The first number was published September 29, 1731. In this journal he wrote articles, literary and political, for a year, when the increase of his professional business obliged him to relinquish it. His writings exhibit ingenuity and originality, fervor and energy. Having been elected a member from Brookline of the general court of the province, he became a decided opponent of the measures of the ministry, and manifested a warm attachment to liberal principles. He was, nevertheless, appointed attorney-general of the province of Massachusetts Bay, and, in that capacity, was obliged to perform the unpleasant duty of defending the obnoxious *writs of assistance*. The celebrated James Otis, who had been a student in his office, was his opponent, and wholly confuted him. He died in Boston, September 7, 1767, aged about 62 years. Mr. Gridley was a man of a high, elevated and ardent spirit, always more anxious for fame than for wealth.

Gries, John Dietrich, a German scholar, the translator of Tasso, Ariosto and Calderon, was born February 7, 1775, in Hamburg, where his father was a senator. Against his own wish, he was intended for a merchant, but, in his 17th year, obtained permission to follow his inclination for study. He studied at Jena in 1795, and was favorably noticed by the leading belles-lettres scholars of that time in Germany —A. W. Schlegel, Göthe, Wieland and Schiller—whose intimate friend he remained. He first studied law; but various circumstances, among them an increasing deafness, determined him to devote himself entirely to poetry. Several of his poems were published in periodicals; but he gained celebrity chiefly by his translation of Tasso, the first in the German language in the metre of the original. Three editions of this translation have been already published. The translation of Ariosto's Orlando Furioso appeared in 1804—1808. He also undertook to translate Bojardo's Orlando Innamorato; but the great length of this poem induced him to abandon the attempt, after having published 12 cantos. Since 1815, he has published 6 volumes of the translation of Calderon. Gries lives at present in Jena.

Griesbach, John James (died in 1812), first professor of theology at Jena, acquired a permanent reputation by his critical edition of the New Testament, and by the education of several thousand youth. Born at Butzbach in Hesse-Darmstadt, in 1745, he removed, while a child, to Frankfort on the Maine, where his father, a preacher and consistorial counsellor, died in 1777. He received his first instruction at the gymnasium of Frankfort, and removed to the university of Tübingen in 1762. In 1764, he went to Halle, and afterwards spent a year at Leipsic. Ecclesiastical history was the subject of his studies, in which Ernesti, at Leipsic, aided him with books and advice. He next undertook, at Halle, an extensive course of preliminary studies to the criticism of the New Testament and dogmatic history. Having resolved to devote himself altogether to the criticism of the text of the New Testament, he undertook, in 1769 and 1770, a literary journey through Germany, England, Holland and France. The following winter he devoted, in his native city, to the elaboration of his materials; and, in 1771, appeared as a lecturer in Halle, with such applause, in consequence of his celebrated treatise on the criticisms of Origen on the Gospels, that, two years after, he was appointed professor. He now pursued, with indefatigable industry, his plan of an edition of the New Testament. Having received an appointment to a regular professorship of theology at Jena, he published a synopsis of the Gospels. This was soon followed by the first edition of the whole Testament. Its peculiarity is, that it does not merely consider the accepted or rejected readings, but the different degrees of probability for or against them are determined and represented by intelligible marks in the margin. It is to be lamented that he could not finish, as he had intended, the complete edition, which was begun in 1796, and appeared simultaneously at Halle and London. He was, however, incessantly employed on it till his death, and lived to see the superb edition, published by Göschen, finished. Gabler has edited Griesbach's *Opuscula Academica* (Jena, 1824., 2 vols.).

Griffin, or Gryphon (γρύψ); a fabulous monster of antiquity, commonly represented with the body, the feet and claws of a lion, the head and wings of an eagle, the ears of a horse, and, instead of a mane, a comb of fishes' fins: the back was covered with feathers. Ælian says that its

back was covered with black feathers, its breast with red, and its wings with white. Ctesias gives him blue and shining neck feathers, the beak of an eagle, and fiery eyes. Later writers add other particulars. According to the book *De Rerum Natura*, it is larger than an eagle, has on its fore feet large claws, like those of an eagle, and others on its hind feet, like those of a lion; and it lays an agate in its nest. Drinking cups are made from its talons. The griffin is so strong, says Ctesias, that he conquers all beasts, the lion and elephant only excepted. India was assigned as the native country of the griffins, and it was believed that they built their nests on the mountains; that they could be easily caught and tamed when young, but never when full grown; that they found gold in the mountains, and built their nests of it; or, according to other accounts, that they feared those who sought for gold in the mountains, and defended their young against their attacks. Böttiger, in his *Vasengemälde*, has given much information concerning the origin of this fabulous animal. He maintains that this and similar monsters are merely the creation of Indian tapestry-makers, who, from the most ancient times, employed themselves on strange compositions of mythological beasts. The Greeks, who saw this kind of tapestry at the court of the king of Persia, thought that the animals depicted on it were really inhabitants of India, so rich in wonders, and they spread the report. So much is certain, that the notion of this bird came from Asia into Greece in the train of Bacchus. He was, therefore, the symbol of illumination and wisdom.

Grillparzer, Francis, born in 1790, lives, at present, in Vienna, where he has an office at court. In 1816, he attracted the attention of the public. As Müllner was led by Werner's 24th of February to write his *Schuld* (Guilt), Grillparzer was probably excited by the *Schuld* to write his *Ahnfrau* (Ancestress)—a piece still more decidedly belonging to the fatalist school. It is full of horrors; but the poetical language, the highly lyric power displayed in his descriptions, and the novelty of the school of the fatalists, kept this play a long time on the stage. The young poet published, in 1818, his Sappho, and, in 1822, the Golden Fleece, in both of which the lyric language is the chief merit. In a subsequent piece (*Ottokar*), he has wisely chosen a subject comparatively modern; it breathes a more dramatic spirit than his earlier productions. It appeared in 1824.

Grimaldi (family); one of the four families of the high nobility in Genoa. The lordship of Monaco (afterwards elevated to a principality) belonged, for more than 600 years (beginning with 980), to the Grimaldi. With the Fiescos, they always played an important part in the history of Genoa, especially in the disputes between the Gibelines and the Guelfs, to which latter party both families belonged. Large estates in the kingdom of Naples, in France and Italy, increased the influence of the Grimaldi, from whom proceeded several eminent men:—1. *Ranieri Grimaldi* was the first Genoese who conducted the naval forces of the republic beyond the straits of Gibraltar. In the service of Philip the Fair of France, Grimaldi sailed to Zealand in 1304, with 16 Genoese galleys and 20 French ships under his command. He there defeated and made prisoner the count Guy of Flanders, who commanded the enemy's fleet of 80 sail.—2. *Antonio Grimaldi*, likewise, distinguished himself in the naval service in the first half of the 14th century. The Catalonians had committed hostilities against Genoa, which city had been prevented by internal discord from punishing the offence. But when a more favorable moment arrived, Antonio received the command of the fleet, with the commission to devastate the coasts of Catalonia. This commission the Genoese performed but too faithfully. He also defeated an Arragonese fleet of 42 sail. Twenty-one years after, he suffered such a defeat from the combined Venetian and Catalonian fleets, under the command of Nicolas Pisani, that, of the whole Genoese fleet, only 17 vessels escaped. This defeat (29th of August, 1353) obliged the Genoese to submit to John Visconti, lord of Milan, who promised them protection against their enemies, the Venetians.—3. *Giovanni Grimaldi* is celebrated for the victory which he gained, May 23, 1431, over the Venetian admiral, Nic. Travisani, on the Po, although Carmagnola, the most distinguished general of his time, was ready to support the Venetians, with a considerable army, on the banks of the river. By an able manœuvre, Grimaldi separated the Venetian fleet from the bank, where the army was stationed (three miles below Cremona), and thus succeeded, not only in utterly defeating the enemy, but in taking 28 galleys and a great number of transports, with immense spoils.—4. *Domenico Grimaldi*, cardinal, archbishop and vice-legate of Avignon, lived in the 16th century. Before he obtained these high

dignities, Pius V intrusted to him the supervision of the galleys of the States of the Church, and Grimaldi, though already bishop, was present at the naval battle of Lepanto (1571), on which occasion he is said to have distinguished himself by his courage. The annals of the Roman church also relate of this warlike prelate, that he succeeded in totally extirpating the poison of heresy from his diocese. He died in 1592, and left behind a volume of letters relative to the events in which he had been engaged.—5. His nephew *Geronimo Grimaldi*, born at Genoa in 1597, was appointed, in his 28th year, vice-legate of Romagna, and afterwards bishop of Albano and governor of Rome. Urban VIII sent him as nuncio to Germany and France; and the services which he rendered the Roman court were rewarded, in 1643, by a cardinal's hat. After the death of Urban, Grimaldi, from gratitude, protected his family, and thus incurred the displeasure of Innocent, who refused, during his whole life, to sign the bull, constituting Grimaldi archbishop of Aix. Not till Alexander VII succeeded Innocent, was he able to enter on his new office (1655). He endeavored to reform the manners of the clergy of his diocese, for which purpose he established an ecclesiastical seminary; he likewise founded an hospital for the poor, and annually distributed 100,000 livres of his vast property in alms. He contributed much to the election of Innocent XI, whose virtues he revered. Although he was subsequently appointed dean of the holy college in Rome, he could not resolve to abandon the congregation intrusted to him. He died at Aix, in 1685, 90 years of age.—6. *Nicholas Grimaldi*, born in 1645, was invested with the Roman purple by Clement XI, in 1706. He died in 1717, leaving immense wealth.—7. Another *Geromimo*, born in 1674, was honored with a cardinal's hat. He had previously been the nuncio of the Roman court at Avignon, and afterwards at Brussels, in Poland and Germany. He was subsequently appointed cardinal legate of Bologna. He died in 1733.—Besides these Grimaldis, we find others of this name, conspicuous in science and art.—1. *Giacomo*, a writer of the 16th century, whom Tiraboschi mentions with great praise. He was born at Bologna, embraced the clerical profession, and, as superintendent of the archives of the church of St. Peter in Rome, rendered an important service by arranging the whole of this valuable collection. He also attempted to explain the ancient inscriptions, discovered during the pontificate of Paul V, by illustrative remarks. A list of his antiquarian and philological writings may be found in the 4th volume of *Scriptor. Bolognesi.* He died in 1623.—2. *Giovanni Francesco*, called *Bolognese*, from his having been born in that city, lived in the 17th century, and was an eminent painter, architect and engraver. In the first mentioned art, he took the Carracci for his model; he also studied some time with Albano. Having been invited to Paris by cardinal Mazarin, he painted several frescos in the Louvre. As an architect, he was no less distinguished; and his engravings are highly esteemed. Innocent X employed him to execute the frescos in the Vatican and the Quirinal. Several of his best paintings are to be found in the church Sta. Maria del Monte in Rome; the museum at Paris also contains some of his best productions. He died in 1680, 74 years of age. Alexander, a son of his, is likewise known as a painter.—3. *Francesco Maria*, a Jesuit, was born in Bologna in 1613, and was distinguished as a mathematician. He assisted Riccioli in his mathematical labors, and afterwards published a work on the spots on the moon. He also wrote *Physico-mathesis de Lumine Coloribus et Iride, aliisque annexis* (Bologna, 1665, 4to.). This learned Jesuit died in his native city, in 1663.—4. *Francesco*, who likewise lived in the 17th century, and was born in the kingdom of Naples, joined the Jesuits, and is distinguished as a Latin poet. We have several bucolic and dramatic poems from him, which evince his talents. He died while professor of rhetoric in the college of the Jesuits, in Rome, in 1738, about 60 years of age.—5. *Peter Grimaldi*, likewise a Jesuit, was born in Civita-Vecchia, lived in the 18th century, and was, for a long time, a missionary in the East Indies. There is a story of him, that, on his return to Europe, he invented a machine, by means of which (1751) he passed through the air from Calais to Dover in an hour. It is mentioned by Pingeron, in his translation of the work of Milizia, and by Fontenai, in his *Dictionnaire des Artistes.* Since they give no more explicit account of the affair, and as this previous experiment is not quoted in the treatises that appeared at the time of the invention of the air-balloon (1784), we must entertain some doubt of the truth of the aërial journey ascribed to Peter Grimaldi.—6. *Constantine*, born at Naples, in 1667, died there in 1750, was a jurist, and was distinguished

for his knowledge of history, medicine and theology. He is, however, principally known for his controversy with Benedictis, a blind advocate of the philosophy of Aristotle, who was then publishing his *Lettere apologetiche*, in which he made a furious attack on Descartes and his followers. Grimaldi defended the Cartesians, and, in a severe reply, reduced the father *ad absurdum*.—7. *Francesco Antonio* (who died in Naples in 1784) was the author of some good historical works on Naples, and the constitution of that country.

Grimm, Frederic Melchior, baron of; counsellor of state of the Russian empire, grand cross of the order of Wladimir; a man of letters, whose great reputation has arisen from posthumous publications. He was born in 1723, at Ratisbon, of poor parents, who, however, bestowed on him a good education. His taste for literature manifested itself in his youth, when he wrote a tragedy. Having finished his studies, he went to Paris as governor to the children of the count of Schomberg. Soon after, he was appointed reader to the duke of Saxe-Gotha. At this period, he became acquainted with Jean-Jacques Rousseau, who introduced him to Diderot, D'Alembert, D'Holbach, and other Parisian philosophers; a piece of service which, according to Jean-Jacques (*Confessions*, 8), he repaid with ingratitude. The count de Friese made him his secretary, with appointments which rendered his circumstances agreeable, and left him at liberty to pursue his inclinations. His vanity induced him to give himself the airs of a man of gallantry; and, as he attempted to repair the ravages of time by means of cosmetics, the Parisians bestowed on him the sobriquet of *tyran le Blanc*. The arrival of a company of Italian *bouffons* in Paris having divided all the musical connoisseurs into two parties, Grimm declared for the Italian music, and was at the head of the *coin de la reine*, a party so called because they used to sit in the pit, under the queen's box, whilst the friends of Rameau and the French music formed the *coin du roi*. Grimm wrote on this occasion a pamphlet, full of wit and taste, *Le petit Prophète de Bömischbroda*, and, when his adversaries attempted to answer it, completely confuted them by his *Lettre sur la Musique Française*. These pamphlets irritated so many persons against him, that they talked of exile, the Bastile, &c.; but when the excitement had subsided, he obtained a general applause. On the death of the count de Friese, Grimm was nominated principal secretary to the duke of Orleans. The fame of the French literati, with whom he was connected, led to his being employed, in conjunction with Diderot, to transmit to the duke of Saxe-Gotha an account of the writings, friendships, disputes, &c., of the authors of that period. Copies of this curious correspondence were also sent to the empress Catharine II, the queen of Sweden, Stanislaus, king of Poland, the duke of Deux-Ponts, the prince and princess of Hesse-Darmstadt, &c. Frederic the Great gave him marks of great esteem. In 1776, he was appointed envoy from the duke of Saxe-Gotha to the French court, honored with the title of baron, and with several orders. On the revolution breaking out, he retired to the court of Gotha, where he found a safe asylum. In 1795, the empress of Russia made him her minister plenipotentiary to the states of Lower Saxony; and he was confirmed in that post by Paul I, and retained it till ill health obliged him to relinquish it. He then returned to Gotha, and died there, Dec. 19, 1807. His grand work was published in different portions successively, under the following titles—*Correspondance Littéraire, Philosophique et Critique, adressée à un Souverain d'Allemagne, depuis* 1770, *jusqu'en* 1782, *par le Baron de Grimm et par Diderot* (Paris, 1812, 5 vols., 8vo.); *Correspondance Littéraire*, &c. *en* 1775, 1776, 1782—1790, (*troisième et dernière Partie*, 1813, 5 vols., 8vo.); and *Correspondance Littéraire*, &c. *depuis* 1753, *jusqu'en* 1760, (*première Partie*, 6 vols., 8vo.). A selection from this voluminous mass of literary gossip was published in 2 vols., 8vo., in French and English.

Grimm, James Lewis Charles; born in Hanau, 1785; at present librarian of the elector of Hesse-Cassel. By his German Grammar (2d ed., Göttingen, 1822), he has rendered great service to German philology. He was the first who explained historically the elements and developement of the Teutonic dialects. This work is highly distinguished for acuteness of investigation and extensive learning, showing an intimate acquaintance with the European and Asiatic languages. With his brother William Charles, he has published several valuable collections of the productions of the early German literature. A part of his *Kinder und Hausmärchen*—Nursery Tales (Berlin, 1812—1814, 2 vols., 12mo.)—has been translated under the title German Popular Stories. A third brother, L. Emilius, is an engraver, and has produced some valuable pieces.

Grimod de la Reynière, Alexandre

Balthasar Laurent, the most witty epicure of modern France, member of the Arcadians in Rome, and of several learned societies, born at Paris, 1758, was the son of a farmer-general. A defect in the formation of his hands obliges him to use artificial fingers, with which he draws, writes and carves with great dexterity. Till 1780 he was an advocate; but a bitter satire, of which he was the author, having caused him to be exiled, he subsequently devoted himself entirely to literature, passing his time in literary clubs, in the *foyer* of the theatres, &c. This eccentric character, in the splendid circle of his parents, used to make himself merry at the pride of rank of the noble world. He gave a celebrated banquet, to which no one was admitted who could not prove himself a bourgeois. Another time he invited to his house some persons of rank, and received them in a room hung with black, where a coffin was placed behind each of them. His epicurism equals that of Apicius or Vitellius. He lived peaceably through the revolution. In the beginning of Napoleon's reign, he became known throughout Europe by his witty *Almanach des Gourmands*, which he dedicated to the cook of Cambacérès (from 1803 to 1812, 8 vols., 18mo.). For the *parvenus*, who do not know how to use their wealth, he wrote, in 1808, *Le Manuel des Amphitryons*. His zeal in promoting the *science of the palate*, as Montaigne terms it, led him to form a jury of epicures (*dégustateurs*), who held a monthly session in the Rocher de Cancale, at a select table, where judgment was passed with black and white balls, on a juicy *salmi* or a fine *blanc-manger*, with all the solemnity of the Roman senate of yore, in the well known turbot session. Since 1814, Grimod has lived in the country, but without neglecting his literary pursuits. (See *Cookery*.)

Griselda; the ever-patient wife of the marquis di Saluzzo, the subject of the tenth *novella* in the tenth *giornata* of Boccaccio's *Decameron*. The marquis's *beau idéal* of a wife was a woman of all-enduring patience. He chooses Griselda, the daughter of one of his tenants, ill-treats her in a variety of ways, takes away her two sons, and makes her believe that they are killed. At last he turns her out of doors in her shift, and celebrates a marriage with a noble lady. But finding that Griselda endures every thing patiently, he takes her back, restores her two sons, and treats her as marchioness. No one can suppose that Griselda is held up as a model. One might as well have a wax image for a wife. This subject has been treated by poets of many other nations; for instance, by Chaucer. *Griselda* is, therefore, not unfrequently used to designate a woman whose patience is trial-proof.

Grisette (*French*); originally a dress of coarse gray cloth, worn by the females of the lower classes; hence it is used for the females themselves, and is generally used to signify a belle of the lower classes. In the language of the theatre, *grisette* signifies an intriguing young girl, of the class of *soubrettes*.

Grisons, the (*Graubündten*); the Upper Rhætia of the ancients; since 1788 a canton of the Swiss confederacy. It is the largest in the confederacy, containing 3000 square miles, with 75,000 inhabitants, and is bounded N. by Glarus, St. Gall and the Vorarlberg; E. by the Tyrol; S. by the Valteline, Milan and the canton Ticino; W. by Uri. The Grison Alps rise 11,000 feet above the level of the sea; the line of perpetual snow is from 8200 to 8400 feet; they contain 241 glaciers and 56 waterfalls. The Inn and the Rhine have their sources here. The lowest point of the populous valley Engadin, at Martinsbruck, is 3234 feet above the level of the sea; the highest village is situated at an elevation of 5600 feet. The varieties of climate are, therefore, very striking in the Grisons. The country is divided into five great valleys:—1. The valley of the posterior Rhine, which includes the Rheinwald, and the valleys of the Schamser, the Via Mala and the Domlesch. The latter is formed by the posterior Rhine, is the mildest district in the Grisons, and contains 22 villages, in which the Romansh, a mixture of Latin, German and Italian, is spoken. The Schamser-Valley contains 9 villages, and is about 7 miles long. Between this and the Rheinwald is the terrible Via Mala, which is formed by the posterior Rhine. In this and in the Rheinwald, the winters last 9 months, on account of their elevated situation. Two formidable roads lead to Italy, one over the Splugen, the other over the St. Bernard. The former was passed, in 1800, by the French, under Macdonald. Lecourbe, with a considerable corps, ventured to enter the latter in 1797.—2. The second valley is that of the anterior Rhine, which extends from the western frontier and the St. Gothard to Coire and Lucien-steig. Here are the most interesting points—the old Benedictine abbey Disentis, whose literary treasures and buildings were destroyed, in 1799, by the French;

also Ilantz (the town), the old Coire (q. v.), where Roman antiquities and coins are found.—3. The third valley is that of Engadin, or the valley of the Upper Inn, which stretches from south-west to north-east, and contains, indeed, no important town, but incomparable views and picturesque scenery. It is one of the most romantic spots on earth.—4. The fourth valley is formed by the Albula, a river which rises in the Julian or Septimian mountains, and falls into the Posterior Rhine at Thusis.—5. The fifth valley is that of the Prettigau, situated on the northern frontier, in the neighborhood of the Vorarlberg; Mayenfield is the principal town.—The people of the Grisons are divided into three leagues (in German, *Bünde*; hence the German name of the canton, *Graubündten*); the League of God's house, the capital of which is Coire; the Gray League, with Ilantz; and the League of the Ten Jurisdictions, of which Davos is considered as the chief place. In these three places 63 deputies of the leagues assemble annually in September, under three heads, deliberate on the affairs of the canton, and decide, finally, in legal cases. The canton sends 1600 men to the army of the confederacy, and contributes 12,000 guilders. About two thirds of the inhabitants profess the Helvetic Protestant religion. But the ministers have so scanty an income, that they are obliged to maintain themselves by their industry. The only Latin school is in Coire. About 10,000 of the inhabitants speak an Italian dialect; these are in Engadin. About 28,000 speak the Swiss dialect of the German, and more than 36,000, chiefly near the sources of the Rhine, speak the Romansh or Ladin. This language is a relic of the old *Romana rustica*. Commerce is much interrupted by the narrowness of the passes on the frontiers. The exports (chiefly to Milan) are cattle, cheese, coals and rare minerals; for which grain, salt, linen and cloth are received in return.

Grist Mill. (See *Mill*.)

Griswold, Roger, a governor of Connecticut, was born at Lyme, in that state, May 21, 1762. His father had also been governor, and his mother was the daughter of the first and the sister of the second governor Wolcott. He was graduated at Yale college in 1780, and, three years afterwards, admitted to the bar, where he soon acquired the highest distinction. In 1794, he was elected a member of congress, in which body his intimate knowledge of the public affairs and true interests of his country, joined to his great talents, general information and urbane demeanor, gave him great influence. President Adams offered him, in 1801, the secretaryship of war, which was, however, declined. In 1807 he resigned his seat in the house of representatives. In this year he became a judge of the supreme court of Connecticut, and filled the office with much reputation. In 1808 he was one of the electors of president and vice-president. In 1809 he was chosen lieutenant-governor, and in 1811 governor, of his native state. He died in October, 1812. Governor Griswold was uncommonly amiable and dignified, as well as able. He was, for several years, an eminent leader of the federal party.

Gritti; a noble Venetian family. *Andrew*, having been taken prisoner by the Turks, concluded a treaty between the Porte and Venice (1501). At a later period, he commanded the Venetian armies in the war against the league of Cambray, was made prisoner by Gaston de Foix (q. v.), and persuaded Louis XII to secede from the league, and, in 1513, to conclude a treaty with the republic. From 1523 to 1538, he was doge.—*Ludovico Gritti*, son of Andrew, was born in Constantinople, during his father's captivity; served in the armies of the Turks, among whom he enjoyed a high reputation; commanded at the siege of Vienna; defended Buda, in 1531; became governor of Hungary, but drew upon himself the popular hatred by the murder of the bishop of Wardein. The Hungarians besieged him in Medwisch, which they took in 1534. They cut off his hands in the morning, his feet at noon, and his head in the evening.

Grog; a general name for any spirituous liquor and water mixed together; but is more particularly applied to rum and water cold, without sugar.

Gröger, Frederic Charles, and Aldenrath, Henry; the former born 1766, in Holstein; the latter, 1774, in Lubeck; two inseparable friends and artists. Gröger is a historical painter, and Aldenrath a miniature painter. Both have distinguished themselves by lithographic productions. Gröger had to struggle, in his youth, with the greatest obstacles, having been an apprentice to a tailor, a turner and a house painter, and was often punished for following his inclinations for drawing. They live in Hamburg.

Groin, among builders, is the angular curve made by the intersection of two semi-cylinders or arches, and is either regular or irregular:—*regular*, as when the intersecting arches, whether semicircular

or semi-elliptical, are of the same diameters and heights; and *irregular*, when one of the arches is semicircular, and the other semi-elliptical.

Grolman, Charles Louis William von, late minister of justice and the interior, and president of the council of ministers of the grand-duke of Hesse-Darmstadt, was born July 23, 1775, in Giessen. In 1798, he was appointed professor of law in the university of Giessen. In 1816, he was called to Darmstadt, to preside over a commission for drawing up a new code. He rose gradually to the post of minister, in which he managed all branches of the government, except the military. Grolman, during his long career as professor of law, has written many works, some of distinguished merit, as his Principles of the Science of Criminal Law (4th edit., 1826), in which he lays down the theory of *prevention*, as the German lawyers call it, and several others. He has also edited or written for several law periodicals of high reputation.

Groningen; a province of the kingdom of the Netherlands, between 52° 50′ and 53° 28′ N. lat., and 6° 10′ and 7° 13′ E. lon., forming the north-eastern extremity of the kingdom, on the coast of the German ocean, containing 780 square miles; is protected against the encroachments of the sea by dikes. It is very level, and is intersected by innumerable canals, partly for the purpose of safety, and partly to drain the land, which is in some parts fertile, in others sandy, and in others marshy. In the south-east are the vast morasses of Bourtange. There are many lakes, of which the Zuidlaader, the Schild and the Foxholster are the principal. The climate is damp. The 142,575 inhabitants are mostly Calvinists, and raise great numbers of cattle. Groningen takes the sixteenth place in the kingdom, and sends four deputies to the states-general. The provincial states consist of 36 members. In 1810, it was made a department of the French empire, under the name of the *Western Ems*. The capital of this province is Groningen. (*See the following article.*)

Groningen; a city in the Netherlands, capital of the province of Groningen, on the rivers Hunse and Fivel, 81 miles west of Bremen, 100 miles north-east of Amsterdam; lat. 53° 13′ 13″ N.; lon. 6° 34′ 26″ E.; 27,800 inhabitants; churches, 12. It is large, rich, strong, well peopled, and adorned with many excellent buildings, public and private; its figure is nearly round, encompassed with good ramparts, guarded by large ditches filled with water, besides many bastions and other fortifications, which would render an attack upon it very difficult. Its port is very commodious; ships enter with great ease by means of a canal, whose sides are lined with large stones for about nine miles from the sea. The university of Groningen, founded in 1614, and endowed with the revenues of several monasteries, has long been respectable. It consists of five faculties, and has a good library. Here are also academies for drawing, navigation and agriculture, an institution for the deaf and dumb, and societies of lawyers and physicians. In 1826, an epidemic, caused by the great drought, did great injury. Some authors think this city to be on the spot of the ancient fortress which Tacitus mentions under the name of *Corbulonis monumentum*, but there is no historical proof of it.

Gronovius (properly *Gronov*); the name of several celebrated critics and philologists. 1. *John Frederic*, one of the most learned students of antiquities, was born at Hamburg in 1611. He studied at Leipsic and Jena, and went through a course of law at Altdorf, spent some time in Holland and England, was appointed professor of history and eloquence at Deventer, and, after the death of Daniel Heinsius, succeeded him, as professor of belles-lettres at Leyden (1658), where he died 1671. With extensive knowledge he combined indefatigable industry and amiable manners. His editions of Livy, Statius, Justin, Tacitus, Gellius, Phædrus, Seneca, Sallust, Pliny, Plautus, &c., and his Observations, are valuable for their notes and improved readings. His *Commentarius de Sesterciis* displays a thorough acquaintance with the Roman language and antiquities; and his edition of Hugo Grotius's work, *De Jure Belli et Pacis*, is justly valued, on account of the notes. 2. His son *James*, born at Deventer, in 1645, studied there and at Leyden. He spent some months at Oxford and Cambridge, and returned to Leyden, where he published, in 1676, an edition of Polybius, which met with such applause, that he received an offer of a professorship at Deventer. He refused it, however, from a desire to travel through France, Spain and Italy. The grand-duke of Tuscany conferred on him a professorship at Pisa, which he relinquished in 1679, and was appointed professor of belles-lettres at Leyden and geographer to the university. He died at Leyden in 1716. This learned and industrious critic edited Tacitus, Polybius, Herodotus, Pomponius Mela, Cicero, Ammianus Marcellinus, &c., and compiled the valuable *The-*

saurus Antiquitatum Græcarum (Leyden, 1697, 13 vols. fol.) He also promoted the publication of the collections of Grævius. (See *Grævius.*) These two works should be united, and, to form a complete library of antiquities, the *Novus Thesaur. Ant. Rom.* by Sallengre (Hague, 1716, 3 vols. fol.), the *Utriusque Thes. nova Supplementa*, by Polemi (Venice, 1737, 5 vols. fol.), the *Inscriptiones Antiquæ totius Orbis Rom.*, by Gruter (Amsterdam, 1707, 4 vols. fol.), and the *Lexicon Ant. Rom.*, by Pitiscus (Leuwarden, 1713, 2 vols. fol.), should be added. He had many weak points in his character, and his vanity led him to assail and calumniate men of the greatest merit, such as Henry Stephens, Spanheim, Vossius, Salmasius, Bochart and Grævius. 3. His son *Abraham*, born at Leyden, 1694, showed himself a good philologist, by his editions of Justin, Pomponius Mela, Tacitus and Ælian. He died there in 1775, librarian to the university.

Gros (*French*); thick, strong; a word used in many compositions for silks, as *gros de Naples, gros de Tours, gros de Berlin*, &c., all strong fabrics.

Gros, Anthony John, born in Paris, 1771, a pupil of David, is the most celebrated painter of battle-scenes of the age. Gros first made himself known by his skill in portrait painting; but he soon devoted himself to the path of rich and noble composition, in which he seems to have taken Paul Veronese for his model. His first celebrated work was the picture of the Sick of the Plague at Jaffa, finished in 1804. An officer is represented holding a handkerchief before his face, to avoid inhaling the infection, while the hero of the piece fearlessly approaches and touches one of the sick. All the figures in this work are portraits. All that is terrible in such a subject is represented in the clearest light, but softened by skill of execution and happy conception. This painting excited general admiration. It was purchased by the government, and Gros was commissioned to execute the battle of Aboukir. This splendid painting he completed in about 14 months. His Battle of Eylau is painted with exquisite skill. There is much that is overcharged in it, however; and a delicate taste must be particularly offended with the profusion of mutilated soldiers. In 1814, Gros executed a picture, representing the visit of Francis I and Charles V to the abbey of St. Dénis, which excited great admiration. It was designed for the sacristy of the church. The departure of the king, on the night of March 20, 1815, formed the subject of another work, which he executed in 1817. The prevailing confusion and want of nobility in the principal character are looked upon as unfortunate defects. A group of national guards, however, is very expressive. The light on the back ground and the figure of an old servant are exquisite. In 1824, he completed his painting for the dome of the church of St. Geneviève, covering a space of 3250 feet, and therefore requiring the figures to be colossal. It represents Geneviève protecting the French throne. Clovis, Charlemagne, St. Louis, and (instead of Napoleon, who furnished the plan) Louis XVIII, with the duchess of Angoulême, form the principal groups. When Charles X saw the picture, he saluted the artist as *baron*, and the minister granted him 50,000 francs, in addition to the price of the picture (100,000 francs). All the works of this artist are marked by bold design and powerful coloring. Gros is a member of the academy, and of the legion of honor, and professor in the school of painting and sculpture.

Grosbeak (*loxia*, L.) These birds are in general shy and solitary, chiefly living in woods, at a distance from the habitations of man. Their vocal powers are not great, and hence they are little sought after as song birds. Their most conspicuous characteristics are the thickness and strength of their bills, which enable them to break the stones of various kinds of fruits. There are many species of them, the best known of which is the *L. coccothraustes*. This species is an inhabitant of the temperate parts of Europe. Buffon says it is a shy and solitary bird, with no song. The female builds her nest in trees; it is composed of small, dry roots and grass, and lined with warmer materials. The eggs are roundish, of a bluish green, spotted with brown. The green grosbeak (*L. chloris*) is common in every part of Great Britain, and may be seen in every hedge, especially in winter. It does not migrate. The female builds in hedges or low bushes; she lays five or six eggs, of a pale greenish color, marked at the larger end with spots of a reddish brown. The pine grosbeak (*L. enuchleator*) inhabits the cold regions of both continents, whence it occasionally visits temperate climates in the winter. The female makes her nest on trees, at a small distance from the ground, and lays four white eggs. There are several species peculiar to North America, as the cardinal bird (*L. cardinalis*), which is found from New England to South America, and is most

numerous west of the Alleghanies. This beautiful bird, which is often kept in cages, on account of its bright plumage, is crested, of a red color, brighter beneath, with the throat black, and bill red; the female is of a drab red color. The other species are, evening grosbeak (*L. vespertina*), rose-breasted grosbeak (*L. ludovisiana*), blue grosbeak (*L. cærulea*).

Groschen; a silver coin, so called from the Latin *grossus* (thick); thick coins, in opposition to thin lead coins. The oldest groschen known were struck in Treves, in 1104. The first Bohemian groschen were coined in 1296, at Kuttenburg. In 1525, the groschen was divided into 12 pfennige. In 1504, the small groschen, now in use, were first struck at the city Gosslar. The Marien-groschen are valued at eight pfennige, and 30 modern groschen of Prussia are equal to a thaler. *Grosch* is also the name of a Russian copper coin, worth two copecks.

Gross (*Ital.*), in opposition to *net*, is applied to merchandise, including that in which it is packed. It refers particularly to weight. Thus we say, "The bag of coffee weighs nine hundred weight *gross*," that is, including the weight of the bag.

Gross-Beeren, Battle of, August 23, 1813. August 17, 1813, the armistice having expired, the war between the allies and Napoleon commenced anew, and the emperor of France desired to hurl his bolts, at the same time, into the camps at Breslau, Prague and Berlin. They recoiled upon himself on the Katzbach, at Culm and Gross-Beeren. Berlin was protected by the militia and the northern army, commanded by Bernadotte, then crown-prince of Sweden, and consisting of the third and fourth Prussian divisions, the Russian corps under Woronzow, Winzingerode and Czernitschef, and about 22,000 Swedes. The French army, reinforced by the forces of Würtemberg, Bavaria, Darmstadt and Saxony, was formed into four divisions, led by Oudinot (the general-in-chief), Victor, Regnier and Bertrand, and was, together with the cavalry, under Arrighi, from 80,000 to 90,000 strong. Its destination was the capture of Berlin, and it was supported by general Girard, with the garrison of Magdeburg; but the crown-prince performed, in detail, the same operations against this body as the allies against the main body of the enemy. His army formed a curve from Buchholtz, the extremity of the left wing, through Mittenwalde, Klein-Beeren, Heinersdorf, Blankenfeld, Rühlsdorf, to Belitz and Treuenbriezen, the extreme right wing, from which the Russian line inclined inwards towards Jüterbock; while the Prussians, in the centre, were advanced to Trebbin. The Prussian generals Hirschfeld and Puttlitz observed Magdeburg beyond Brandenburg. On both wings, the light troops were dispersed as far as Wittenberg, Guben and Baruth. On the 22d, the enemy entered the curve—Regnier in the centre, Bertrand on the right, and Oudinot on the left wing. They attacked the Prussians, at Trebbin, who gave way. On the 23d, Bertrand fell upon general Tauenzien at Blankenfeld, but was repulsed. Regnier forced his way to Gross-Beeren, the key-stone of the arch, about 10 miles from Berlin. Here he was unexpectedly attacked by the brave Bülow. At the same time, Borstell surrounded the right wing of the enemy. The Prussians fought, with great courage, in sight of their capital. A mounted Saxon battery having been outflanked and taken, they advanced to a charge. The discharge of fire-arms being rendered impossible by the rain, the soldiers fought with the butt-ends of their muskets and with bayonets. Gross-Beeren was taken by storm; the Saxon and the second French division were driven from the field, and the cavalry of the duke of Padua routed. Oudinot now brought up the three divisions of reserve, which were attacked by the Russians and Swedes as they deployed from the wood. Cardell, colonel of the Swedish forces, supported by an attack of cavalry, took the enemy's artillery. Oudinot now abandoned the struggle, and retreated to Wittenberg and Torgau, on the Elbe. He lost 30 cannons and more than 2000 prisoners. The Prussians gained possession of Jüterbock, and, on the 28th, of Luckau. A pyramid of cast iron has been erected on the spot by Frederic William III.

Grotefend, George Frederic; born 1775; director of the gymnasium in Hanover; a distinguished German philologist. He published a revised edition of Wenck's Latin Grammar (fourth edition, 1824, Frankfort), and an abridgment of it at the same place. It is one of the best German-Latin grammars. He has also written many learned philological treatises. His nephew *Augustus*, co-rector of the royal pædagogium at Ilfeld, is the author of a Complete Latin Grammar (two volumes, Hanover, 1830).

Grotesques, in painting, are often confounded with *arabesques*. All ornaments compounded in a fantastical manner, of men, beasts, flowers, plants, &c.,

are called sometimes *arabesques*, and sometimes *grotesques;* but there is a distinction between them. Arabesques are flower-pieces, consisting of all kinds of leaves and flowers, real or imaginary. They are so called from the Arabians, who first used them, because they were not permitted to copy beasts and men. As they were also used by the Moors, they are sometimes called *moresques*. The Romans ornamented their saloons with paintings, in which flowers, genii, men and beasts, buildings, &c., are mingled together according to the fancy of the artist. These ornaments are properly called *grotesques*, because they were found in the ruined buildings of the ancient Romans, and in subterranean chambers, which the Italians call *grottoes*. The origin of these fantastic compositions is traced, by Böttiger, to the carpets of Persia and India, adorned with all the wonders of Oriental fable. In the baths of Titus and Livia, at Rome, in Adrian's villa at Tivoli, in the houses in Herculaneum and Pompeii, and many other places, such grotesques have been found; sometimes, indeed, showing an excess of ornament, but generally valuable for their arrangement and execution. Raphael was well aware of their beauty, and caused his pupils, particularly Giov. Nanni da Udine, to use them as patterns in painting the porticoes of the Vatican. He likewise used them, as the ancients did, for borders. The taste for grotesques has, in part, degenerated into the monstrous and unnatural; *grotesque* has therefore become a term of art to express a distorted figure, a strange monster, the offspring of an unrestrained imagination.

Grotius, or De Groot, Hugo, a scholar and statesman of the most diversified talents, was born at Delft, April 10th, 1583. He was descended from a noble family, and received an excellent education. In his 15th year, he sustained, with general applause, theses on philosophy, mathematics and law. The next year, he accompanied Barneveldt (q.v.), the Dutch ambassador, to France, where he gained the approbation of Henry IV, by his genius and demeanor, and was every where admired as a prodigy. After his return, he conducted his first lawsuit in his 17th year; and, in his 24th, was appointed advocate-general. In 1613, he became syndic, or pensioner, of Rotterdam. The disputes of the Remonstrants and their opponents then disturbed the tranquillity of Holland. (See *Arminians.*) Barneveldt was the defender of the former party. Grotius, who had declared himself on the side of Barneveldt, supported him by his pen and influence. This involved him in the trial which terminated in the beheading of Barneveldt, in 1619, and the condemnation of Grotius to imprisonment for life in the fortress of Louvestein. He succeeded in escaping from this fortress by concealing himself in a chest, in which his wife had sent him books. After wandering about for some time in the Catholic Netherlands, he escaped to France. Louis XIII gave him a pension of 3000 livres. The Dutch ambassadors endeavored in vain to prejudice the king against him. Richelieu was unfavorably disposed towards him, and, in 1631, even his pension was withdrawn. Grotius then returned to his native country, relying on the favor of Frederic Henry, prince of Orange, who had written him a sympathizing letter. But, by the influence of his enemies, he was condemned to perpetual banishment. Grotius next proceeded to Hamburg. During his residence in that city, the kings of Denmark, of Poland and of Spain made attempts to persuade him to settle in their states; but the protection which the chancellor Oxenstiern promised him, and the inclination of queen Christina for learning, induced him to accept the offers of this princess. In 1634, he went to Stockholm, where he was appointed counsellor of state and ambassador to the French court. This choice displeased cardinal Richelieu, who was irritated to see a man return, who had been denied protection and a residence in France; but Oxenstiern would not allow any other minister to be nominated, and Grotius appeared at Paris in 1635. He discharged his duties, as ambassador, for 10 years, and gained universal respect. On his return to Sweden by the way of Holland, he met, in Amsterdam, with the most honorable reception. Most of his enemies were dead, and his countrymen repented of having banished the man who was the honor of his native land. He was received with equal favor by the queen in Sweden. He afterwards requested his dismission, and, having finally obtained it, was on his way to Holland, when a storm drove him to Pomerania. He fell sick at Rostock, where he died, August 28, 1645. With the talents of the most able statesman, Hugo Grotius united deep and extensive learning. He was a profound theologian, excellent in exegesis, his Commentary on the New Testament being still esteemed; a distinguished belles-lettres scholar, an acute philosopher and jurist, and a historian in-

timate with the sources of history. His writings have had a decisive influence on the formation of a sound taste, and on the diffusion of an enlightened and liberal manner of thinking in affairs of science. As a philologian, he seizes the genius of his author with sagacity, illustrates briefly and pertinently, and amends the text with facility and success. His metrical translations from the Greek are executed with the spirit of a poet. Among the modern Latin poets, he holds one of the first places, and he also tried his powers in Dutch verse. But the philosophy of jurisprudence has been especially promoted by his great work on natural and national law, *De Jure Belli et Pacis*, which laid the foundation of a new science; besides which he wrote *Annales Belgicæ usque ad Ann.* 1609; *Parallelon Rerumpublic.*; *De Veritate Religionis Christ.*, and *Poemata* (Leyden, 1617, 12mo.).

Grotta del Cane (*dog's cave*); the most remarkable of the many grottoes around Naples, mentioned even by Pliny (lib. 2, c. 90), hollowed out of a sandy soil, to the depth of ten feet, and the breadth of four. A light vapor, resembling that of coal, is always seen rising about six inches in height. The walls do not exhibit any incrustation or deposit of saline matter No smell is emitted, except that which is generally connected with a subterranean passage. A dog is most commonly chosen to exhibit the effects of this vapor. The animal, held in it, at first struggles considerably, but loses all motion in about two minutes, and would immediately die, if it was not withdrawn into the open air. The effect is the same on all animals, and is owing to the presence of carbonic acid gas (see *Carbon*), which produces death merely by suffocation. A man, however, may enter the cave with impunity, as he may wade into the water, because the specific gravity of the gas prevents its rising above five or six inches from the floor. (See *Damp.*)

Grotto; a small artificial edifice made in a garden, in imitation of a natural grotto. The outsides of these grottoes are usually adorned with rustic architecture, and their inside with shell-work, coral, &c.

Grouchy, Emanuel, count of, was born at Paris, in 1766, entered the military service at the age of 14, and, in 1785, was appointed an officer in the king's body-guard. On the breaking out of the revolution, he showed his attachment to liberal principles, left the guards in consequence, and served in the campaign of 1792, as commander of a regiment of dragoons. In the succeeding winter, he was placed at the head of the cavalry of the army of the Alps, and contributed essentially to the conquest of Savoy. He was then sent into Vendée, where he distinguished himself on several occasions, but was obliged to leave the army in consequence of the decree of the convention excluding all nobles from any military command. In 1794, he was again sent to Vendée, with the rank of general of division, disappointed the attempts of the emigrants at Quiberon, and coöperated vigorously with the measures of general Hoche. In 1797, he was appointed second in command of the army destined for the invasion of Ireland. A storm dispersed the fleet, and he arrived in the bay of Bantry, with a small part of the land forces and a few ships. He determined, nevertheless, to land his forces; but the rear-admiral Bouvet refused to comply, and Grouchy was obliged to return to France without effecting any thing. In 1798, he was ordered to join the army of Italy, and received the command of the citadel of Turin, and afterwards of all Piedmont, where he distinguished himself by his prudence, moderation and firmness. In the following year, his services contributed essentially to Moreau's victories in Germany, and the battle of Hohenlinden was gained chiefly by his energy and courage. During the trial of general Moreau, he manifested his sentiments in his favor in such a manner as to incur the displeasure of Napoleon, who continued, indeed, to employ him in the most dangerous and important enterprises, but without rewarding his services. In the campaigns against Prussia, in 1806 and 1807, he commanded a cavalry corps, compelled the corps of prince Hohenlohe to capitulate at Prenzlau, and that of Blücher near Lübeck, and distinguished himself at Friedland. From 1808 to the time of the Austrian war, he was governor of Madrid, was then attached to the army of Italy, penetrated to Hungary, and distinguished himself at the battle of Wagram. In reward for his important services, he was created commander of the iron crown, colonel-general in the chasseurs, and grand-officer of the empire. During the campaign in Russia (1812), general Grouchy commanded one of the three cavalry corps of the grand army, took an important part in all the great operations, covered the retreat to Smolensk, and received the command of the *sacred squadron*, composed of generals and offi-

cers, which Napoleon had organized for the security of his person, in case of extremity. Offended by the refusal of the emperor to confide to him the command of a division of infantry, Grouchy retired from the service. But on the loss of the battle of Leipsic, and the disastrous retreat of the French from Germany, he offered to resume his post. Napoleon, while he permitted him to choose between the army in Piedmont and the cavalry, gave him to understand that he considered that he would be most useful at the head of the cavalry, the command of which Grouchy, therefore, determined to accept. His brilliant services in the campaign of 1814 were rewarded with the baton of marshal. After the restoration, he received no appointment, and he therefore joined Napoleon on his return from Elba. In 1815, he received the command of the reserve cavalry of the grand army (80 squadrons). On the 17th of June, he was detached in pursuit of the Prussians, and on the 18th, the day of the battle of Waterloo, was before Wavre. Napoleon accuses him of being the author of the defeat at Waterloo, by permitting two divisions of the Prussian army, under Blücher, to join the English forces. After the abdication of the emperor, marshal Grouchy proclaimed Napoleon II. He was one of the 19 general officers, whose arrest was ordered by the *ordonnance* of July 24, 1815, in consequence of which he retired to the U. States, where he remained until he received permission to return to France. In his Observations on the Campaign of 1815, published at Philadelphia, Grouchy has defended himself from the charges of the emperor. His sister,

Grouchy, Sophie, wife of the famous Condorcet, died 1822. She is the author of several valuable works. Her translation of Smith's *Théorie des Sentiments moraux* is admired. Mad. Condorcet showed a touching solicitude for her brother, the marshal, when he was tried, in 1817, and defended by his son.

Groundsel (*senecio vulgaris*); a weed, growing in waste places, introduced into the U. States from Europe, and flowering throughout the whole season. It belongs to the natural order *compositæ;* the stem is fistulous, about a foot high; the leaves amplexicaul and sinuate-pinnatifid; the flowers small, yellow, destitute of any ray, and disposed in a loose corymb. The plant is emollient, has a herbaceous and slightly acid taste, but is rejected by almost every quadruped, except the hog and goat: small birds, however, are very fond of the seeds. Such was the mildness of the weather in the beginning of the winter of 1824–5, that this plant flowered on the 30th of December, in the streets of Boston.

Ground Tackle; a general name given to all sorts of ropes and furniture which belong to the anchors, or which are employed in securing a ship in a road or harbor; as cables, anchors, bow-lines, &c.

Group (Italian *groppo* or *gruppo*); a term employed, in painting and sculpture, to signify an assemblage of several objects, such as figures of men, beasts, fruits or the like, which have some relation to each other, arranged in such a manner as to present to the eye one connected whole. To group objects, is to arrange them according to their magnitude, direction, apparent motion, &c., so as to form one whole. Rules for the disposition and employment of groups are derived from philosophical principles of art. These rules require a unity of interest, which is by no means inconsistent with variety of expression. Thus, in historical paintings, all the figures have reference to the principal one, to which the attention is chiefly directed. The groups must also be easily embraced by the eye, and agreeable. This depends upon a skilful arrangement of the figures and distribution of the light. The cone, the pyramid, and a bunch of grapes, have been taken as models of a group. Titian regarded the bunch of grapes as a model, because, in its outlines and surfaces, it exhibits a unity connected with the most agreeable variety, and all the necessary differences of light and shade and reflections. In the pyramid we have the model of the relation between a small height and broad surface. Mengs advises to bring the larger masses into the centre, and the smaller to the circumference, which gives lightness and grace to the group; not to arrange the figures in succession, nor to bring out various prominent parts of the figure, for instance, heads, so as to form together straight, horizontal, perpendicular or oblique lines; to avoid geometrical figures, too great regularity and repetition, and to exhibit only the most beautiful portions. He also thinks it advantageous to unite the groups of figures in uneven numbers, and to observe the same rules in collecting the groups into pictures. Of the even numbers, he says, the most tolerable are those which are made up of two uneven numbers; for example, 6, 10, 14; but those formed of two even numbers, such as

4, 8, 12, can never be introduced with grace. The reason is, that such a disposition serves to avoid uniformity. If monotony of figures in a group is intolerable, a monotony of groups in a picture is as little to be endured; and one pyramidal group at the side of another gives to the whole a stiff and constrained appearance. Moreover, objects apparently separate may often serve to unite two groups, otherwise distinct, which the artist effects by a skilful intermingling of light and shade.

Grouse (*tetrao*). This is a large genus of birds, whose distinguishing mark is a naked band, often of a red color, in place of an eyebrow. They are wild, shy, and almost untamable. They live in families, dwelling in forests, barren countries, far from man and cultivation. They feed exclusively on berries, buds and leaves. They are polygamous, the male abandoning the female, and leaving to her the whole care of the progeny. The number of eggs varies from eight to fourteen. The largest species is the *wood grouse* (*T. urogallus*). This is superior in size to the turkey, and is peculiar to the old continent. It lives in pine forests, feeding on the cones of the fir, which, at some seasons, give an unpleasant flavor to its flesh. The *black grouse* (*T. tetrix*), also peculiar to the old continent, is about the size of a common fowl, though it is much heavier. It chiefly lives in high and wooded situations, feeding on various kinds of berries. It does not pair, but, on the return of spring, the males assemble in great numbers, when a contest for superiority ensues, and continues with great bitterness till the vanquished are put to flight. *Red grouse* (*T. Scoticus*). This bird is also called *moorfowl*, and is found in great plenty in the Highlands of Scotland. It pairs in the spring; the female lays eight or ten eggs. The young follow the hen the whole summer. As soon as they have attained their full size, they unite in flocks of forty or fifty, and are extremely shy and wild. *White grouse* (*T. albus*). This bird is ash-colored in summer, but its hue changes to a pure white in winter. It is found in most northern regions. Buffon, speaking of this bird, says that it avoids the solar heat, and prefers the biting frosts on the tops of mountains; for, as the snow melts on the sides of the mountains, it constantly ascends. The flesh is dark colored. There are also several species peculiar to North America, the most remarkable of which is the *pinnated grouse*, or heath hen (*T. cupido.*) This curious bird inhabits open, desert plains in particular districts of the Union, avoiding immense intermediate regions. The male is furnished with wing-like appendages to his neck, covering two loose, orange, skinny bags, capable of being inflated. Its favorite food is the partridge berry, though it is also fond of whortleberries and cranberries. It commonly unites in covies, until the pairing season. *Ruffed grouse*, or partridge of the Eastern States, and pheasant of Pennsylvania (*T. umbellus*), well known in almost every quarter of the U. States. Its favorite places of resort are high mountains, covered with the balsam pine, hemlock, &c.; it is seldom found in open plains. The manners of this bird are solitary, being usually found in pairs or singly. It generally moves along with great stateliness, with the tail spread out like a fan. The male makes a peculiar noise, termed *drumming*. This is done by rapidly striking with his stiffened wings; it is most common in the morning and evening. It pairs in April, and lays in May. The eggs are from nine to fifteen in number. It is in best order for the table in September and October. The other American species are, the *dusky grouse* (*T. obscurus*), inhabiting near the Rocky mountains; *Canadian grouse* (*T. Canadensis*), peculiar to the northern and northwestern parts of the U. States, more common in Canada: *long-tailed grouse* (*T. phasianellus*) inhabits the western wilds of the U. States beyond the Mississippi.

Grünberg; a city in the Prussian government of Liegnitz, Silesia, with 10,000 inhabitants. It manufactures a great quantity of broadcloth, and is surrounded by vineyards, which produce large quantities of wine. The wine is much used to mix with inferior French wines, to be sold in the interior. It is so astringent, that it is commonly said, in Germany, "You can mend the holes of a stocking by putting some Grünberg wine into it."

Gruner, Christian Godfrey; a celebrated German physician, born Nov. 8, 1744, at Sagan, in Silesia. He first studied theology, at the desire of his father, after whose death he followed his own inclination for the medical science, in which he became one of the most prolific and practical writers. He wrote about 50 large works, and many essays, which show a thorough acquaintance with ancient medical literature, as well as sound practical judgment. He was a long time professor in the university at Jena, where he died Dec. 4, 1815. He was member of a vast number of academies and learned

societies in Germany and other countries.

Gruner, Charles Justus von, born Feb. 28, 1777, studied in Halle and Göttingen. In 1803, he received an office under the Prussian government. When the French entered Posen, Gruner was making a collection for the widow of Palm, the bookseller, who was shot by the French for having published a pamphlet against them. Gruner was therefore denounced to marshal Davoust as a suspicious person; upon which he went himself to Davoust with the list of subscribers, and the marshal subscribed a large sum. Afterwards, feeling unsafe, he fled to Tilsit. He was then appointed the president of the police in Berlin, at that time a very dangerous and delicate situation. In 1811, he was indirectly obliged, by the French, to give up his office. In 1812, he went to Bohemia (whether sent by government or not is not known), and, supported by Russia and England, established connexions throughout Germany for the overthrow of Napoleon's domination. The plan was to begin with the burning of the French magazines, when their troops were far advanced in Russia; but the vigilance of the French rendered this plan abortive, and the Prussian government was obliged to demand his arrest of the Austrian government. He remained in confinement a year, when the Russian government delivered him from his prison. During the war against the French, he was appointed governor of the Rhenish provinces, where he was very active. The emperor of Russia conferred on him the order of St. Anne of the first class. After Napoleon's second fall, he was made Prussian director of the police for Paris and the environs, in which capacity he counteracted, with great decision and dexterity, the cunning of Fouché, who employed every means to retain the works of art which had been collected in Paris. After the peace, the king of Prussia made him a noble, and appointed him minister to the Swiss republics. He died Feb. 8, 1820. Gruner has written several valuable works on subjects connected with politics and the police.

Gry; a measure containing one tenth of a line.

Gryphius, Andrew (properly, *Greif*), a dramatic poet, was born 1616, at Glogau. He studied at Fraustadt and Dantzic, and acquired an extensive knowledge of law; after which he became tutor in a family. He passed ten years in travelling through Holland, France and Italy, during which he formed friendships with many of the most eminent men of the age. On his return, he became syndic to the senate of Glogau. He died suddenly (1664), in an assembly of the estates. Gryphius did much for German literature. At a time when there were no German dramas but the carnival plays, he wrote tragedies and comedies, which displayed his acquaintance with the ancient and modern literature, and contained many poetical passages, though they showed no acquaintance with theatrical effect. The Dutch poet Vondal seems to have been his model. Many of his other poems breathe a high lyric spirit, mixed with a tone of melancholy, occasioned by his misfortunes.

Guadalaxara; formerly an intendancy of Mexico, bounded N. by Sonora and Durango, E. by Zacatecas and Guanaxuato, S. by Valladolid, and W. by the Pacific ocean; it is 350 miles long and 300 broad; square leagues, 9612; population in 1803, 630,000. It contains 2 cities, 6 towns, and 322 villages. The principal mines are those of Bolanos, Arientos de Oburra, Hostiotipaquillo, Copala and Guichichila. It is crossed from E. to W. by the Rio de Santiago. All the eastern part is table land, and has a pleasant climate. The maritime regions are covered with forests, and abound in excellent timber for shipbuilding; but the air is very hot and unhealthy. This country now forms the state of Yalisco, in the Mexican confederacy.

Guadalaxara; a city in Mexico, capital of the country of the same name, on the Santiago, 240 miles N. W. of Mexico; lon. 103° 2′ W.; lat. 21° 9′ N.; population, 19,500—Spaniards, mulattoes and mestizoes. It is a bishop's see, and is situated in a delightful and fertile plain, is regular and handsome, containing eight squares, a magnificent cathedral, two colleges, many convents, and a manufactory of cigars. The houses are mostly of only one story, the streets unpaved, and the carriages are drawn by unshod mules.

Guadaloupe; an island of the West Indies, and one of the largest and most valuable of the Caribbee islands. It is situated in lon. 62° W., and in lat. 16° 20′ N., and is between 60 and 70 miles in length, and about 25 miles in its greatest breadth. It is divided into two parts by a channel, in breadth from 30 to 80 yards. This channel runs north and south, and communicates with the sea on both sides by a large bay at each end. The east part of the island is called *Grande Terre*, and is about 57 miles from Antigua point. This part is about 120 miles in circumference. The west part, which is properly Guada-

loupe, is divided by a ridge of mountains. This is 36 miles from north to south, and 23 where broadest, and about 120 in circuit. In many parts the soil is rich. Its produce is the same with that of the other West India islands, namely, sugar, coffee, rum, ginger, cocoa, logwood, &c. The island is well stored with horned cattle, sheep, horses, &c. This island was first discovered by Christopher Columbus. It was taken possession of by the French in 1635, who drove the natives into the mountains. In 1759, it was taken by a British squadron, and was restored to France at the peace of 1763. It was again taken by the British in 1794; but was retaken by the French in 1795. In 1810, it was again taken possession of by a British armament; and, in 1814, was restored to the French. Population, 120,000: whites, 12,500; slaves, 101,000; free negroes, 6500.

Guadet, Marguerite Elie; one of the most distinguished leaders of the Girondists. (See *Girondists.*)

Guaiacum; a genus of plants, containing four or five arborescent species, natives of the West Indies and the tropical parts of America. The yellowish-brown gum resin, bearing the same name, is obtained by wounding the bark of one or more of these trees. It has a bitter, aromatic taste, is sudorific, and is frequently employed in chronic rheumatism, sciatica, &c. The wood itself possesses similar medicinal properties. The leaves are opposite, pinnate, and the peduncles axillary, bearing single blue flowers. The wood is exceedingly hard, so much so as frequently to break the tools employed in cutting it; of a pale yellow color near the exterior, and blackish brown at the heart; specifically heavier than water; and is well known under the name of *lignumvitæ*. It is used for a variety of purposes, as for the wheels and cogs of sugar mills, for pulleys, bowls, and a variety of ornamental articles of furniture, as it is susceptible of a very fine polish. The tree has now become very scarce in Jamaica and St. Domingo, large quantities having been cut down for exportation.

Gual, Pedro, a civilian by education, of the province of Carthagena, in Colombia, has been distinguished in that country's war of independence in various important stations. In 1814, he was the presiding officer of the chamber of representatives of his province. At that time, a project was agitated for creating a confederation of the littoral provinces, to extend from the mouth of the Orinoco to the boundaries of the commandancy of Panamá, with Maracaybo, or some place in the valleys of Cúcuta, for its capital. Sr. Gual proposed the appellation of *Colombia* for the new republic, and thus led to the adoption of this name for the union afterwards formed of the whole of New Granada and Venezuela. In 1821, he was a member of the first general congress of Colombia, which produced the constitution of that year. Afterwards he became secretary of the department of foreign affairs; and, in 1826, he was appointed to represent his government in the congress of Panamá, and attended the various meetings of that body as one of its members. Owing to his having resided some time in Baltimore, he is personally known and esteemed in the U. States.

Guamanga; a town in Peru, the see of a bishop, whose diocese extends over several districts; lon. 77° 56′ W.; lat. 12° 50′ N.; population stated from 18 to 26,000. This city was founded for the convenience of the trade carried on between Lima and Cusco. There are three parochial churches, one for the Spaniards and two for Indians, besides the cathedral and several other churches and convents. In it is a university, which has a large revenue, for the study of philosophy, divinity and law.

Guanahani. (See *Cat Island.*)

Guanaxuato; a state (formerly an intendancy) of Mexico, bounded N. by San Luis Potosi, E. by Mexico, S. by Mechoacan, and N. W. by Guadalaxara and Zacatecas; population, 382,829; 52 leagues long and 31 broad; square leagues, 911. It is the most populous state in Mexico, and is famous for its rich mines. It contains 3 cities, 4 towns, 37 villages, and 33 parishes. The most elevated point of this mountainous country, according to Humboldt, is 9235 feet above the sea.

Guanaxuato, or Santa Fé Guanaxuato; city, Mexico, capital of the state of the same name; 140 miles north-west of Mexico; lon. 100° 55′ W.; lat. 21° N.: population within the city, 41,000; and, including the mines surrounding the city, the buildings being contiguous, 70,600. It is situated in a narrow defile, hemmed in by mountains, the ground on which the city is built being 6836 feet above the sea. The streets are irregular, but the city is well built, and contains three convents, a college, two chapels and five hermitages. The mines of Guanaxuato are the most productive in the world. The mines of the intendancy yielded, from 1796 to 1803, $40,000,000 in gold and silver; nearly

$5,000,000 per annum, and nearly equal to one fourth of the whole quantity of the gold and silver produced in Mexico.

Guanca Velica, or Huanca Velica; jurisdiction in the bishopric of Guamanga, in Peru. The town which gives name to this government was founded on account of the famous rich quicksilver mine, and to the working of it the inhabitants owe their subsistence.

Guanca Velica, town, Peru, in the diocese of Guamanga, and capital of a jurisdiction of the same name; 30 miles northwest of Guamanga, 130 south-east of Lima; lon. 74° 46′ W.; lat. 12° 45′ S.; population 5,200. It is 12,308 feet above the level of the sea. The buildings are of stone, more or less porous. It stands in a breach of the Andes, has a changeable and cold climate, and is one of the richest towns in Peru. This town is famous for its mines of mercury, also for its gold and silver.

Guards; troops whose particular duty it is to defend the person of a civil or military ruler. In modern times, the term *guard* has been used to designate corps distinguished from the troops of the line by superior character, or only by rank and dress. The interest of the governors being often different from that of the governed, and the rulers being also often liable to be called to account for the evils suffered by the people, sovereigns have had guards from the most ancient times. The Assyrian and Persian monarchs had body guards, from whom the generals of the troops were taken. Alexander formed a guard of nobles, and many such have existed in modern times. These guards of Alexander were the sons of the noblest persons of the empire, and were divided into two classes. The inferior class guarded the exterior of the palace or tent, took care of the king's horses, &c. From among them were chosen the *hetæri*, or friends, who dined with the monarch, and, in the field and at the chase, never left his side. Two of their number watched his bed-room. He promoted them to be generals; and several of them, after his death, became monarchs of those countries which, during his life, they had ruled as his governors. Still more like modern guards were the *argyraspides* (the silver-shielded), commanded by Nicanor, son of Parmenio. The *prætorians* (q. v.) were the guards of the Roman emperors, and, in later times, had the greatest influence on the election of the emperors, sometimes the entire control of it. In their licentiousness and political importance they resembled the janizaries, the guards of the sultan. In fact, in every real despotism, the tendency of the body guards is, to become the masters. (See *Janizaries.*) At a later period, the *trabants* and *hatschiers* (archers) guarded the persons of the Roman-German emperors; and similar troops were maintained at other courts. In the middle ages, distinguished persons, in turbulent cities, often had guards; at least, this was frequently the case in the larger cities of Italy, and, at one time, every cardinal had his own guard. The Corsicans were then employed for this service in Rome. But, until recent times, guards were merely destined to protect the person of the monarch, or some distinguished person. When the interest of the monarch is different from that of the nation, it is safer to choose foreigners for body-guards, as not having any interest in the disputes between the two parties; hence the Scotch archers of Louis XI, and the Swiss of the Bourbons. In France, their number seems first to have been augmented by the ostentatious Louis XIV, the idol of monarchists. As his plan of government was, to avail himself of the commons against the nobles, and of a standing army against the commons, the number and importance of the guards were much increased. The *maison du roi* in his reign amounted to 8000 men, but still retained, more or less, the character of household troops,—that is, it was their duty to guard the person and palaces of the kings. Most monarchs had similar troops, and many of the smaller ones were distinguished for the splendor of their guards. The petty princes of Germany had brilliant corps of Swiss, Heydukers, &c. Frederic the Great led his battalion of body-guards into the fire, like other troops. He had several battalions of infantry and several squadrons of cavalry as guards; troops of distinguished courage and remarkable height. Height, at this time, was considered one of the chief excellences of a soldier. The guards were, therefore, to excel all other troops in this quality; and they were indeed a rare collection of giants. The Russian guards were more numerous. In 1785, they amounted to 10,000 men. Napoleon's, however, were the finest guards, and among the finest troops that ever existed. He relates (in Las Cases's *Mémorial*, vol. 2, page 33, edit. of 1824), that his narrow escape from being taken prisoner, in a castle on the Mincio, led to the establishment of troops whose destination was the personal safety of the commander. He called them *guides:* these were body-guards.

When he became the head of the government, and all Europe was arrayed against the revolutionary principles of France, it was natural, more particularly after he had conceived the plan of reëstablishing a hereditary throne, that he should wish to have a corps, which might serve, in every respect, as a model to his whole army, and which, at the same time, would be particularly attached to him. He therefore instituted his consular guards, and, afterwards, the imperial guards, which formed a complete *corps d'armée*, with artillery and cavalry, and of which he made use, in battles, only in decisive moments. He could confidently rely on them. They were the *élite* of the army: none were admitted who had been punished by a court-martial. In 1812, the imperial guards consisted of one division of old guards (three regiments of *garde-grenadiers* and two regiments of *garde-chasseurs*) and two divisions of young guards, consisting of six regiments of *garde-tirailleurs*, six regiments of *garde-voltigeurs*, one regiment of *garde-chasseurs*, one regiment of *garde-grenadiers*, one of *garde-flanqueurs*, each containing two battalions of 800 men. The cavalry consisted of grenadiers, dragoons, chasseurs, *chevaux legers*, *lanciers*, Mamelukes and gendarmerie *d'élite*. The artillery had 120 pieces of cannon. After the disasters of 1812, the imperial guard was reorganized on the same basis. Every one knows how nobly the old guards left the stage of history on the field of Waterloo. When Louis XVIII was put upon the throne of his brother, he abolished the imperial guards—a measure which, according to some writers, he afterwards regretted—and, instead of them, the ancient household troops were again introduced, which had been, in part, abolished, even before the revolution—the *gardes-du-corps*, the *gardes-de-la-porte*, the *cent Suisses*, the *mousquetaires noirs* and *gris*, &c., most of them commanded by emigrants, two of the bodies by Berthier and Marmont. The *cent Suisses* looked ridiculously in their dress, which appeared ludicrous even before the revolution. But, after the hundred days, real guards were established, and several battalions of Swiss. The fate of both, in July, 1830, is well known. (See *France*.) There are now no royal guards in France. In England, the household troops or guards consist of the life-guards, the royal regiment of horse-guards, and three regiments of foot-guards. In Russia, the guards form a numerous corps, which, on the death of Alexander, and previously, showed that many among them had the spirit which, as we have said, the guards of despots always have, more or less; though, at present, Russia has nothing to fear from them similar to the conduct of the Strelitz (q. v.), because even the Russian autocrat governs, in some degree, by means of laws. The Prussian guards form a whole *corps d'armée*. In Austria, the guards, though more numerous than formerly, are still merely body-guards of the sovereign, and therefore their number is comparatively small. Noble guards, in which only sons of noblemen could serve, have sometimes been formed, a private in which had the rank of ensign. They have generally proved useless in moments when their services were needed.

Guards, National; an institution which has acquired historical importance in the politics of France, and, according to all appearance, will now become more important than ever. It was desirable that the popular party, in the beginning of the revolution, should have forces on which they could rely, both for maintaining order and resisting the attempts of the court party, in case it should be necessary; as, for instance, the court had early marched 30,000 men, under the duke de Broglie, towards Paris. July 13, 1789, after great disorders had occurred in Paris, and the day before the Bastile was taken, a municipal committee was formed in the *hôtel-de-ville*, to provide for safety and order. They invited the lieutenant of the police to advise with them; and, within a few hours, a plan was prepared for arming the citizens. The armed force was to consist of 48,000 men, to be drawn from the various electoral districts. They first adopted green as their color, taking branches of trees as their badges; but, as it was remembered that this was the color of the livery of the count d'Artois (afterwards Charles X, brother of Louis XVI), who was highly unpopular on account of his arbitrary sentiments, it was abandoned; and it is commonly believed that the colors of the city of Paris (blue and red), were united with that of the king (white). But the origin of the tricolor is not quite certain. (See the article *Tricolor*.) The plan of arming a portion of the citizens was adopted with great readiness, because it was necessary to preserve order. This is the origin of the national guards, afterwards so important. On the 14th, the Bastile was taken; on the 15th, Bailly, president of the assembly, was made mayor of Paris, and the marquis de La-

fayette commandant-general of the militia of Paris. June 12, 1790, the national assembly decreed that, to enjoy the rights of citizenship, it was necessary to be a member of the national guard. September 29, 1791, a decree was issued for the organization of the national guards. A standing municipal and departmental national guard was herewith established, to be raised by voluntary enlistment, in the proportion of 1 to every 20 citizens; they chose their own officers, and received pay, arms and uniform. The solemn declaration of the national assembly, December 29, 1791, that the French nation renounces all wars of conquest, and will never employ its arms against the liberty of any nation, was connected with this measure. In May, 1792, the number of the battalions of the departmental national guards was fixed at 216. But the measures of Austria and Prussia, as well as the arming of the emigrants on the frontier, obliged the French government to assume a military attitude; and the national guards became a great support to the army, by diffusing a military spirit throughout the nation, and training many individuals, who afterwards joined the army. October 5, 1795 (13 Vendémiaire), Bonaparte, acting under Barras, led the troops of the convention against the national guards of the sections of Paris, who had declared against the system of terrorism. In consequence of the events of this day, the staff of the national guard of Paris was dissolved, October 8, and the command conferred upon the commander-in-chief of the army of the interior; and thus the genuine national guard, a militia, under the civil authorities, destined to maintain order, was abolished. Some months later, the directory introduced movable columns, in lieu of the stationary departmental guards. August 12, 1797, the two legislative councils gave the national guards a new organization, of which Napoleon retained the essential features, but adapted to his military policy. Numerous legions were formed, which watched the coasts and fortresses on the frontiers, or served in the interior, whilst a numerous *gendarmerie*, entirely distinct from the national guards, formed a powerful and active police, with a military organization. In 1810, Napoleon formed a regiment of four battalions of the national guards, which had distinguished themselves on the occasions when the English had landed. This regiment was called the *national guards of the guards*. March 13, 1812, Napoleon issued the decree for the formation of the national guards in three *bans*, as they were called, of which the first comprised all men capable of bearing arms, from 20 to 26 years of age; the second, all able-bodied men from 26 to 40 years; the third, or *arrière ban*, all men fit for service, from 40 to 60 years. Of the first ban, he called out 100 cohorts, of 1000 men each, for active service, who were not to fight beyond the frontiers; but, in 1813, they declared, at least a part of them, their willingness to serve beyond the frontiers. The correspondence between Napoleon and Joseph, his brother, just before the entrance of the allies into Paris, shows that the emperor still relied on the national guards for the defence of the capital; but the want of arms, the defection of the highest civil and military officers, and, more than all, the aversion of the people to a continuance of the struggle, prevented such a measure. After the restoration of the Bourbons, the government endeavored to make the national guards dependent upon itself. *Monsieur* (the brother of the king) was appointed commander-in-chief of all the national guards of France. The guards were not allowed to choose any of their officers (see *France*, in 1818); but, in 1818, the staff of the national guards was dissolved, and *Monsieur* resigned the chief command. The national guards were again put under the prefect and the minister of the interior. April 29, 1827, the national guard of Paris, on an occasion when it was reviewed by the king, having ventured to demand the removal of the ministry (that of Villèle, see *France*), and the banishment of the Jesuits, was dissolved on the 30th. It was revived at Paris, during the memorable days of July, 1830. July 30, general Lafayette was appointed, by the provisionary government, commander-in-chief of the national guards, in which office he was confirmed by king Louis Philip, receiving, at the same time, the marshal's staff. The new charter "intrusts the charter and the rights which it consecrates to the patriotism and courage of the national guard and all the citizens" (article 66); so that, it would seem, the national guards have become a fundamental institution of the kingdom, and cannot again be constitutionally abolished. Complaints have been made, that the command of this immense power is left in the hands of one man, and that the national guards are not, as formerly, a municipal force for the maintenance of order. An ordinance of October 9, 1830, reorganizes the national guards. They are divided into movable

and stationary; the first, composed of men from 20 to 30 years of age, inclusive, and only to be called into service by a law, or, while the chambers are not in session, by an ordinance, which must become a law during the next session, is to be "an auxiliary of the army for the defence of the territory,—the guard of the frontiers, to repel invasion, and maintain public order in the interior." Corporals, subalterns and sub-lieutenants are to be elected by the members; the other officers are to be appointed by the king. When this body is organized, the members are subject to military discipline; yet, when the national guards refuse to obey orders, or leave their corps without authority, they are to be punished only by imprisonment, not to exceed five years. The Prussian *Landwehr* is something similar, but more military in its organization, without the privilege of choosing officers, and subjected to an absolute military discipline. (See *Militia*.) The citizen guards established in Belgium during the revolution of the year 1830, were an imitation of the French national guards.

Guarini, Giovanni Battista, born at Ferrara, 1537, was descended from a noble family, distinguished for its influence on the revival of learning and of poetry. After having studied in Ferrara, Pisa and Padua, and lectured, in his native city, on the ethics of Aristotle, he entered the service of the duke Alphonso II, who appreciated his talents, knighted him, and sent him as his ambassador to the Venetian republic, to Emanuel Filibert, duke of Savoy, to Gregory XIII, Maximilian II, and Henry of Valois, who was chosen king of Poland; and, when the latter ascended the throne of France under the name of Henry III, Guarini was sent to the Polish estates to propose the duke as a candidate for the throne of Poland. The failure of this embassy, which involved the sacrifice of a part of Guarini's own property, was taken advantage of, by his jealous rivals, to deprive him of the favor of his prince; and, after all his services, he was dismissed. He now passed his time in literary retirement, partly in Padua, and partly on his own estate, but was recalled, in 1585, to the office of secretary of state. He again attained a distinguished rank in the court, but, two years after, retired a second time, because the duke, in a dispute between Guarini and his daughter-in-law, gave a decision which displeased him. He then continued some time in private life. In 1597, he entered the service of Ferdinand I, grand-duke of Tuscany, which he soon quitted. Suspecting that the duke had favored the marriage of his youngest son, which had been concluded privately, against Guarini's will, he left his court, and retired to that of the duke of Urbino. After some time, he returned to Ferrara, but resided alternately at Venice, Padua and Rome, on account of the numerous lawsuits in which his litigious spirit involved him. In 1605, he went as an ambassador of his native city to the court of Rome, to congratulate Paul V on his elevation. He died at Venice, in 1612. Guarini is one of the most elegant authors and poets of Italy, as is shown by his letters, his *Segretario*, a dialogue, his comedy *L'Idropica*, his *Rime*, and, above all, by his *Pastor Fido*. This pastoral drama, which was first represented at Turin, on the marriage of Charles Emanuel, duke of Savoy, with Catharine of Austria, and afterwards frequently brought upon the stage, and translated into many languages, has rendered him immortal. The slightest glance shows that this piece is by no means an imitation of the *Aminta*, to which it is superior in ingenuity, epigrammatic turns and poetical ornament, —characteristics which have brought upon him undeserved reproach, as being ill adapted to the pastoral drama. Guarini's works appeared at Ferrara, in 1737 (four volumes, 4to.). His *Trattato della politica Libertà* (written about 1599) was first printed at Venice, in 1818, with his life by Ruggieri.

Guastalla; a duchy in Upper Italy, on the Po, in the Austrian dominions, and the duchy of Modena, containing 33 square miles, with 7200 inhabitants. Its chief place, of the same name, on the Crostolo and Po, contains 5500 inhabitants. Guastalla formerly belonged to the dukes of Mantua. The line becoming extinct in 1746, it was given to Parma, and, in 1795, was comprised, with all the dominions of this house, in the Italian republic. In 1815, it was annexed to the duchy of Parma, and given to Maria Louisa, wife of Napoleon, as duchess of Parma.

Guatimala (for an account of the country of this name, see *Central America*). Guatimala is also the largest of the five states of the republic of Central America, formed from the old captain-generalship of the same name. It lies in the north-western part of the republic, bordering on Mexico, the gulf of Honduras, and the Pacific ocean. It is divided into 14 *partidos*.

Guatimala, La Nueva (*the New*); seat

of the federal government of Central America, archiepiscopal see, situated on the river Vacas, near the Pacific ocean, with a good harbor; lat. 14° 40′ N.; lon. 91° 25′ W. In April, 1830, it was nearly destroyed by an earthquake. Previous to this, the inhabitants were about 40,000; the houses were handsome, but built low, on account of the frequency of earthquakes; the streets broad, and the numerous churches and public buildings distinguished for their elegance. It was founded in 1775, in consequence of the destruction of the old city by an earthquake.

Guava (*psidium*); a genus of plants, allied to the myrtle, containing nearly 40 species, natives of the intertropical parts of America, with one or two exceptions. They are trees or shrubs, with opposite entire leaves, and axillary white flowers. The *P. pysiferum* attains the height of 18 or 20 feet, and is now cultivated in all the intertropical parts of the globe, for the sake of its fruit, which has a sweet, agreeable flavor, and is considered very wholesome. The young branches of this tree are quadrangular; the leaves, oval-acute, and the fruit shaped like a pear, and about as large as a pullet's egg, yellow without, with a fleshy pulp, and is eaten either in a crude state, or in the form of jellies. The wood, which is very hard, is much used for various mechanical purposes, as also for burning, and makes excellent charcoal. This tree has been cultivated, with complete success, in the south of France.

Guaxaca, or Oaxaca; a state of Mexico, situated between Puebla and Guatimala, about 240 miles in length and 120 in breadth. The soil is fertile, producing corn, maize, cocoa, cochineal, sugar, honey, and fruits of every kind. Here are mines of gold, silver and crystal. Mulberry trees, for the cultivation of silk, have been introduced by the Spaniards. There are 150 Indian towns, besides 300 villages and upwards of 150,000 natives, who are tributary to the Spaniards. Population, 534,000.

Guaxaca; a town in Mexico, capital of the state of the same name; 90 miles S. by W. of Vera Cruz, 195 miles S. S. E. of Mexico; lon. 98° 36′ W.; lat. 17° 30′ N. Population in 1792, 24,000. This town, also called *Antequera*, is the see of a bishop. It is agreeably situated in a valley, on a river abounding with fish, which runs into the Alvarado.

Guayaquil, a province of Colombia, in New Granada, lies along the Pacific ocean, on the Guayaquil river, and on the north side of the gulf of the same name. Population, about 90,000. Staples, cocoa, cotton, tobacco, salt, wax, rice and honey.

Guayaquil; a city of Colombia, and capital of the province of the same name, on the west side of Guayaquil river. It possesses an excellent seaport. Ship-timber abounds in the vicinity, from which many vessels have been built. It is 150 miles S. S. W. of Quito; lon. 79° 56′ W.; lat. 2° 11′ S.

Guayaquil Bay, or Gulf, extends from cape St. Helena to Pontade Picos, upwards of 100 miles; and, extending inland, in the form of a triangle, receives, at its head, Guayaquil river. The gulf is chequered by numerous islands, one of which, Puna, is of considerable size.

Gubitz, Frederic William, one of the best wood-engravers in Germany, was born in 1784. He is professor in the academy at Berlin, and teacher of the art of engraving on wood, which he has carried to great perfection. He is also a writer of some talent, and has edited a periodical (*Der Gesellschafter*) in Berlin, since 1817.

Gudgeon (*gobio*, Cuv.). These fish are distinguished by having the dorsal and anal fins short, and without spines. At the angle on each side of the mouth, there is a small beard of a quarter of an inch in length. Neither jaw is furnished with teeth, but, at the entrance of the throat, there are two triangular bones, that perform the office of grinders. These fish are taken in gentle streams, and are generally of small size, measuring only about six inches. They are brought together by raking the bed of the river, which makes them crowd in shoals to the spot, expecting food from this disturbance. They are spoken of by Aristotle; and old Willoughby says that they are preferred, by the English, to every other river fish.

Guebers, or Guebres, or Gauers (i. e., infidels); the fire-worshippers in Persia; in India called *Parsees*. They call themselves *Behendie*, or followers of the true faith, and live chiefly in the deserts of Caramania, towards the Persian gulf, and in the province Yerd Keram. These people, who are but little known, are laborious and temperate cultivators of the ground. The manners of the Guebers are mild. They drink wine, eat all kinds of meat, marry but one wife, and live chastely and temperately. Divorce and polygamy are prohibited by their religion; but if a wife remains barren during the first nine years of marriage, the husband may take

a second wife. They worship one Supreme Being, whom they call the *Eternal Spirit*, or *Yerd*. The sun, moon and planets they believe to be peopled with rational beings, acknowledge light as the primitive cause of the good, darkness as that of evil, and worship fire, as it is said, from which they have received their name. But they themselves say, that they do not worship fire, but only find in it an image of the incomprehensible God; on which account they offer up their prayers before a fire, and maintain one uninterruptedly burning on holy places, which their prophet Zoroaster (q. v.), they say, kindled 4000 years ago. Their holy book is called *Zend-Avesta*. (q. v.) One of the peculiarities of the Guebers is, that they do not bury their dead, but expose the bodies upon the towers of their temples, to be devoured by birds. They observe which part the birds first eat, from which they judge of the fate of the deceased.

Guelfs, or Guelphs (from the Italian *Guelfi* and the German *Welfen*); the name of a celebrated family, which, in the 11th century, was transplanted from Italy to Germany, where it became the ruling race of several countries. The family still continues in the two lines of Brunswick, the royal in England, and the ducal in Germany. According to Eichhorn's *Urgeschichte des Hauses der Welfen*, this house first appears distinctly in the 9th century, in the reign of Charlemagne. The memory of this ancient name has lately been revived by the foundation of the Hanoverian Guelf order. (See *Hanover*.) The term *Guelf* is also applied to a powerful party in the middle ages, which, in Germany, and, at a later period, in Italy, opposed the German emperors and their adherents, called the *Gibelines*. (See Frederic von Raumer's *Geschichte der Hohenstaufen*, Leipsic, 1823.) The family of the Guelfs, in different branches, possessed considerable estates in Germany, in the 11th century. Azzo, of the family of Este in Italy, lord of Milan, Genoa and other cities of Lombardy (died in 1097), acquired some of these estates by his marriage with Cunigunde, the heiress of the Guelfs. His son, Guelf I (died 1101), became duke of Bavaria, and inherited the estates of the other Guelf lines. The son of Guelf I acquired, by marriage, the estates in Saxony which belonged to his wife's father, duke Magnus. The emperor Lothaire gave (1137) the duchy of Saxony to his son-in-law, Henry the Generous, grandson of Guelf I. This Henry, on the death of Lothaire, opposed Conrad III, of the house of Hohenstaufen, who had been elected emperor, was put under the ban of the empire, and most of his vast possessions confiscated. After his death, his son, the famous Henry the Lion, received, in 1139, only the duchy of Saxony, and his hereditary estates in this country, the Bavarian fiefs having been given to his uncle Wolf. In 1140, war having broken out between Wolf and Frederic, brother to the emperor Conrad, the words *Welf* and *Waiblingen* became the war-cries of the respective parties in the battle at Weinsberg. Waiblingen, in the present kingdom of Würtemberg, was an estate of the house of Hohenstaufen (q. v.), to which Conrad belonged, and the Italians afterwards changed the word (as *w* is often changed into *g*, q. v.) into *Ghibellini*. The contest, which, in the beginning, was merely between the two families, spread, at length, more and more widely, and became an obstinate struggle between two political parties. This contest was not a mere family quarrel, like many of the disputes of the middle ages. It was a strife of opinions, involving important interests, conducted, it is true, in many instances, with a senseless disregard both of justice and expediency, owing to the crude notions of the period respecting the rights and well-being of nations, but still having great objects in view. The wars of the Guelfs and Gibelines became the struggle between the spiritual and secular power, through which it was necessary that western Europe should pass, to shake off the dominion of the popes, which was now on the point of crushing all national independence, after having completed its proper work of raising Europe from a state of barbarism. (See *Gregory VII.*) The popes, who endeavored to reduce the German emperors to acknowledge their supremacy, and the cities of Italy, struggling for independence and deliverance from the oppressive yoke of these same emperors, formed the party of the Guelfs. Those who favored the emperors were called *Gibelines*. Italy underwent great sufferings during this contest, as did Germany also, which sent army after army to be swallowed up in this lion's cave whence none returned, as a German emperor called it. There is little doubt that the inconsiderable progress of Germany in public law and political well-being was, in a great measure, owing to this struggle, which consumed her strength and engrossed her attention. The contest continued, with bitterness, for almost 300 years. These parties appeared

in Italy under many different names, as the *bianchi* and *neri* (white and black), in Florence, &c. History shows no instance of a more untiring and cruel party spirit.

Guercino (properly *Gianfrancesco Barbieri*, surnamed *Guercino da Cento* from his squinting), a celebrated painter, was born at Cento, near Bologna, in 1590. By his own genius he discovered the first principles of his art, and afterwards perfected himself in the school of Lodovico Caracci. An academy which he opened in 1616, attracted a great number of scholars from all parts of Europe. The king of France offered him the situation of his first painter; but he preferred to accept an apartment in the palace of the duke of Modena. In his character he was mild, upright, courteous and benevolent, and ready to assist his fellow artists. He died in 1666, at Bologna, where he had settled after the death of Guido. His principal works are to be found in the museums of Rome, Parma, Piacenza, Modena, Reggio and Paris. The manner which he first adopted was too strong, and resembled that of Caravaggio. His second and best period was compounded of the Roman, Venetian and Bolognese schools, blended, however, with somewhat of Caravaggio's bold opposition of light and shade. His last manner was a palpable imitation of Guido, and is inferior to the other in power and elegance. He acquired great wealth by his profession, which he bestowed liberally in acts of charity, building chapels and founding hospitals. Few painters have labored with so much facility and rapidity. Having been requested by some monks, on the eve of a festival, to paint God the Father, for the grand altar, he finished the picture in one night, by torch light. We have, also, an introduction to the art of drawing from his pen. Guercino, moreover, etched some prints in a style of excellence.

Guericke, Otto von, burgomaster of Magdeburg, was one of the most distinguished experimental philosophers of the 17th century. He was born at Magdeburg, Nov. 20, 1602; studied law at Leipsic, Helmstädt and Jena; mathematics, and particularly geometry and mechanics, at Leyden; travelled in France and England; acted as chief engineer at Erfurt; became, in 1627, counsellor at Magdeburg; and, in 1646, burgomaster, and counsellor of the elector of Brandenburg, but resigned his offices five years before his death, and repaired to his sons, at Hamburg, where he died May 11, 1686. In 1650, he invented the air-pump, about the time that a similar idea occurred to Robert Boyle in England. This discovery changed the whole aspect of natural philosophy, and gave rise to a more intimate acquaintance with the nature and effects of air. In 1654, he made the first public experiments with his machine, at the diet at Ratisbon, before the emperor Ferdinand III, his son Ferdinand IV, king of Rome, several electors and other estates of the empire. The first air-pump, with which Guericke almost exhausted the air from two hemispheres, is preserved in the royal library at Berlin. Guericke also invented an air-balance, and the small glass figures, which were used before the invention of the barometer (q. v.), to show the variations of temperature. The pressure of the atmosphere he exhibited by means of two large hollow hemispheres of copper and brass, an ell in diameter. These being fitted closely together, the air contained in the hollow sphere thus formed was exhausted by means of an air-pump. Guericke then harnessed horses to strong rings, attached to the hemispheres, and they attempted in vain to separate them. The number of the horses was increased to 30 without success. An additional number at length made them part with a loud report. He was also an astronomer. His opinion, that the return of comets might be calculated, has been confirmed. His most important observations, collected by himself, appeared at Amsterdam, in folio (in 1672), entitled *Experimenta nova, ut vocant Magdeburgica, de vacuo Spatio*, &c. (See *Air-Pump*.)

Guerillas (Spanish diminutive of *guerra*, war), in the war for Spanish independence, was the name of the light, irregular troops, who did much injury to the enemy, while their disconnected character and active movements secured them from suffering much in return. They consisted chiefly of peasants, who, in the ardor of patriotic zeal and religious fanaticism, having put to death such Frenchmen as fell into their hands on the first retreat of the French forces, fled to the mountains, on their return, to avoid their resentment, collected in numbers, chose leaders, and carried on a partisan warfare, without being paid or dressed in uniform. They appeared sometimes in small bands, sometimes to the number of 1000, hanging on the outskirts, picking off single soldiers, attacking small detachments, intercepting couriers; and it was with difficulty that the French could keep up any communications. The general Juan Martin Diaz,

surnamed *El Empecinado* (q. v.), first organized them with some system, in the vicinity of Madrid, after Saragossa had been taken by the French (1808), and Spain, by the defeat of its armies, seemed lost beyond recovery. Romana, however, extended the plan much further. They contributed to sustain the confidence of the people in the final success of their arms, and to maintain a spirit of determined resistance. They fought even to the capital, which was occupied by the enemy. It was a no less important circumstance, that every advantage gained by the Spanish or English troops was proclaimed, by their means, in all quarters, with the rapidity of lightning, and often, of course, with great exaggerations. Sir Robert Wilson (q. v.) had likewise a great influence in the organization and success of the guerillas.

Guérin; a pupil of Regnault; one of the most distinguished painters of the modern French school. His style is noble and graceful; his coloring transparent and harmonious. The first picture, by which he made himself known, was the Sacrifice before the Statue of Æsculapius, taken from the Idyls of Gesner. The work has defects, which are easily accounted for by the youth and inexperience of the artist. It is in the gallery of Versailles. He next painted Geta murdered by his Brother Caracalla, and afterwards Coriolanus. His Marcus Sextus, in 1800, excited general admiration. It breathes the deepest feeling. The noble exile is represented as on his return, when he finds his wife dead. Guérin's next work, Hyppolitus and Phœdra, in 1802, was honorably mentioned by the judges of the decennial prizes. This picture has many beauties, though there is something extravagant and theatrical about it. It was received with great applause, but the modest artist was not satisfied with it, and desired to study the true spirit of the art in Italy. After his return, it was proposed to him to paint Napoleon pardoning the Revolters at Cairo, and he knew how to take advantage of the favorable points of the subject. The noble forms, the glowing colors, the splendid Oriental costume, the brilliant sky, the peculiarities of the country, the unity of action and variety of feeling, the contrast between the Europeans and Asiatics,—all was made subservient to the genius of the artist. On the left stands Napoleon, elevated above the rest, and in profile. The expression of prudent distrust and silent earnestness in the emperor, is a masterpiece of execution. The distribution of light is admirable. A tree hanging over a group of Frenchmen, throws upon the Egyptians shade interspersed with streaks of light, so that the tawny inhabitants form a stronger contrast with the brilliant and cloudless sky. For the exhibition of 1812, Guérin painted his splendid Andromache. His Cephalus and Aurora is full of elegance, and possesses an almost magic charm. In 1817, the artist exhibited two still finer paintings—a Dido listening to the Story of Æneas, and a Clytemnestra at the moment that Ægisthus is instigating her to assassinate her sleeping husband. It was a stroke of genius to select a sombre, red light for this scene. Guérin has painted but few portraits, but they all do honor to his skill. In 1817, the king proposed to him to paint the portrait of the hero of La Vendée, Henri de la Rochejacquelin, in the act of storming an entrenchment. It is a highly expressive picture. Guérin is a member of the academy of fine arts and of the legion of honor. He is amiable and unpretending.

Guernsey, an island in the English Channel, near the coast of Normandy and Brittany, lies in Mount St. Michael's bay, a spacious gulf formed by cape La Hogue in Normandy and cape Frehille in Brittany; in 49° 13′ N. lat.; 2° 40′ W. lon. This beautiful island is 9 miles in length and about 30 in circumference. It is abundantly watered, though, from its limited size, none of the streams are considerable. The soil throughout is rich and fertile, and yields very fine pasture. The cows are much esteemed, yielding abundance of excellent milk. A great number of them are yearly exported to England. Vegetables are also excellent, and in great variety. Timber, with the exception of the elm tree, is not lofty, but luxuriant. Most kinds of fruit and flowers grow in profusion; and so genial is the climate, that myrtles and geraniums flourish in the open ground, and the more hardy species of the orange tree, the Seville, will fructify with very little shelter in winter. Thousands of that beautiful flower, the Guernsey lily, are exported yearly to England and France. The fig tree attains great luxuriance, and sometimes reaches a remarkable size. The aloe tree frequently blossoms here. One of the most useful vegetables is a marine plant, called *varec*, which is used both for fuel and manure. Both the judicial and executive authorities are exercised by a body called the *royal court*, composed of 12 jurats, the procureur or attorney-general, and the comptroller or solicitor-general. But the

task of raising money to defray public expenses, is committed to what is called the *states of deliberation*—a political body composed of the governor for the time being, the bailiff, 12 jurats and the procureur, the 8 rectors of the 10 parishes, and the united voices of the constables of each parish, the total number of voters being 32. Application must, however, in certain cases, be made to the king, for permission to carry into effect the levies proposed by this body. Guernsey is divided into ten parishes, the churches appertaining to which were consecrated between the years 1111 and 1312. Dissenters, more particularly the Calvinists and Methodists, are very numerous, and have several chapels. The Roman Catholics are few. The society of Friends or Quakers are rather increasing in number. Population, 20,827. Steam vessels and sailing packets ply daily between Portsmouth, Plymouth, Southampton, and many other ports of England, to this island; there is also a constant communication kept up between this and the opposite French coast.

Guerrero, Vicente, president of the United Mexican States, is a Creole by birth, and is said also to be partly of Indian extraction. He took arms against the royalists at the very commencement of the revolution in Mexico, and has never ceased to occupy a prominent position in the affairs of that country. In 1819, after Hidalgo, Morelos and Mina had successively fallen victims to their zeal in the cause of independence, and the patriots, being unsuccessful every where, were captured, cut up or dispersed, Guerrero continued in arms in the province of Valladolid, at the head of a formidable guerilla in the Tierra Caliente. The publication and general adoption of the terms of accommodation between the Mexicans and Spaniards, proposed by Iturbide, known as the plan of Iguala, and the new impulse thus imparted to the revolution, gave employment and importance to Guerrero once more, until the usurpation of Iturbide placed him in opposition to all the steady republicans. When Santa Aña raised the standard of revolt in 1823, and the success of the insurgents under him and Victoria gave the republicans a chance of overturning the mushroom emperor, Guerrero, with Bravo, fled from Mexico in secret, and placed himself at the head of a body of troops in the west. The result of all these movements was the dethronement of Iturbide, the adoption of the constitution of 1824, and the election of Victoria as president, and Bravo as vice-president of the Mexican States. In the organization of political parties which ensued, general Guerrero became the rallying point of the liberal or popular party, the Yorkinos, and was also repeatedly called into active service in his military capacity, by reason of the civil troubles which the anxious impartiality of president Victoria rather tended to augment than to moderate. In 1827, Guerrero was despatched to Vera Cruz, to put down the disorderly movement of colonel Rincon, and quelled the rebellion without a struggle. In December, 1827, don José Montaño, a colonel in the army, set afoot at Otumba an insurrection for the forcible reform of the government, in order to counteract the influence of the Yorkino party. In January following, general Bravo, the vice-president, who was the leader of the Escoceses, or the aristocratical party, left Mexico, in order to join the rebels, and stationed himself at Tulancingo, where he issued a manifesto declaring himself in favor of the views of Montaño. To suppress this insurrection, general Guerrero was hastily despatched at the head of a large force, to which Bravo and his associates surrendered with little or no resistance. The Yorkinos were now triumphant. Bravo was banished from the republic; and Guerrero, as the most prominent individual of the successful party, was universally looked upon as the probable successor of Victoria in the presidency. But the Escoceses, and the Mexicans of Spanish birth, who all belonged to that party, and who knew that their expulsion would be the immediate consequence of the government's being placed entirely in the hand of the Yorkinos, rallied all their strength to turn the scale against Guerrero. Nothing could exceed the disappointment of the friends of the latter, when the election of September, 1828, took place, and it appeared that don Gomer Pedraza, the secretary of war, had the votes of ten states, while only eight declared for Guerrero. It appears that many moderate men of the Yorkino party united with the whole body of the Escoceses to produce this result. Pedraza had been an active partisan of the Yorkinos, and had been particularly active and instrumental in putting down the insurrection of Otumba, and with it Bravo, the hope of the Escoces party. Nevertheless, being deemed more moderate in his political principles than Guerrero, the Escoceses threw their votes for him, as their last resource, to prevent the introduction of a radical and proscriptive administra-

tion, which they knew would come, if Guerrero should be elected. The Yorkinos loudly exclaimed against the election of Pedraza, as having been effected by bribery and military violence. In a country of stable laws and well organized government, the defeated party would have awaited the result of a constitutional inquiry into the legality of the election. But in Mexico they order things otherwise. The Yorkinos determined to resort to arms to prevent the elevation of Pedraza to the presidency; and general Santa Aña, who, since the fall of Iturbide, had been living in comparative retirement at Jalapa, seduced a small body of troops, marched to Perote, and gained possession of the castle, before the government were well aware that another civil war had broken out. Here he issued a manifesto, proposing that the people and army should annul the election of Pedraza; that Guerrero should be declared president; and that the Spanish residents should be expelled from Mexico. When information of these incidents reached the government, Santa Aña was denounced as a rebel, and a force was sent against him, which he found himself unable to withstand, and retired into the mountains of Oaxaca. But meanwhile measures were secretly planning in the capital for a more decisive movement in favor of Guerrero. It was discovered by the executive that don Lorenzo de Zavala, the governor of the state of Mexico, was in correspondence with Santa Aña. He was arrested, but found means to escape. Soon afterwards, a battalion of militia, aided by some troops of the line, took possession of the artillery barracks, called the *acordada*, situated on the outskirts of the city, and, being joined by general Lobato, by Zavala, and by other persons of distinction, announced their intention to annul the election of Pedraza, and to force the government to expel the Spaniards. But as the constitutional authorities were resolved not to give up the point without a struggle, a violent contest ensued, in some of the principal streets of the city, during the three first days of December, in which many persons were killed on both sides. At length Guerrero openly joined the insurgents, with a reinforcement of his friends; on which Pedraza left the city, and, on the 4th, president Victoria agreed to a partial accommodation. (See *Mexico*.) Victoria was obliged immediately to appoint a cabinet favorable to the insurgents, including Guerrero himself as secretary of war. Finally, when the national congress assembled in January, some of the votes given for Pedraza were pronounced to have been illegally obtained, and Guerrero was declared to be regularly elected president, with Anastasio Bustamente as vice-president. The new magistrates were inducted into office in April, 1829, soon after which the expedition of Barradas (see *Mexico*) gave employment to the government, and a subject of engrossing interest to the people. The better to enable the president to meet the exigency, he was invested with extraordinary powers; but after the victory over the Spanish troops, and when the invading expedition was destroyed, Guerrero evinced an unwillingness to relinquish the dictatorship, which became the cause or pretext of another revolution. He had previously abolished slavery, September 15, 1829, the anniversary of Mexican independence, with a promise of indemnity to the proprietors when the resources of the government permitted it. Bustamente, the vice-president, took command of the army of reserve stationed at Vera Cruz, and commenced his march towards Mexico, for the purpose of reforming the government by force. Guerrero left the city to meet him; but no sooner was he gone, than the troops in Mexico revolted, and declared for Bustamente; in consequence of which, Guerrero, and the other leaders of the *acordada* revolution, resigned their offices, and Bustamente assumed the reins of government. He was not destined, however, to continue in the tranquil exercise of power. Disturbances soon broke out afresh, and in September, 1830, Guerrero had collected a large force in Valladolid, and established a form of government in opposition to that of Bustamente, and the whole country was agitated by troops in arms, in different parts and under various chiefs, for the purpose of either preventing or effecting the reinstatement of Guerrero.

Guesclin, Bertrand du, constable of France, a man renowned for talent and courage, was born about the year 1314, at the castle of Motte-Broon, near Rennes. The poets derive the origin of his family from a king of the Moors. Like most of the nobles of his time, he could neither read nor write. From childhood, he longed but for war and for battle. He united his young companions into a regiment, made himself their general, and, dividing them into companies, taught them to form in order of battle. According to the descriptions which remain of him, he was of a vigorous frame, with broad shoulders and muscular arms. His eyes were small,

lively, and full of fire. His face had nothing pleasing in it. "I am very ugly," said he when a youth; "I can never please the ladies; but I shall at least know how to make myself terrible to the enemies of my king." He rose entirely through his own exertions. At the age of seventeen, he won the prize at a tournament at Rennes, where he had gone against the will and without the knowledge of his father. From this time he was always in arms. After the disastrous battle of Poitiers, in 1356, he came, while king John was yet a prisoner, to give assistance to his eldest son, Charles, who then held the regency. Melun surrendered; those of his party obtained their freedom, and many other towns yielded to him. Charles V, who, in 1364, had succeeded his father, rewarded in a suitable manner the services of Guesclin, who, in the same year, gained a victory at Cocherel over the king of Navarre. These successes hastened the peace. He next supported Henry, who had assumed the title of king of Castile, against his brother, Peter the Cruel. He deprived this prince of his crown, and secured it to Henry, who rewarded him with a large sum of money, and raised him to the dignity of constable of Castile. Bertrand soon after returned to France, to defend his country against England. The English, hitherto victorious, were now every where beaten. Advanced to the rank of constable of France, he attacked them in Maine and Anjou, and even made their leader prisoner. He brought Poitou and Saintonge under the dominion of France, so that the English retained only Bordeaux, Calais, Cherbourg, Brest and Bayonne. He died in the midst of his triumphs, before Chateau-neuf-de-Randon, July 13, 1380. His body was buried with royal honors, near the tomb which Charles V had designated for himself. France, since him, has had among her many generals but a single one who can be compared to him,—Turenne. Both were equally brave, modest and generous. Du Guesclin was twice married, but left no children, except a natural son, Michael du Guesclin.

Gueux (*beggars*). This title was, in the time of Philip II, under the government of the blood-thirsty duke of Alba, given to the allied noblemen, and the other malcontents in the Netherlands. In 1654, Philip sent nine inquisitors there, to execute the decrees of the council of Trent, and occasioned thereby a great excitement among both Protestants and Catholics. The nobles bound themselves by a compact, known under the name of the *compromise*, not to appear before the nine inquisitors, and, in solemn procession, made known their resolution, in 1565, to Margaret, duchess of Parma, then at the head of government. Their declaration was received with contempt. The princess, during the audience, happening to show some embarrassment, the earl of Barlaimont, president of the council of finance, whispered to her that she ought not to manifest any fear of such a mob of beggars (*tas de gueux*). Some of the confederates overheard this, and, on the evening of the same day, communicated it at a meeting of their members, who immediately drank to the health of the *gueux*, and agreed thereafter to be called by that name.

Guevara, Louis Valez de las Duenas y, a dramatic poet, who, for his wit and humor, deserves to be called the *Spanish Scarron*, was born at Ecija in Andalusia, in 1574. He applied himself to the study of the law, and lived as a lawyer in Madrid. By his inexhaustible fund of humor, he often excited the laughter of his numerous hearers, and of the judges, even in the most serious causes. It is related of him, that by this means he once saved a criminal from death, and obtained the acquaintance of the king (Philip IV). The monarch, who knew his talent for poetry, induced him to write comedies. (Philip IV himself sometimes wrote pieces, which were given to Guevara to revise, and afterwards often exhibited at court.) In this new career Guevara obtained no small success. His pieces deserve, for their excellent delineations of character, and their richness in strokes of genuine comic humor, the praise which Lope de Vega has given them. That, however, which especially established the poetical fame of Guevara, was his *Diablo Cojuelo, o Memorial de la otra Vida*, a romance written with equal elegance and wit; in which the poet describes with great humor and spirit, and lashes with inimitable satire, the manners of his countrymen and life in Madrid. This Spanish romance afforded the idea of Le Sage's famous *Diable Boiteux*. It was literally translated into French (by the author of *Lectures amusantes*), and into Italian. Guevara died at Madrid in January, 1646, at the age of 72, to his last day enjoying the favor of the monarch, and to his last day a warm, and often extravagant admirer of the other sex. Many of his witty sayings have become familiar to the people in his country, and to this day are often heard as proverbs in Spain. There are sev-

eral other Spanish poets of the same name.

Guglielmi, Peter, was born in 1727, at Massa Carrara, where his father, Giacomo Guglielmi was chapel-master of the duke of Modena. He studied music with his father until his eighteenth year, and afterwards went to Naples to the conservatorio di Loretto, then under the direction of the celebrated Durante. Guglielmi showed little taste for music, but Durante kept him to the study of counterpoint and of composition. He left the institution in his twenty-eighth year, and immediately began to compose comic and heroic operas for the Italian theatre. In each he was equally successful. He was invited to Vienna, to Madrid, and to London, and returned to Naples about the fiftieth year of his age. Here he made a most brilliant display of his talents. Two masters, Cimarosa and Paesiello had taken possession of the great theatre in Naples, and contended for the palm. He took a noble revenge upon the latter, of whom he had some cause to complain. To every work of his adversary he opposed another, and was always victorious. In 1793, Pius VI named him chapel-master of St. Peter's, which gave him an opportunity of distinguishing himself in sacred music. He has left more than 200 pieces, remarkable for their simple and beautiful airs, for their clear and rich harmony, and for their spirit and originality. He died in 1804, in his 77th year. His son, Peter Charles, is likewise a distinguished composer.

Guiana; a country of South America. This name was formerly given to the country extending from the Orinoco on the north to the Amazon on the south; but the part called *Spanish Guiana* now forms a province of Colombia, and *Portuguese Guiana* now belongs to Brazil. The rest of the country belongs to the English, Dutch and French. English Guiana contains three small colonies, viz. Essequibo, Demerara and Berbice. The principal town is Stabroek. Dutch Guiana, often called *Surinam*, is watered by the river Surinam. Parimaribo, the capital, is a pleasant town. French Guiana, called also *Cayenne*, is noted for producing the Cayenne pepper. Cayenne, the capital, is situated on an island. Guiana is of a mild climate for a tropical country. Along the sea-shore, and for a considerable way into the interior, the country is an extensive and uniform plain of unequalled fertility. In the interior, it rises into mountains, which frequently contain a great variety of mineral substances. Rich and fertile valleys are interspersed throughout these mountainous tracts. These uncultivated parts are covered with immense forests, which are intersected with deep marshes, and by extensive savannas or plains covered with luxuriant herbage. The country is watered by the tributary streams of the Orinoco and the Amazon. Guiana is overspread with the most luxuriant vegetation, abounding in the finest woods, in fruits of every description, and in an infinite variety of both rare and useful plants. Many of the trees grow to the height of 100 feet; they consist of every variety, of such as are valuable for their hardness and durability, as well as of others, which are richly veined, capable of taking the finest polish, and well adapted for all sorts of ornamental furniture; while others yield valuable dyes, or exude balsamic and medicinal oils. The fruit trees are in great variety, and the fruits they yield are of the most exquisite delicacy and flavor. Wild animals and beasts of prey are abundant. These are the jaguar, which is a powerful and ferocious animal; the cougar, or red tiger, resembling a greyhound in shape, but larger in size; the tiger cat; the crabbodago, not much larger than a common cat, and exceedingly ferocious; the coatimondi, or Brazilian weasel; the great ant-bear; the porcupine; the hedgehog; the armadillo; the sloth; the opossum of different kinds; the deer; the hog; the agouti; the lizard; the chameleon. In the rivers are to be found the alligator; the tapir, resembling the hippopotamus of the old continent, but of much smaller size, not being larger than a small ass, but much more clumsy; the manati, or sea-cow, about 16 feet in length; the paca, or spotted cony; and the pipa, a hideous and deformed animal. Of the serpent tribe there are various species, from the large aboma snake, which grows to the length of 20 and 30 feet, to those of the smallest size. The woods of Guiana are filled with every variety of the feathered species, many of which, there is reason to believe, are but imperfectly known to naturalists. Those most commonly seen are the crested eagle, a very fierce bird, and very strong; the vulture; the owl; the black and white butcher-bird; parrots of different kinds, and of the most brilliant plumage; the toucan; the pelican; the tiger-bird; herons of different kinds; the flamingo; the humming-bird of various species; the plover; the woodpecker; the mocking-bird. The vampire bat is also

found in Guiana, and grows to an enormous size, measuring about 32½ inches between the tips of the two wings. It sucks the blood of men and cattle when they are fast asleep. After it is full, it disgorges the blood, and begins to suck afresh, until it reduces the sufferer to a state of great weakness. The rivers of Guiana abound with fish, many of which are highly prized by the inhabitants; and, owing to the heat and moisture of the climate, insects and reptiles of all sorts are produced in such abundance, that the annoyance from this source is inconceivable. These insects are flies, ants, mosquitoes, cockroaches, lizards, jack-spaniards, a large species of wasp, fire-flies, centipedes, &c. The native inhabitants of Guiana are continually receding from the districts which are occupied by the Europeans. They chiefly consist of the following tribes, viz., the Caribbees, the Worrows, the Accawaws, the Arrowauks. From the earliest period, the Dutch colonies in Guiana have been exposed to depredations from fugitive Negroes, who, at different periods, have been driven, by the cruelty of their masters, to take refuge in the woods. At one time, the colony was threatened with destruction from these bands of deserter slaves. As the European troops who were sent against this enemy generally fell a prey to the climate, a corps of manumitted Negroes was formed, by whom the slaves were pursued into the woods; and the colony has been since freed from this source of annoyance.

Guibert, Jacques-Antoine-Hippolite, count of, was born at Montauban in 1743, educated at Paris, and accompanied his father to Germany, during the seven years' war, at the age of 13. In the battle of Bellinghausen, in 1761, finding that the orders which he carried were rendered unseasonable by a change of circumstances, he had the boldness to alter them, and adapt them to the existing state of affairs. In the Corsican war in 1766, he obtained the cross of St. Louis, and soon after, with the rank of colonel, the chief command of the newly-levied Corsican legion. He employed his leisure hours in literary occupations, and his *Essai général de Tactique, précédé d'un Discours sur l'État de la Politique et de la Science militaire en Europe* (London, 1772), probably written during the German campaigns, attracted the more attention, as at that time a reform was going on in almost all the armies. He afterwards travelled for military purposes through Germany. His journal, *Journal d'un Voyage en Allemagne, fait en* 1773, *Ouvrage posthume de Guibert, publié par sa Veuve, et précédé d'une Notice historique sur la Vie de l'Auteur, par Toulongeon, avec Figures* (1803), was but a mere sketch for the author's use, but is interesting for its descriptions and anecdotes of celebrated men, especially of Frederic II, whose great character Guibert passionately admired. His tragedies have not retained their place upon the stage. In 1779 appeared his *Défense du Système de Guerre moderne*. In 1786, he became a member of the French academy. In 1787, he wrote his famous eulogy on Frederic II, one of the most splendid monuments ever raised to the memory of this great king. Guibert's eulogies, among which are one upon Thomas, and another upon l'Espinasse, are among his most finished works. Vigor, fancy, clearness, and a certain artlessness, engage the reader, and cause him to excuse many instances of negligence. Guibert was a field-marshal, and member of the council of war—an office which gave him much trouble. He died in 1790, in the 47th year of his age. He was distinguished for ambition and for activity of spirit.

Guicciardini, Francis, a celebrated historian, was born March 6, 1482, at Florence, where his family was of distinguished rank. He obtained so great a reputation as a jurist, that in his 23d year he was chosen professor of law, and, although he had not yet reached the lawful age, was appointed ambassador to the court of Ferdinand the Catholic, of Spain. When Florence (1512) had lost her liberty through the usurpation of the Medici, he entered the service of that family, which soon availed themselves of his talents. He was invited by Leo X to his court, and intrusted with the government of Modena and Reggio. This office he discharged also under Adrian VI, to the general satisfaction; and afterwards, when Clement VII (de' Medici) ascended the papal chair, Guicciardini was sent, as *luogotenente* of the pope, to Romagna, then torn by the factions of the Guelfs and Gibelines, and infested by robbers, where, by a severe and upright administration of justice, he soon succeeded in restoring tranquillity. He also contributed here in other ways to the public good, by constructing roads, by erecting public buildings, and by founding useful institutions. Having been appointed lieutenant-general of the pope, he defended Parma with great valor, when besieged by the French (at least he says so in his own history; Angeli, author of a history of Parma, accuses him, on the

contrary, of great cowardice). At a later period, after the death of Giovanni de' Medici, Guicciardini was invited by the Florentines to succeed him in the command of the famous *bande nere;* but the pope still claimed his services for a time. Having quelled an insurrection in Bologna, he returned, in spite of the instances of the holy father, to his native city, where, in 1534, he began his great work, on the History of Italy, which has since been repeatedly published, and has obtained for him great reputation. It extends from 1490 to 1534. In his retirement he was not without influence on state affairs, and his counsels often restrained the prodigality and the ambition of Alessandro de' Medici, who esteemed him very highly, as did likewise Charles V, whose interests he had promoted in his negotiations at Naples, and who, when his courtiers once complained that he preferred the Florentines to them, answered, "I can make a hundred Spanish grandees in a minute, but I cannot make one Guicciardini in a hundred years." When Alessandro de' Medici was murdered by one of his relations (Lorenzino, 1536), and the Florentines, under the direction of cardinal Cibo, wished to restore the republican constitution, Guicciardini opposed it with all his power, and maintained that to preserve the state from becoming the prey of foreigners or of factions, the monarchical form of government ought to be retained. His eloquence and the force of his arguments triumphed, and Cosmo de' Medici was proclaimed grand-duke of Florence. Guicciardini died in 1540, and, according to his own directions, was buried, without pomp, in the church Santa Felicità in Florence. It is related of him, that his love for study was so great, that, like Leibnitz, he often passed two or three days without rest or food. One of his works, which was afterwards translated into French, his Advice on political Subjects, was published in 1525, at Antwerp. The Florentine J. B. Adriani (who died 1579), in his *Istoria de' suoi Tempi* (new edition, 1823), which may be regarded as a continuation of the work of Guicciardini, has given a good narrative of events between 1536 and 1574. This work was first published after the death of the author in 1583. The reader of Guicciardini is sometimes offended by a want of method. A more important defect, however, is, that his statements cannot always be depended on as derived from the best sources, so that he must be read with caution. One of the best criticisms on Guicciardini is contained in Leopold Ranke's *Zur Kritik neuerer Geschichtschreiber* (Leipsic and Berlin, 1824). Guicciardini has often been called the *Italian Polybius*. Of the 20 books of his history, the 4 last are unfinished, and are to be considered only as rough drafts. He is much too prolix, and the satirist Boccalini, in his *Ragguagli di Parnaso*, makes a Spartan, who has been condemned to read Guicciardini for having used three words when he could have expressed his meaning in two, faint away at the first sentence. Guicciardini also wrote poems. In the beginning of a poetical epistle, entitled *Supplicazione d'Italia al Cristianissimo Re Francesco Primo*, he expresses the feeling so commonly exhibited by Italian writers, ever since the time of Dante, in regard to the distracted state of their country. The epistle begins thus :—

Italia afflitta, nuda e miseranda,
Ch' or de' principi suoi stanca si lagna,
A Te, Francesco, questa carta manda.

Guides ; in some armies, persons particularly acquainted with the ground, who serve in the staff, to give the necessary information, and point out the best route for an army. As it is, however, impossible always to have officers of this kind, some armies have geographical engineers attached to the staff, whose particular studies are geography and topography. Napoleon gave the name of *guides* to his first body of guards, formed after he had been on the point of being surprised and taken prisoner in a castle on the Mincio (*see his own account*, Las Cases' *Mémorial*, &c. vol. ii, p. 3, ed. of 1824.)

Guido Aretino. (See *Aretino.*)

Guido Reni; the most charming and graceful painter whom Italy ever produced. His family name was *Reni*, but he is always called *Guido*. In fact, many of the old masters are best known by their Christian names. He was born at Bologna, in 1575. His father, Samuel Reni, an excellent musician, at first intended that his son should devote himself to music, for which he showed some talent; but he soon discovered in the boy a greater genius for painting, and had him instructed by the Dutch artist Dionysius Calvaert (q. v.), who was then in high repute at Bologna. In this celebrated school, Guido is said to have studied chiefly the works of Albert Dürer. This becomes probable if we consider some of his earlier works, in which, particularly in the drapery, occasional resemblance may be traced to the style of Albert Dürer. In the mean time, the school of the Caracci, at Bologna, on account of its novelty and superior

taste, began to eclipse the former, and Guido joined it in his 20th year. He soon gave his teachers occasion to admire his talents, and is even said to have excited the jealousy of Annibal Caracci. Guido's desire to behold the treasures of art in Rome, induced him to visit that city, with two of his fellow students, Domenichino and Albani. There he saw some of the paintings of Caravaggio, who was greatly admired for his powerful and expressive (though often coarse and low) manner, which Guido imitated. His reputation soon spread, and cardinal Borghese employed him to paint a crucifixion of St. Peter for the church Delle Tre Fontane. The powerful manner of this picture, and several others of the same period, which Guido did not, however, long retain, increased his fame; and when, at the cardinal's request, he completed the Aurora, so beautifully engraved by Morghen, the admiration was universal. Paul V, at that time, employed him to embellish a chapel on Monte Cavallo, with scenes from the life of the virgin Mary. Guido accomplished this work to the satisfaction of the pope, and was next intrusted with the painting of another chapel in Santa-Maria-Maggiore. These works were followed by so many orders, that he was unable to execute them all. To this period his Fortuna, and the portraits of Sixtus V and cardinal Spada, may be assigned. Guido's paintings are generally considered as belonging to three different manners and periods. The first comprises those pictures which resemble the manner of the Caracci, and particularly that of Caravaggio. Deep shades, narrow and powerful lights, strong coloring, in short, an effort after great effect, distinguish his works of this first period. The second manner is completely opposed to the first, and was adopted by Guido himself as a contrast to the works of Caravaggio, with whom he was in constant controversy. Its principal features are light coloring, little shade, an agreeable, though often superficial treatment of the subject. It is quite peculiar to Guido. His Aurora forms the transition from the first to the second style of his paintings. A third period commences at the time when Guido worked with too much haste to finish his pieces, and was more intent upon the profits of his labor than upon its fame. It may be distinguished by a greenish gray, and altogether unnatural coloring, and by a general carelessness and weakness. This last manner is particularly remarkable, in the large standard, with the patron saint of Bologna, and more or less in a number of other paintings of that period. During the government of pope Urban VIII, Guido quarrelled with his treasurer, cardinal Spinola, respecting the price of a picture, and returned to Bologna. There he had already executed his St. Peter and Paul for the house Zampiere, and the Murder of the Innocents for the Dominican church, and was on the point of embellishing the chapel of the saint with his pictures, when he was called back to Rome, loaded with honors, and received by the pope himself in the most gracious manner. But he soon experienced new difficulties, and accepted an invitation to go to Naples. Believing himself unsafe at this place, on account of the hatred of the Neapolitan artists against foreign painters, he returned once more to his native city, never to quit it again. At Bologna, he finished the chapel above mentioned, painted two beautiful pictures for the church Dei Mendicanti, an Ascension of Mary for Genoa, and a number of others for his native city and other places, particularly for Rome. While in Rome, Guido had established a school. In Bologna, the number of his pupils amounted to 200. He now worked mostly in haste, accustomed himself to an unfinished, affected style, became negligent, had many things executed by his pupils, and sold them, after having retouched them, as his own works; and all this merely to satisfy his unfortunate passion for gambling. He often sold his paintings at any price, and became involved in pecuniary embarrassments, which were the cause of his death, in 1642. If we analyze Guido's productions, we find his drawing not always correct, rarely powerful and grand, his attitudes without much selection, sometimes not even natural. Yet his drawing has a grace peculiar to him, a loveliness consisting rather in the treatment of the whole, than in the execution of the parts. This grace and loveliness are often to be found only in his heads. His ideas are generally common, the distribution of the whole rarely good; hence his larger works have not a pleasing effect, and are not so much valued as his smaller works, particularly his half-lengths, of which he painted a great number. The disposition of his drapery is generally easy and beautiful, but often not in harmony with the whole piece, and with the nature of the substance which it is intended to represent. An elevated, varied, distinct expression is not to be looked for in his works. For this reason, he rarely

succeeded in adult male figures, in which power and firmness are to be represented. The best are from his early period. But Guido's element was the representing of youthful, and particularly female figures. In them he manifested his fine instinct for the delicate, graceful, charming, tender and lovely. This is shown particularly in his eyes, turned towards heaven, in his Madonnas and Magdalens. His coloring is rarely true, often falls into yellowish, greenish and silver gray, yet is generally agreeable, and proves the very great ease and power with which he managed his pencil, which, however, often degenerates into mannerism. Guido not only worked in relievo, but also executed some statues, and a considerable number of etchings, with his own hand, which exhibit ease and delicacy, and are much esteemed. It might almost be said, that his drawing, in these engravings, is more correct and noble than even in his paintings. Among the number of his pupils, who remained more or less faithful to his style, are distinguished, Guido Congiagi, Simone Contarini Pesarese, Francesco Ricchi, Andr. Streni, Giovanni Sementi, G. Bat. Bolognini.

Guienne. (See *Aquitania*, and *Department*.)

Guignes, Joseph de, born at Pontoise, in 1721, is distinguished for his knowledge of the Oriental languages, which he studied under the celebrated Stephen Fourmont. He was appointed royal interpreter in 1745, and, in 1753, was chosen a member of the academy of belles-lettres. He applied himself particularly to the study of the Chinese characters; and, comparing them with those of the ancient languages, he thought he had discovered that they were a kind of monograms, formed from three Phœnician letters, and therefore concluded that China must have been peopled by an Egyptian colony. The *Journal des Savans*, and the Memoirs of the Academy, he enriched, during the space of 35 years, with a great number of contributions, which display profound learning, great sagacity, and many new views. At the age of near 80, he was reduced to poverty by the revolution; but, even in this situation, he retained his equanimity, his disinterestedness and his independence, which would not allow him to receive support from any one. He died at Paris, in 1800. Among his numerous works, the first place belongs to his *Histoire Générale des Huns, des Turcs, des Mogols et des autres Tartares Occidentaux* (five volumes, 4to.). In this work, the materials for which he had drawn from valuable, and, in part, untouched stores of Eastern knowledge, to which he had gained access by a profound study of the languages, much light is thrown upon the history of the caliphates, of the crusades, and, generally, of the Eastern nations. As regards industry, he has given us no cause to complain; but we often feel the want of a careful style, of a nice taste and a just discrimination. The language frequently shows marks of neglect. A better taste would have given a more powerful translation of the peculiar Oriental expressions. He needed a more philosophic mind to understand fully the poetry of the East, to lay open the causes of events, to point out the most striking circumstances, which he has often slightly passed over. De Guignes, like Herbelot, drew from a large number of manuscripts, and, like him, often falls into repetitions and sometimes contradictions. His *Mémoire dans lequel on prouve que les Chinois sont une Colonie Egyptienne* is of great value. Translations of the *Chou King* (by father Gaubil), one of the sacred books of the Chinese, and of the Military Art among the Chinese (by Amyot), were revised and published by De Guignes, besides other pieces, and 28 papers in the Memoirs of the Academy, and contributions to the *Notices et Extraits de la Bibliothèque royale*. His son Christian, born in 1759, was likewise skilled in the Chinese language and literature, and wrote several dissertations upon them. His Chinese dictionary, with the definitions in French and Latin, is a masterpiece of typography, and is generally esteemed.

Guild; a society, fraternity, or company, associated for carrying on commerce, or some particular trade. The merchant guilds of our ancestors answer to our modern corporations. The societies of tradesmen, exclusively authorized to practise their art, and governed by the laws of their constitution, played a very important part in the middle ages. Few institutions show the progress of civilization in a stronger light than that of guilds, from the first rude mixture of all kinds of labor, its division, the establishment of corporations, the corruption of these by privileges, which are in some cases highly absurd, down to their total abolition, and the restoration of liberty to human industry. Though the division of labor is comparatively of recent date, yet the division of the people by occupations is one of the oldest and rudest political institutions of which history makes mention. These divisions by occupations or

castes (q. v.), generally took their rise, however, from a difference of national origin, as with the Egyptians, Indians, &c. The Romans had various mechanical fraternities (*collegia et corpora opificum*) which might be compared to modern guilds, as they had the right to enact by-laws. In the later times of the republic, these societies not unfrequently appeared as political parties; and, on this account, their influence was restrained, and they were partly abolished after the establishment of the monarchy. In Italy, the cradle of the class of free citizens in the middle ages, and particularly in the Lombard cities, those connecting links between the ancient and modern civilization, some remains of these Roman institutions, or recollections of them, probably contributed to revive the guilds, which naturally presented themselves as an excellent means of supporting the citizens against the nobility, by uniting them into powerful bodies. With the increasing importance of the cities, which became the seats of industry, and with the establishment of their constitutions, begins also the extension of guilds. The chief reason that mechanical industry was freely developed in the middle ages, at the same time with agricultural, which had been exclusively cultivated by the Greeks and Romans, was the independence which the mechanics acquired with the growth of municipal and civil liberty. Mechanical industry has always been essentially of a democratic character, and would never have flourished under the feudal system. It is not possible now to give the exact date of the origin of these societies in Upper Italy. Traces of them are found in the 10th century. Thus, in Milan, we find the mechanics united under the name *credentia*. It is certain that small societies of mechanics existed as early as the 12th century, which appear, in the following century, to have been in the possession of important political privileges. We even meet with abuses in these bodies as early as this period; and, several centuries later, the guilds became the subject of bitter and just complaint, particularly those in Germany. When the advantages of these associations became known and felt, they rapidly increased; and, in the struggles of the citizens and the nobility, the principal resistance against the latter was made by the corporations. As soon as the citizens acquired an influence on the administration, the guilds became the basis of the municipal constitutions, and every one, who wished to participate in the municipal government, was obliged to become the member of a guild. Hence we find so often distinguished people belonging to a class of mechanics, of whose occupation they probably did not know any thing. This mixture of social and political character, as well as the insignificance of the individual, considered merely as such, is a natural consequence of the rudeness of the period. Just principles are the work of time. It is only by slow degrees that the true is separated from the false, the essential from the unessential. Political, like religious and scientific principles, are at first always vague and incoherent. Men must have long experience of the concrete before they form just notions of the abstract. Thus it is a characteristic of the middle ages, that political rights were considered as arising from special privileges. All that men enjoyed was looked upon as a gift from the lord paramount. In fact, the idea of the rights of man, as an individual, has been developed only in very recent times. Even the ancient republics had no just conception of it. In Germany, the establishment of guilds was also intimately connected with that of the constitutions of the cities. (q. v.) The latter were different according as the ancient Roman, or the old German organization of the community prevailed; the relations among the mechanics were also very different. The mechanical arts were at first chiefly practised by the villeins; and, even in the time of Charlemagne, they appear to have been pursued on the estates of the feudal lords, by the bondsmen, as is still the case on the great possessions of Russian noblemen. Commerce could not, however, be carried on by bondsmen (in Russia they are permitted to trade). Although there early existed free mechanics, yet they were also under the protection and jurisdiction of the feudal lord, before the privileges of the cities were acknowledged, except in cities of Roman origin (for instance, Cologne). These privileges early secured to them, as a distinct class of vassals, a sort of organization under the direction of the masters of each trade, as appears from the oldest law of the city of Strasburg, which seems to belong to the 15th century; and out of this the guilds in Germany may have originated. (See Eichhorn's *Deutsche Staats- und Rechtsgeschichte*, vol. ii; and his *Treatise on the Origin of the Constitutions of German Cities*, in the *Zeitschrift für Geschichtliche Rechtswissenshchaft*, vol. i, No. 2, and vol. ii, No. 2; and Hüllmann's *Geschichte des Ursprungs der Städte in*

Deutschland.) The full developement of the guilds in Germany falls in the last half of the 12th century, and the oldest examples are those of the cloth-shearers and retailers in Hamburg (1152), the drapers (1153) and shoemakers in Magdeburg (1157). But they possessed no political importance in Germany before the 13th century, when a struggle arose between them (the laboring classes) and the citizens belonging to ancient families, the civic aristocracy. The guilds were victorious, and became so powerful, that even persons of "free occupations" joined these associations, as the allodial possessors of land sometimes placed themselves under feudal lords. The corporations of merchants and mechanics became more and more confirmed in their privileges and monopolies, whilst the country people suffered by being made, in many respects, the slaves of the guilds. Particular branches of industry were often subject to restrictions in favor of the guilds, which were sometimes of a most offensive nature. The guilds became insupportable aristocracies, sometimes allowing only a certain number of master mechanics in the place, and seldom admitting any one into their associations except favorites of the masters. The examinations for the admission of a journeyman to the rank of a master were used as means of extorting money, and were often combined with the most absurd humiliations. In some parts of Germany, there were from four to five different guilds of smiths, which did not allow each other the use of certain tools. The guilds are now abolished in a considerable portion of Germany; and yet many persons wish to restore the ancient order of things, as a support of aristocratical distinctions, and as tending to repress that free exercise of industry which is so favorable to the growth of the democratic spirit. Attempts were made to check the insolence of the guilds by laws of the empire, as in 1731, but without success. In France, the guilds also originated with the increasing importance of cities, and became general in the reign of Louis IX; but they became subject to abuses, as in Germany, and were abolished at the time of the revolution. Their restoration was also desired by those who wished for the return of the Bourbons. In England, the societies of mechanics are important principally in a political respect, on account of their connexion with the democratic element of the constitution. These societies originated in England, as on the continent, at the time of the developement of the importance of the cities. In the towns where they still exist, they have an important influence in the election of representatives, and in the municipal administration. The rights of a "freeman," with which is associated the privilege of voting in the cities or boroughs, are often confined to the members of these societies, of which the membership is obtained by serving an apprenticeship, or by purchase. As the principal privilege of these societies consists in this right of voting, persons not mechanics are frequently admitted members, to give them this privilege. These guilds, in England, have no right to prevent any man from exercising what trade he pleases. The only restriction on the exercise of trades is the statute of Elizabeth, requiring seven years' apprenticeship. This the courts have held to extend to such trades only as were in being at the time of the passage of the statute; and they consider seven years' labor, either as master or apprentice, as an apprenticeship.

GUILDER. (See *Coins.*)

GUILDHALL; the city hall of London. It was first built in 1411, but almost entirely consumed in the great fire. In 1669, it was rebuilt. The front was not erected until 1789. The most remarkable room of this edifice is the hall, 153 feet long, 48 broad, and 55 high, capable of containing from 6000 to 7000 persons, and used for city feasts, the election of members of parliament and city officers, and for all public meetings of the livery and freemen. Monuments, erected at the expense of the city, to the memory of lord Nelson, William Pitt earl of Chatham, William Pitt his son, and Beckford, lord mayor in 1763 and 1770, whose celebrated reply to his majesty George III is engraved beneath, ornament this hall. In another room, that of the common council, is a collection of pictures, some of great merit; among others, Copley's Destruction of the Spanish and French Flotilla before Gibraltar, and many portraits of distinguished persons. The dinner which was given here, in 1815, by the city of London, to the emperor Alexander of Russia and other monarchs, cost £20,000.

GUILFORD; a post-town and seaport in New Haven county, Connecticut, on Long Island sound; 15 miles east New Haven, 36 miles south Hartford; lon. 72° 42′ W.; lat. 41° 17′ N.; population, in 1820, 4131. (For the population in 1830, see *U. States.*) It comprises four parishes, and contains seven houses of public worship. It has two harbors, and carries

on considerable trade, chiefly with New York. Shoemaking is a considerable business, and large quantities of oysters are obtained here. The borough was incorporated in 1815, and is pleasantly situated about two miles from the harbor. The Indian name of Guilford was *Menunkatuck*.

Guilleminot, Armand Charles, count, lieutenant-general, created peer of France October, 1823, was born in the Belgic provinces, in 1774, and received a careful education. During the insurrection of Brabant against Austria, in 1790, he fought in the ranks of the patriots. On their subjection by the power of the house of Hapsburg, he fled to France, where he received a place in the staff of general Dumouriez. Being imprisoned in Lille, after the defection of this general, he escaped by flight, and concealed himself in the ranks of the French army. He was soon received into the staff of general Moreau, to whom he remained gratefully attached, even in his misfortunes. In the year 1805, Napoleon employed him in the army in Germany, and, in 1806, appointed him his aid-de-camp. In 1808, he served in Spain, as chief of the staff of marshal Bessières, and after the victory at Medina del Rio-Secco, was made general of brigade, and an officer of the legion of honor. In 1809, he was employed by Napoleon on a mission to the Persian court. He remained some time in the East, and several months at Constantinople, and received the Turkish order of the crescent and the Persian order of the sun. In the campaigns of 1812 and 1813, he distinguished himself in the battles of the Moskwa, of Lützen and Bautzen. He rendered essential service by repelling the attack of the Swedes upon Dessau (September 28, 1813), and, in consequence, was promoted by Napoleon to the rank of general of division. After the restoration, Louis XVIII named him grand officer of the legion of honor, and gave him the cross of St. Louis; he also appointed him, at the return of Napoleon from Elba, chief of the general staff in the army which the duke of Berri was to command. He held the same rank in the army which, in June, 1815, was assembled under the walls of Paris; and he signed, in the name of marshal Davoust, the capitulation of that city. He was afterwards appointed director of the topographical military bureau in the ministry of war; and, in 1816 and 1817, in conjunction with the commissioners of the Swiss confederacy, settled the boundary line between France and Switzerland, as was stipulated by the treaty of 1815. In the war with Spain, in 1823, general Guilleminot received the important post of major-general in the French army, at the express desire of the duke of Angoulême, but against the will of the duke of Belluno, then minister of war, who desired the place for himself. In this capacity, he directed the whole campaign, from April 7 to the liberation of king Ferdinand (October 1, 1823), who rewarded him with his order. Guilleminot then distributed the French army of occupation in the fortresses, concluded a contract with the Spanish government for its supply, &c., and returned, in the middle of December, to Paris, where an embassy to Constantinople was given him. General Guilleminot, by his proclamation, dated Andujar (August 8, 1823), which was intended to put a stop to the arbitrary treatment of the constitutionalists by the Spanish royalists, had rendered himself obnoxious to the absolutists. The duke of Angoulême, however, reposed entire confidence in him; for Guilleminot, as major-general, had executed, with great prudence, the plan of reducing Spain by moderation, of restraining the political fanaticism of the soldiers of the faith and of the people; and, by a liberal policy, inducing the Spanish leaders, Morillo and Ballesteros, and the commanders of the castles, to capitulate, and the members of the cortes to disagree; and had happily attained the object of the six months' campaign, the taking of Cadiz. In 1826, he was permitted to return from Constantinople to Paris, to defend himself before the house of peers, in the trial of Ouvrard, relative to the contracts for supplying the French army in Spain. Being acquitted of any blame in the affair, he returned to Constantinople in August of the same year. General Guilleminot is one of the best informed of the French officers, and we may expect from him a history of the late wars. (For his conduct in the affairs of Greece, see *Greece*.)

Guillotin, Joseph Ignatius, a French physician, was born at Saintes, in 1738. He was at first a Jesuit, and professor in the Irish college at Bordeaux, but afterwards studied medicine, and lived in Paris. He was one of the commissioners appointed to examine the pretended cures of Mesmer, which he contributed much to discredit. A pamphlet (in 1788) on some abuses in the administration, gained him great popularity, and caused his election into the national convention. Here

he was principally occupied with introducing a better organization of the medical department. A machine, which he proposed should be used for the purpose of capital punishment, was called, from him, the *guillotine*. (q. v.) He narrowly escaped suffering himself by this instrument. He died in 1814, at Paris, where he was much esteemed as a physician.

Guillotine. This instrument has been erroneously called an invention of Guillotin, a physician at Paris, during the French revolution, concerning whose character very false notions have also been entertained. (*See the preceding article.*) A similar instrument, called *mannaia*, was used in Italy for beheading criminals of noble birth. The *maiden*, formerly used in Scotland, was also constructed on the same principle. The convention having determined, on the proposition of Guillotin, to substitute decapitation for hanging, as being less ignominious for the family of the person executed, the guillotine was adopted, also on his proposition, as being the least painful mode of inflicting the punishment. It was erected in the *place de Grève*, and the first criminal suffered by it April 25, 1792. Portable guillotines, made of iron, were afterwards constructed. They were carried from place to place, for the purpose of executing sick persons. This machine consists of two upright pillars, in the grooves of which a mass of iron, sharpened at the lower extremity, is made to move by cords. Being raised to a certain height, it falls, and at once severs the head of the criminal (who is laid upon a horizontal scaffolding) from his body. It is much surer than the sword or axe, which is sometimes used for decapitation, and of which we read, in many instances, that several blows have been necessary to put an end to the life of the sufferer. In the reign of terror, it was called *notre très Sainte-Guillotine* by the most violent political fanatics. It is still the common instrument of capital punishment in France.

Guinea; a name which modern Europeans have applied to a large extent of the western coast of Africa, of which the limits are not very definite. The European geographers, however, seem now to have agreed in fixing, as the boundaries of Guinea, the Rio Mesurado and the western extremity of Benin, comprehending a space of about 13 degrees of longitude. This large territory is usually divided into four portions, called the *Grain coast*, the *Ivory coast*, the *Gold coast*, and the *Slave coast*. The Grain coast, called also the *Malaghetta*, or *Pepper coast*, extends from the Mesurado to the village of Growa, about ten miles beyond cape Palmas. The aromatic plant from which this coast derives its name, appeared, when Europeans first landed on this coast, a delicious luxury. As soon, however, as they became familiar with the more delicate and exquisite aromatics of the East, this coarser one fell into disrepute; and as this coast afforded neither gold nor ivory, and was not favorable for procuring slaves, it has been comparatively little frequented. About ten miles to the east of cape Palmas commences what by European navigators is termed the *Ivory coast*. This name is derived from the great quantity of ivory, or elephants' teeth, which is brought from the interior countries. Gold is also tolerably plentiful. Although the Ivory coast is thus tolerably supplied with materials of trade, it has never been very extensively frequented. The Ivory coast is populous and thickly set with villages, but does not contain any town of much consideration. It reaches to cape Apollonia. The Gold coast extends from cape Apollonia to the Rio Volta, which separates it from the Slave coast. Of all parts of Guinea, and, indeed, of the African coast, it is the one where European settlements and trade have been carried to the greatest extent. It has been frequented at different times by the Portuguese, the Danes, Swedes, Dutch and British. Britain has now a more extensive footing upon this coast than any other nation. She maintains a range of forts, the expense of which is defrayed by the African company, out of a grant of £23,000 per annum, made by government for that purpose; but the trade is thrown open to all the subjects of the British nation. Although the Gold coast is situated almost immediately under the line, the thermometer has scarcely been known to rise above 93 degrees, and the common heat of midsummer is only from 85 to 90. The country, from the sea, appears like an immense forest, parts only of which are cleared for the purpose of cultivation. High lands are seen in various directions, crowned with lofty trees and thick underwood; the soil along the coast varies from a light, sandy and gravelly texture to a fine black mould and loamy clay. As we advance into the interior, it sensibly improves, and, at the distance of six or eight miles from the shore, becomes rich in the extreme, and fit for any species of cultivation. The natives inhabiting the Gold coast present a considerable variety. The most prominent

place is held by the Fantees. Of late years, another power, before almost unknown to Europeans, has occupied a conspicuous place. This is Ashantee, the sovereign of which has waged repeated and successful wars against the Fantees. Cape Coast Castle is the capital of the British settlements on the Gold coast; and forts are also maintained at Acra, Dixcove, Succondee, Commendo and Anamaboe. That at Winnebah has been given up. The Slave coast extends from the Rio Volta to the bay and river of Lagos, which separate it from Benin. Of all the parts of native Africa yet explored by Europeans, this is the one where cultivation and the arts have been carried to the greatest perfection. The country here was in a most flourishing and prosperous state, when it received a fatal blow, about the middle of last century, by the invasion of the king of Dahomey, who, having conquered it, reduced the principal towns to ashes, and massacred a great proportion of the population. This coast has since continued to form part of the territory of Dahomey, and is governed by a viceroy, who resides at Griwhee; but, under this ferocious and military tyranny, it has never recovered its ancient wealth and prosperity.

Guinea; an English gold coin, worth 21 shillings sterling. Guineas were first coined, in the reign of Charles II (1662), of gold which the English procured from Guinea, and hence the name. Till 1718, they were of the value of 20 shillings sterling. (See *Coin*.)

Guinea Cloth. Mariners give the name of Guinea to a much greater extent of the African coast than is recognised by geography; and, in commerce, several articles made for the African trade are called by this name. Guinea cloth is a kind of calico, calculated for the African market, where it is an important article of barter. There are also Guinea knives, &c.

Guinea Pepper. (See *Cayenne Pepper*.)

Guinea Pig (*cavia cobaya*). This well known little animal is a native of South America, and is now domesticated both in Europe and this country. As writers make but little mention of its habits and manners in a wild state, most that is known respecting it has been derived from observations on the domesticated animal. It is a restless, grunting little quadruped, seldom remaining quiet more than a few minutes. It feeds on bread, grain, fruit or vegetables, giving a decided preference to parsley. It breeds when only 2 months old, and generally brings forth every 2 months, having from 4 to 12 young ones at a time; hence the produce of a single pair might be a thousand in the year. From their being so prolific, they would become innumerable, were not vast numbers of the young eaten by cats, killed by the males, or destroyed by other means. As they are very tender, multitudes perish from cold and moisture. In the space of 12 hours after birth, the young are able to run about. In their habits, they are so extremely cleanly, that if the young, by any accident, are dirtied, the female takes such a dislike to them as never to suffer them to approach her. The principal employment of the male and female seems to consist in smoothing each other's hair, which being performed, they turn their attention to the young, whose hair they take particular care to keep unruffled, biting them if they prove refractory. Their sleep is short, but frequent; they eat rapidly, like the rabbit, a little at a time, but often. They repose flat on their belly, and, like the dog, turn round several times before they lie down. Their manner of fighting is very singular, and appears extremely ridiculous. One of them seizes the neck of his antagonist with its teeth, and attempts to tear the hair from it; in the mean time, the other turns his tail to the enemy, kicks up like a horse, and, by way of retaliation, scratches the sides of his opponent with his hind feet. Their skins are scarcely of any value, and their flesh, though edible, is not savory. Buffon observes of them, "By nature they are gentle and tame; they do no mischief, but they are equally incapable of good, for they never form any attachments: mild by constitution; docile through weakness; almost insensible to every object, they have the appearance of living machines, constructed for the purposes of propagation and of representing a species."

Guiscard, Robert, duke of Apulia and Calabria, a son of the celebrated Tancred de Hauteville, was born in 1015. Hauteville had many sons, and his estate in Normandy was small. This induced his three eldest sons, William the Ironarms (*Bras-de-fers*), Dagobert and Humphrey to go to Italy and offer their services to the Italian princes, then engaged in continual wars. Fortune, courage and cunning enabled William the Ironarms, who knew how to take advantage of the weakness of the Italian princes, to get possession of Apulia. Robert Guiscard, who, in the mean time, had grown up, burned with the desire of sharing the splendid fortune of his brother in Italy. A little band of adventurers was soon

found, in those times, so prone to adventurous enterprises, who were ready to follow him in the expectation of a rich booty. Robert, who was no ways inferior in courage to his brothers, soon distinguished himself in many battles; and the soldiers, moved by his exploits, unanimously proclaimed him, after the death of his brother Humphrey, count of Apulia—a dignity which he accepted without hesitation, although to the prejudice of the rights of his brother's children. He then conquered Calabria, in the possession of which he was confirmed by pope Nicholas II, although that pontiff had not long before excommunicated him for his outrages. Robert, grateful for this favor, bound himself to pay to the holy see an annual sum; and from this the feudal claims of the papal see on Naples, which exist to this day, are derived. In Apulia itself, Guiscard ruled with absolute power. This country had, till his reign, preserved a number of privileges, and some forms of a constitution; but scarcely was he at the head of the state, when he destroyed them; and hence naturally arose discontents and conspiracies among the nobility, who, at that time, were alone in possession of any rights. Robert punished many of these with death, and reduced the others to submission. He now began to think of conquering Sicily, the investiture of which the pope had already promised him. He sent, therefore, his youngest brother, Roger, whose valor had already been displayed in many battles, at the head of 300 resolute warriors, to take possession of this island. Roger made himself master of the city of Messina, with this small band, in 1060. In the following year, the two brothers united conquered the Saracens on the plains of Enna; but the misunderstanding which broke out between the victors, prevented them from deriving all the advantages which might have resulted from this victory. Guiscard had promised Roger the half of Calabria, in case his expedition to Sicily should prove successful; but he was now unwilling to allow him more than two cities. The complaints of Roger irritated his brother, who determined to imprison him. But the soldiers of the former made themselves masters of the person of Robert himself, and Roger was magnanimous enough not to take advantage of this success. Guiscard, touched with this generosity, was reconciled to his brother, and fulfilled his promise. Roger now conquered nearly the whole of the island, and became the first count of Sicily. Guiscard, in the mean time, besieged all those cities in Lower Italy which, as yet, were in the hands of the Saracens. Some of these detained him a long time; as, for instance, Salerno and Bari, before the latter of which places Guiscard was encamped for four years, and endured all the violence of the weather and the dangers of the war, in a miserable hut, composed of branches of trees and covered with straw, which he had caused to be built near the walls of the city. He at length succeeded in conquering all the provinces which now form the kingdom of Naples, and he would have extended his victorious course still farther, had he not been excommunicated by Gregory VII, on account of his attack on Benevento, and obliged to confine his ambition within these limits. The betrothment of his daughter Helen to Constantine Ducas, the son and heir of Michael VII, gave him afterwards an opportunity of interfering in the affairs of the Greek empire. He fitted out a considerable fleet, and sent his son Boëmond to the conquest of Corfu, while he himself went to attack Durazzo. A tempest and a contagious disease had nearly frustrated this expedition. Alexis Comnenus, then emperor of Constantinople, approached with superior forces. The armies joined battle under the walls of Durazzo, where the victory at first inclined to the side of the Greeks; but the courage of Guiscard gave the battle a different turn. He rallied the already flying bands of his soldiers, led them anew to the combat, and gained a complete victory over forces six times as numerous as his own. Durazzo was compelled to surrender. Robert penetrated into Epirus, approached Thessalonica, and filled the capital with terror. In the midst of this victorious career, he was recalled by the information that Henry IV (q. v.), emperor of Germany, had entered Italy. He gave the command to Boëmond, and hastened home to assist Gregory VII, who was besieged in the castle of St. Angelo, against the Germans. Henry IV was compelled to retreat; Gregory was released, and conducted to Salerno as a place of safety. Guiscard now hastened again to Epirus, where he repeatedly defeated the Greeks, and, by means of his fleet, made himself master of many of the islands of the Archipelago. He was upon the point of advancing against Constantinople, when his

death took place in the island of Cephalonia, July 17, 1085, in the 70th year of his age. His army retreated, and the Greek empire was saved. Guiscard's corpse was put on board a galley, which running aground at Venusa, the remains of the victorious prince were deposited in the church of the Holy Trinity. His sons Boëmond and Roger, after much dispute, divided the conquests of their father, the former receiving Tarentum, and the latter Apulia. Robert Guiscard left behind him the glory of having protected learning, and of being highly estimable in all his private relations. His appearance was martial, his frame powerful, and his courage unbounded. The school of Salerno claims him as its founder.

Guischard, Charles Gottlieb, an able writer on military tactics, was a native of Magdeburg. After studying at the universities of Halle, Marburg and Leyden, he entered into the service of Holland, and, while thus employed, found leisure to prepare materials for his *Mémoires militaires sur les Grecs et les Romains*, which appeared in 1757 (in 2 vols., 4to.), and met with great approbation. The same year, he entered as a volunteer into the allied army, and acquired the esteem of prince Ferdinand of Brunswick, who recommended him to the king of Prussia. He was a favorite of Frederic the Great. A dispute having once arisen between them respecting the name of the commander of Cæsar's tenth legion, in which Guischard proved to be right, Frederic gave him the name of this commander (*Quintus Icilius*), by which he was afterwards frequently called. Besides the work already mentioned, he was the author of *Mémoires Critiques et Historiques sur plusieurs Points d'Antiquité militaire* (4 vols., 8vo.), upon which work Gibbon bestows very high encomiums. Guischard died in 1775.

Guise; the name of a celebrated noble family in France, a branch of the house of Lorraine. Claude de Guise, fifth son of René, duke of Lorraine, born in 1496, established himself in France, and married Antoinette de Bourbon in 1513. His valor, his enterprising spirit, and his other noble qualities, obtained for him great consideration, and enabled him to become the founder of one of the first houses in France. In 1527, for the sake of doing him honor, his county of Guise was changed to a duchy, and made a peerage. At his death, in 1550, he left six sons and five daughters, of whom the eldest married James V, king of Scotland. The splendor of the house was principally supported by the eldest son, Guise (Francis, duke of Lorraine), born in 1519, and called *Le Balafré* (the scarred), from a wound which he received in 1545, at the siege of Boulogne, and which left a permanent scar on his face. He showed distinguished courage, in 1553, at Metz, which he defended with success against Charles V, although the emperor had sworn that he would rather perish than retreat without having effected his object. In the battle of Renti, Aug. 13, 1554, he displayed remarkable intrepidity. He also fought with success in Flanders and in Italy, and was named lieutenant-general of all the royal troops. The star of France began again to shine as soon as he was placed at the head of the army. In eight days, Calais was taken, with the territory belonging to it, in the middle of winter. Thus the English lost the city without recovery, after having held it 210 years. He afterwards conquered Thionville from the Spaniards, and proved that the good or ill fortune of whole states often depends on a single man. Under Henry II, whose sister he had married, and still more under Francis II, he was the virtual ruler of France. The conspiracy of Amboise, which the Protestants had entered into for his destruction, produced an entirely opposite effect. The parliament gave him the title of *savior of his country*. After the death of Francis II, his power began to decline. Then grew up the factions of Condé and Guise. On the side of the latter stood the constable of Montmorency and marshal de St. André; on the side of the former were the Protestants and Coligny. The duke of Guise, a zealous Catholic, and an enemy to the Protestants, determined to pursue them sword in hand. After having passed the borders of Champagne, at Bassi, March 1, 1562, he found the Calvinists singing the psalms of Marot in a barn. His party insulted them; they came to blows, and nearly 60 of these unhappy people were killed, and 200 wounded. This unexpected event lighted the flame of civil war throughout the kingdom. The duke of Guise took Rouen and Bourges, and won the battle of Dreux, Dec. 19, 1562. On the evening after this victory, he remained, with entire confidence, in the same tent with his prisoner, the prince of Condé, shared his bed with him, and slept quietly by the side of his rival, whom he regarded as a relation and a friend. At that time, the duke of Guise was at the height of his fortune. He

was preparing for the siege of Orleans, the central point of the Protestant party, when he was killed by a pistol shot fired by Poltrot de Mercy, a Huguenot nobleman, Feb. 24, 1563.

Guise, Henry, duke of Lorraine, eldest son of the preceding, was born in 1550. He displayed his courage, for the first time, at the battle of Jarnac, in 1569. His prepossessing appearance made him a general favorite. He put himself at the head of an army, under the pretence of defending the Catholic faith, and advised the cruel massacre of St. Bartholomew (1572). From motives of personal revenge, he took upon himself the assassination of Coligny, whom he called the murderer of his father. In 1576 was formed the League, first projected by his uncle, the cardinal of Lorraine. For this purpose, it was proposed to the most zealous citizens of Paris to join in a league, which had for its avowed object the defence of religion, of the king, and of the freedom of the state, but in reality tended to the oppression both of the king and the nation. The duke of Guise, who wished to raise himself upon the ruins of France, inflamed the seditions, obtained several victories over the Calvinists, and soon saw himself in a situation to prescribe laws to his prince. He obliged Henry III to annul all the privileges of the Huguenots, and carried so far his imperious demands, that the king, at last, forbade him to come to Paris. Nevertheless, he appeared there in 1588, and obliged the king to leave the city and conclude a treaty with him. Flushed by this triumph, he became imprudent, and clearly showed that he aimed at the highest power. In consequence of the treaty, the estates were assembled at Blois. The king, informed of the ambitious plans of the duke, took counsel with his confidants, D'Aumont, Rambouillet, and Beauvais-Nangis, and all three were of opinion that it was impossible to bring him to a regular trial, but that he must be privately despatched, and that this measure would be justified by his open treason. The brave Crillon refused to take upon himself the execution of this plan. It was therefore intrusted to Lognac, first chamberlain of the king, and captain of 45 Gascon noblemen, of the new royal guard. He selected nine of the most resolute, and concealed them in the king's cabinet. The duke had, indeed, been warned, and his brother, the cardinal, advised him to go to Paris; but, upon the advice of the archbishop of Lyons, who represented to him that his friends would lose courage, if he left Blois at so favorable a moment, he resolved to await the worst. On the following day, Dec. 23, 1588, he went to the king, and was somewhat concerned at seeing the guards strengthened. As soon as he had entered the first hall, the doors were shut. He preserved, however, a calm exterior, and saluted the bystanders as usual. But when about to enter the cabinet, he was stabbed with several daggers, and, before he could draw his sword, he fell dead, exclaiming, "God have mercy on me." At the time of his death, he was 38 years old. On the following day, the cardinal was also assassinated; but, far from extinguishing the fire of civil war, this double murder only increased the hatred of the Catholics against the king. The high-minded Henry of Navarre (Henry IV) said, upon hearing of the deed, "Had Guise fallen into my hands, I would have treated him very differently. Why," added he, "did he not join with me? We would have conquered, together, all Italy."

Guitar, or Guitarra; a stringed instrument, the body of which is of an oval-like form, and the neck similar to that of a violin. The strings, which are distended in parallel lines from the head to the lower end, passing over the sounding hole and bridge, are tuned to the C above Fiddle G, E its third, G its fifth, and their octaves. The intermediate intervals are produced by bringing the strings, by the pressure of the fingers of the left hand, into contact with the frets fixed on the key-board, while those of the right agitate the strings and mark the measure. The Spaniards, the reputed inventors of the guitar, derived the name they give it, *guitarra*, from *cithara*, the Latin denomination for almost every instrument of the lute kind. The people of Spain are so fond of music, and of the guitar in particular, that there are few, even of the laboring class, who do not solace themselves with its practice. It is with this instrument that the Spanish gentlemen at night serenade their mistresses; and there is scarcely an artificer in any of the cities, or principal towns, who, when his work is over, does not go to some of the public places and entertain himself with his guitar.

Guizot, Francis, formerly professor of modern history at the academy of Paris, was born at Nimes, in 1787. He was educated a Protestant, and studied philosophy and German literature at Geneva. He went to Paris, where he devoted himself to literary studies, contributed to several valuable journals, and wrote on phil-

ological subjects (for instance, his celebrated *Nouveau Dictionnaire des Synonymes de la Langue Française*, 2d edit. 1822), besides biographical essays and works on education and the state of the fine arts in France. In 1814, after the restoration, he first entered upon a political career, in which he quickly rose, under the patronage of the abbé Montesquiou, and obtained a great influence, first as secretary-general in the department of the interior, and afterwards in the department of justice; but the manner in which he executed the reforms projected by his patron prevented him from being popular. At the return of Napoleon from Elba, he followed Louis XVIII to Ghent, and was appointed by the king *maître des requêtes*, and, in 1817, counsellor of state. From this time, Guizot showed more moderate principles, and belonged to the party of the *doctrinaires*. The fall of the minister Decazes (q. v.), in 1820, caused his dismission. The system which had formerly been followed by him, as a *protégé* of Montesquiou, was now adopted against the liberals by their opponents. Guizot then employed himself as a lecturer on history and an author. His best writings (some of which have gone through several editions) are his *Idées sur la Liberté de la Presse* (1814); *Du Gouvernement Représentatif et de l'État actuel de la France* (1816); *Essai sur l'Histoire et sur l'État actuel de l'Instruction en France* (1816); *Du Gouvernement de la France depuis la Restauration et du Ministère actuel* (4th edit., 1821). His work *Des Conspirations et de la Justice Politique* (2d edit., 1821) contains some important facts concerning *espions* and *provocateurs* (informers), which the police uses as its instruments. His essay *De la Peine de Mort en Matière politique* (1822) deserves notice. In his *Essais sur l'Histoire de France*, connected with the improved edition of Mably's *Observations sur l'Histoire de France* (4 vols., Paris, 1823), he shows that the middling class of people forms the strength of a country, and its support in times of danger. He has also edited a *Collection des Mémoires relatifs à la Révolution d'Angleterre* (Paris, 1823), which is very full of instruction for the present times. He is now publishing a *Collection des Mémoires relatifs à l'Histoire de France depuis la Fondation de la Monarchie jusqu'au treizième Siècle* (with an introduction and notes, in 30 vols.), which is the first collection of these records of contemporary testimony, and is also important for the history of Germany and of the middle ages. Until the suppression of the censorship, and the abolition of the Normal school, in 1822, Guizot was royal censor and professor in this institution for education. His lectures on modern history were heard with great applause; but the board of education would not allow them to be repeated in the academic year 1824. Five volumes of his lectures have been printed, under the title *Cours d'Histoire Moderne*. The more clearly Charles X and his ministers manifested their disposition to reëstablish an absolute government, the more decided was the opposition of Guizot to their measures; and he obtained the reputation of one of the ablest, most active and most effective writers of the liberal party. He was connected with the *Revue Française*. July 30, 1830, he was elected, by the deputies then assembled, provisionary commissioner for public instruction. When the duke of Orleans was made lieutenant-general of the kingdom, Guizot received the port folio of the interior, as provisionary minister; and, when the duke was proclaimed king of the French, he was appointed minister of public instruction, and retained his office until November 2, 1830, when he, with De Broglie, Molé and Louis, was succeeded by count Montalivet, Mérilhou, Maison and Lafitte. Guizot's wife, Pauline, has written several romances, and works on education, which have been well received. But she did herself no credit by a newspaper quarrel with the abbé Salgues. She also wrote, for some time, the articles relating to the theatre, in the *Publiciste*, and has contributed to several other periodical publications.

Guldberg, Frederic (with the noble prefix Högh), professor and knight, son of Ove Högh Guldberg, formerly minister of state (who died in 1808), was born at Copenhagen, March 26, 1771, and is one of the most original and excellent of the Danish poets. Among his songs, the Flower of Eternity (*Evighedsblomsten*) and the Dying Man (*Den Döende*) are remarkably beautiful. His miscellaneous poems were published, a second time, in 1815—16 (in 3 vols.), with several prose pieces of much beauty, under the title *Samlede Smaating*. His *Digte over bibelske Emner* (Poems upon Biblical Subjects, Copenhagen, 1823) are adapted for youth, whose hearts and imaginations they are well calculated to attract. Guldberg has also translated Terence and Plautus (in six vols.).

Gulf Stream. (See *Current*.)

Gull (*larus*). These birds are well known every where, being found almost universally spread over the globe. They are distinguished from other sea fowl by their straight bill, bending downwards to-

wards the point, and marked below the under mandible by a triangular prominence, by their light body, supported by large wings, by slender legs, palmated feet, and a small hind toe. They are timid and cowardly, except in defence of their young. Generally seen in large flocks, the old and young separate; the larger species frequent the sea, the smaller, lakes or rivers. They walk with tolerable ease, and swim well, but are incapable of diving. They keep much on the wing, and their flight is rapid, strong, and long sustained, even in heavy gales. In sitting, they contract their neck, and rest on one foot. They are extremely voracious, fighting with each other for prey. They are patient of hunger, but will feed on every kind of animal food, either dead or alive, putrid or fresh. Their principal food, however, is fish, of which they will follow the shoals; they catch them with great agility, darting down like an arrow. They breed only once a year, laying from two to four eggs. The species are exceedingly numerous, and resemble each other greatly. The gulls are continually fighting with each other, and the strong plundering the weaker. No sooner does one rise from the water, with a fish in its bill, than it is immediately pursued by others, stronger than itself, and the first that reaches it tears away the spoil. Should, however, the latter not instantly swallow the booty it has acquired, it is, in turn, pursued by others; and, even if it has performed this process, it is oftentimes obliged to disgorge it, when it is seized by one of the pursuers, before it can reach the water. The facility which the gulls have of vomiting their food has been taken notice of, even in their captive state. Some of these birds have been tamed, but, even then, they have always discovered the same quarrelsome and voracious habits. When two are kept together, the weaker generally becomes the victim of the ill nature of the other. Almost all the gulls that appear on our coast are also inhabitants of Europe. This genus is not well understood by naturalists, and much confusion exists as to the species.

Gum; one of the proximate principles of vegetables, distinguished by the following properties:—It is an insipid, inodorous, uncrystallizable solid, more or less transparent, the various colors which the different kinds possess being derived from mixture with coloring principles while exuding in a fluid state. It is insoluble in alcohol, and extremely soluble in water, in which properties it is the reverse of resin. It differs from mucilage only in being deprived of the water which rendered it fluid; and, of course, when water is added, it again becomes mucilage. This mucilage is apparently not susceptible of fermentation, and may be kept for a long time, as it is less disposed to spontaneous changes than almost any vegetable product. Its chemical composition so nearly approaches sugar, that it may be converted into it by means of nitric acid. Gum, as above defined, is identical in all vegetables, and the different kinds vary only in the quantity and quality of the substances united with them. It exists naturally almost pure in gum Arabic and gum Senegal, and, more or less mixed, in the gum which exudes from the plum, cherry and other fruit-trees, as also in the mucilage of flaxseed, slippery elm, &c. Various resins and gum-resins are commonly confounded under this appellation.

Gum Arabic is the product of the *mimosa nilotica* and some other species of the same genus, inhabiting the sandy parts of Arabia, Egypt, Senegal and Central Africa. It exudes spontaneously, in a fluid state, and remains attached to the branches after it has concreted and become solid. This exudation takes place continually, during the whole of the dry season, from October to June, but more copiously immediately after the rains. December and March are the two months in which this gum is collected by the Arabs, with whom it is an important aliment, those tribes that are continually wandering in the desert often making it their principal article of food during a great part of the year. Gum Arabic is obtained in rounded masses, transparent, or of a light yellow color, capable of being easily reduced to a powder, insipid to the taste, or possessing a slight acidity, which, however, is only perceptible by those who use it habitually. It is easily soluble in water, and the solution has the property of conveying pulverized solids through a filter, which would separate them were they suspended merely in water: thus it is impossible, by this means, to separate powdered charcoal from gum water. In pharmacy, gum Arabic is employed to suspend in water substances which, otherwise, could not be kept equally diffused, as balsams, fixed oils, resins, &c.; but its principal consumption is in manufactures, forming the basis of crayons and cakes of water-colors, as well as of writing-ink, and several liquid colors, serving to increase the consistency of these colors, and to prevent their spreading in calico printing, affording

a clear cement for joining light substances which may be prepared in a moment, giving a lustre to ribands, silks, &c., which, however, is destroyed by the application of water. It is, besides, used for a great variety of purposes. In medicine, it is frequently employed, especially in dysenteries, as a demulcent, and enters into the composition of a variety of emollient preparations. Gum Senegal does not differ in its sensible properties; indeed, the chief part of the gum Arabic of commerce is brought from Senegal, and constitutes the most important article of trade with that country.

Gum Resins apparently combine the properties of gums and resins, being partly soluble in water, partly in alcohol; but they are evidently compound substances, formed of two or more vegetable principles, which, indeed, are often in a state of mere mechanical mixture. Aloes, ammoniac, assafœtida, galbanum, gamboge, olibanum, scammony, and a great variety of concrete juices, are referred to this head.

Gun; a fire-arm, or weapon of offence, which forcibly discharges a ball, shot, or other offensive matter, through a cylindrical barrel, by means of gunpowder.—*Gun* is a general name, under which are included divers, or even most species of fire-arms. They may be divided into great and small. Great guns, called, also, by the general name *cannons*, make what we also call *ordnance*, or *artillery*, under which come the several sorts of cannon. (See *Cannon*, *Artillery*, &c.) Great guns, of all sorts, cannons, carronades, &c., whether of iron or brass, are cast in sand, and afterwards bored. Small guns, muskets, fowling-pieces, &c., are forged from bars of malleable iron, hammered to a proper width, and then turned over a mandril, or cylindrical rod, so as to form a tube with a bore smaller than that of the intended piece. The edges overlap about half an inch, and are firmly welded together. The tube is then hammered, in semicircular grooves, on an anvil hollowed for the purpose. It is afterwards bored with several instruments, of different sizes, in succession, till the hollow is sufficiently large and smooth. A strong plug is firmly screwed into the breech, so as to make it perfectly close. The projecting parts of the barrel, the sight, the loops which fasten it to the stock, &c., are soldered on.

Gunnery signifies the science of using artillery against an enemy judiciously, and to the greatest effect. Besides an accurate acquaintance with the management of ordnance of all kinds, the range and force of every kind, the charge and direction necessary for different distances, their materials, the manner of making and of preserving them, with the component parts, the kinds, the fabrication, the effect of gunpowder, and the method of preserving it, with the manner of preparing and managing every thing that appertains to ammunition, the artillerist must be able to instruct his men in their exercises, both on horseback and on foot; he must be well acquainted with the management of the horses, that are used to transport the cannon and to mount the flying artillery; must know how to harness them to the cannon; how to move and manœuvre with them on ground of every kind; how to repair, at the moment, any sudden damage; and must be thoroughly acquainted with tactics, especially with the peculiarities of the ground, and with the art of availing himself of them most judiciously in the disposition of his artillery. He must, finally, be able to attack or defend any position; he must have an accurate acquaintance with the science of fortification; but especially he must be practically skilled in throwing up batteries and other field-works, so that he may be able, by disposing his artillery before or within a strong place, to assist the engineer most effectually in its attack or defence. Besides, the artillerist has often the regulation of the lights, and other signals, in time of war, of the fire-works in peace, &c. All this must be learned by experience, and by the study of auxiliary sciences. Mathematics (particularly the doctrine of curves, to calculate the path of the balls), physics and chemistry are very necessary, in order to understand the effect of powder, and the manufacturing of ammunition, as well as that of all kinds of fire-works. A knowledge of mechanics is, also, very useful, for understanding the theory of carriages, for moving large loads, when necessary, and on many other occasions.

Gunpowder is a mixture of saltpetre, sulphur and charcoal. If we may believe the relations of the missionaries, and the reports of the Chinese historians, the Chinese were first acquainted with the application of gunpowder. Perhaps it proceeded from them to the Arabs; for, in 1331, the Moors used it in their operations before Alicant, and certainly in 1342, at Algesiras; in 1250, the Arabs probably used a mixture similar to gunpowder before Damietta, and perhaps also in a naval

engagement in the year 1085. Among the Europeans, the traces of this invention are still more ancient; for the Greek fire, which was first employed in 668, must have, at least, contained saltpetre mixed with pitch, naphtha, &c., since it was customary, by means of it, to hurl stones from metallic tubes. The first information of the knowledge of the Europeans with regard to the chemical mixture of powder, is found in the 9th century, in a book composed by Marcus Gracchus, preserved in the university of Oxford, which also accurately explains its composition. Roger Bacon (who died in 1294) was likewise acquainted with the power which saltpetre has, when set on fire, of producing a thundering report. The discoverer of the power of powder, when confined and set on fire, of propelling heavy bodies, was, according to common report, Berthold Schwartz, a monk, who is said to have lived at Mayence, between 1290 and 1320. He, in some of his experiments in alchemy, had put the mixture into a mortar, and, having accidentally dropped into it a spark of fire, to his astonishment, saw the pestle fly off into the air. Other traditions attribute this invention to Constantine Antlitz of Cologne (see De Boucher's *Mémoire sur l'Origine de la Poudre à Canon*). However this may be, powder was scarcely applied to military uses before 1350, and the accounts of the use of cannons in the battles of Crécy (1346), Poictiers, and still earlier engagements, have arisen from the various significations of the word *cannon*. In 1356, powder is mentioned in the accounts of the treasury of Nuremburg; in 1360, the house of assembly at Lübeck was burned by the imprudence of the powder manufacturers; and, in 1365, the margrave of Misnia had pieces of artillery. In the course of a few years afterwards, it was known over all Europe. Thus the first traces of this invention would appear to be found in Germany; other nations, however, have put in their claims to this honor. The proportion of the ingredients in the composition of gunpowder, is different in different countries: in the Prussian powder-mills, 75 parts of saltpetre, 11½ parts of sulphur, and 13½ parts of charcoal are used; but in the French mills, 75 parts of saltpetre, 12½ of coal, and 12½ of sulphur. In the manufacture of this article, which is carried on in very different ways, much depends upon the goodness of the ingredients. The crude saltpetre is broken up, moistened and exposed to the action of a slow fire, continually skimmed and violently agitated, till all the moisture evaporates, and the saltpetre remains in the form of a fine powder. The sulphur is pulverized after having been well purified. The charcoal is that derived from the alder or any other soft wood or bushes, as, for example, hemp stalks, which are burned with great care in a confined room, and reduced to a fine powder. These three ingredients are then moistened, brought under a stamping, or more commonly a rolling mill, where two metallic, or, which are better, marble cylinders, turn round a fixed vertical wooden pillar, and crush to pieces the mixture, which lies upon a round smooth surface of the same material. Other mills effect this bruising operation by several large iron runners, revolving upon a metallic plate, similar to a painter's grinding stone, or by a rapid revolution of the mixture in casks containing metallic balls. After the mixture, in some one of these ways, has been acted on in the mills for the space of six or eight hours, and when the ingredients are united, and form one homogeneous mass, it is pressed, while yet wet, by means of cylindric rollers of wood, through a sieve of perforated parchment, by which the powder is formed into grains. In other mills, this process of forming it into grains takes place after the powder has been pressed between two boards into a solid cake, and then submitted twice to the operation of a grooved roller. The powder, after it has been grained, is spread upon boards in the drying-houses, and exposed to the strong heat of an oven for two days. In order to prevent its taking fire, the oven is well lined with clay and copper. Of late years, this process of drying has been sometimes effected by means of steam. Finally, the powder is sorted by being passed through several sieves. In the first, or coarsest, remains what is entirely useless; through the second passes the second-sized, or cannon powder; and through the third and last the finest, or musket powder. The powder, thus prepared, is packed in oaken casks. In order to provide against accidents, the English use copper casks or vessels, with the tops screwed on. Copper vessels are also used in the U. States. Good gunpowder must be of a slate color, uniform, round and pure grain, and also have a uniform color on being broken up; nor should it leave behind it, either on the hand or on paper, any black spots. When set on fire, it should burn at once, without crackling or leaving upon paper any ap-

pearances of its combustion. When applied to the tongue, the taste should be extremely cooling. In order to prove its strength, let any person apply an accurately fitting ball to a small mortar, and the distance to which the ball is thrown will prove the strength of the powder. The French government *eprouvette* is a mortar seven French inches in diameter, and three ounces of powder must throw a copper globe, of 60 pounds weight, 300 feet; otherwise the powder is not admissible. An *eprouvette* is sometimes used which is inaccurate; the powder throws back the cover of a small mortar, and with it a wheel, which catches in a steel spring; the strength is determined by the tooth, at which the wheel remains fixed. This method is defective, because the spring is weakened by use. Another method is, to suspend a small cannon as a pendulum, and to judge of the strength of the powder by the force of the recoil, which will describe a greater or less arc of a circle. In the preservation of powder, fire and water must both be carefully guarded against. Powder destined for military purposes, should be deposited in an airy building, removed at least 1000 paces from any habitation, provided with lightning rods, and surrounded with walls, ditches and palisadoes; there should be a guard constantly set, to prevent the introduction of fire, and to hinder all persons from entering, who have things about them that will produce fire. These buildings should contain openings for the free passage of the air; the casks should stand upon a platform of wood, at a distance from the wall, and the powder itself should be sunned and dried every one or two years. If the powder is to be kept in damp places, as, for example, in the casemates (arched passages under ground) of fortresses, the walls should be internally covered with lead, and a vessel filled with unslacked lime placed in the middle of the apartment, so that the moisture of the atmosphere may be attracted by the lime. In the transportation of gunpowder, dust, which is liable to penetrate the cracks and joints of the casks, should be carefully guarded against, as the friction may produce explosion. It is also necessary for its good preservation, that the carriages and vessels in which it is transported should be water-tight. We may effectually preserve it from moisture, by dipping the cask and the sackcloth covering into melted pitch. Vessels prepared in this way, and containing powder, may be immersed in the water for weeks, without having their contents in the least injured. The effects of this substance, when set on fire, are truly wonderful. When powder is heaped up in the open air, and then inflamed, it detonates without report or effect. A small quantity of powder left free in a room, and fired, merely blows out the windows; but the same quantity, when confined in a bomb within the same chamber, and inflamed, tears in pieces and sets on fire the whole house. Count Rumford loaded a mortar with one-twentieth of an ounce of powder, and placed upon it a 24 pound cannon, weighing 8081 pounds; he then closed up every opening as completely as possible,and fired the charge, which burst the mortar with a tremendous explosion, and raised up this immense weight. Whence such and similar effects arise, no chemist as yet has been able, satisfactorily, to explain; and the greater part of the explanations hitherto made are nothing but descriptions of facts. The best explanation is, that the azote and oxygen gases of the saltpetre, and the carbonic acid gas from the charcoal, which had hitherto been in a solid state, are set free, and the expansive power of all these gases requires much more room than they previously occupied. They now endeavor to overcome the obstructions to their expansion, and this tendency is very much increased by the intense heat generated by the gases. The confined steam operates in the same way, although this is not the only cause of the phenomenon, as Rumford supposes.

Gunpowder Plot; a conspiracy formed in the second year of the reign of James I (1604), for the purpose of destroying the king and parliament at a blow. The Roman Catholics having been disappointed in their expectations of indulgence from James, Catesby and Percy, two Catholic gentlemen of ancient family, with a few others of their persuasion, determined to run a mine below the hall in which parliament met, and, on the first day of the session, when the king and the royal family would be present, involve all the enemies of the Catholic religion in one common ruin. A vault below the house of lords, which had been used to store coals, was hired, two hogsheads and 36 barrels of powder lodged in it, the whole covered with fagots, and the doors thrown open so as to prevent suspicions. As the young prince Charles and the princess Elizabeth would be absent, measures were taken to have them seized, and Elizabeth proclaimed queen. The secret of the conspiracy was communicated

to more than 20 persons, and had been faithfully kept for near a year and a half. Ten days, however, before the meeting of parliament, a Catholic peer received a note from an unknown hand, advising him not to attend at the parliament, as it would receive a terrible blow. This he communicated to the secretary of state, lord Salisbury, who, although apprehending nothing, thought proper to lay it before the king. James saw the matter in a more serious light; and, on searching the vaults below the houses of parliament (Nov. 5, 1605), Guy Fawkes, an officer in the Spanish service, who had been employed to fire the powder, was found at the door, with the matches in his pocket, and the gunpowder in the vault was discovered. Fawkes was put to the torture, and made a full discovery of the conspirators, who, with their attendants, to the number of 80 persons, had assembled in Warwickshire, determined to defend themselves to the last. Percy and Catesby were killed in the attack; the others were made prisoners and executed. Lingard (History of England, vol. ix, chap. 1) gives a very full account of the conspiracy, which does not materially differ from the statement above given. It has been, however, asserted by others, that it was all a plot of Salisbury's, to effect the ruin of the Catholics, and that the warning came from his hands. In support of this, they allege that most of the conspirators declared themselves ignorant of the extent of the conspiracy, the Jesuits, who were implicated in it, protested their innocence, and that the French ambassador, who made inquiries on the spot, entirely exculpates them. (See *Lettres et Négociations d'Antoine Lefèvre de la Boderie.*) In the calendar of the church of England, the 5th of November is duly noticed as a holyday at the public offices; and the Common Prayer Book contains "A Form of Prayer with Thanksgiving, to be used yearly upon the Fifth day of November, for the happy Deliverance of King James I," &c. It is customary for boys in England, as it was formerly in New England, to make an effigy representing Guy Fawkes, which they carry about, singing certain verses,* and asking for materials to burn the figure. Scuffles between boys of different quarters of the town were common on this occasion, at least in Boston, Massachusetts.

GUNTER, Edmund; an excellent English mathematician, who flourished in the reign of James I, and distinguished himself by his inventions, which have never yet been superseded, though some of them have been subsequently much improved.

GUNTER'S CHAIN; the chain in common use for measuring land according to the true or statute measure; so called from the name of its inventor. The length of the chain is 66 feet, or 22 yards, or four poles of five yards and a half each; and it is divided into 100 links of 7.92 inches each. 100,000 square links make one acre.

GUNTER'S LINE; a logarithmic line, usually graduated upon scales, sectors, &c. It is also called the *line of lines* and *line of numbers*, being only the logarithms graduated upon a ruler, which therefore serves to solve problems instrumentally, in the same manner as logarithms do it arithmetically. It is usually divided into a hundred parts, every tenth of which is numbered, beginning with 1, and ending with 10; so that, if the first great division, marked 1, stand for one tenth of any integer, the next division, marked 2, will stand for two tenths, 3, three tenths, and so on; and the intermediate division will, in like manner, represent one hundredth parts of an integer. If each of the great divisions represent ten integers, then will the lesser divisions stand for integers; and if the great divisions be supposed each 100, the subdivisions will be each 10.—*Use of Gunter's Line:*—1. *To find the product of two numbers.* From 1 extend the compass to the multiplier; and the same extent, applied the same way from the multiplicand, will reach to the product. Thus, if the product of 4 and 8 be required, extend the compasses from 1 to 4, and that extent, laid from 8 the same way, will reach to 32, their product.—2. *To divide one number by another.* The extent from the divisor to unity will reach from the dividend to the quotient; thus, to divide 36 by 4, extend the compasses from 4 to 1, and the same extent will reach from 36 to 9, the quotient sought.—3. *To find a fourth proportional to three given numbers.* Suppose the numbers 6, 8, 9: extend the compasses from 6 to 8; and this extent,

* These verses are:

"Remember, remember
The fifth of November,
Gunpowder treason and plot!
We know no reason
Why gunpowder treason
Should ever be forgot.
Holla, boys! Huzza!

"A stick and a stake,
For king William's sake;
A stick and a stump
For Guy Fawkes' rump.
Holla, boys! Huzza!"

laid from 9 the same way, will reach to 12, the fourth proportional required.—4. *To find a mean proportional between any two given numbers.* Suppose 8 and 32: extend the compasses from 8, in the left-hand part of the line, to 32 in the right; then, bisecting this distance, its half will reach from 8 forward, or from 32 backward, to 16, the mean proportional sought.—5. *To extract the square root of a number.* Suppose 25: bisect the distance between 1 on the scale and the point representing 25; then half of this distance, set off from 1, will give the point representing the root 5. In the same manner, the cube root, or that of any higher power, may be found by dividing the distance on the line, between 1 and the given number, into as many equal parts as the index of the power expresses; then one of those parts, set from 1, will find the point representing the root required.

GUNTER'S QUADRANT is a quadrant made of wood, brass, or some other substance; being a kind of stereographic projection on the plane of the equinoctial, the eye being supposed in one of the poles; so that the tropic, ecliptic and horizon form the arches of circles; but the hour circles are other curves, drawn by means of several altitudes of the sun for some particular latitude every year. This instrument is used to find the hour of the day, the sun's azimuth, &c., and other common problems of the sphere or globe; as also to take the altitude of an object in degrees.

GUNTER'S SCALE, usually called, by seamen, the *gunter*, is a large plain scale, having various lines upon it, of great use in working the cases or questions in navigation. This scale is usually two feet long, and about an inch and a half broad, with various lines upon it, both natural and logarithmic, relating to trigonometry, navigation, &c. On the one side are the natural lines, and on the other the artificial or logarithmic ones. The former side is first divided into inches and tenths, and numbered from 1 to 24 inches, running the whole length, near one edge. One half of the length of this side consists of two plane diagonal scales, for taking off dimensions for three places of figures. On the other half of this side, are contained various lines relating to trigonometry, as performed by natural numbers, and marked thus, viz., *Rhumb*, the rhumbs or points of the compass; *Chord*, the line of chords; *Sine*, the line of sines; *Tang.*, the tangents; *S. T.*, the semi-tangents: and at the other end of this half, are, *Leag.*, leagues or equal parts; *Rhumb*, another line of rhumbs; *M. L.*, miles of longitude; *Chor.*, another line of chords. Also, in the middle of this foot are *L.* and *P.*, two other lines of equal parts: and all these lines on this side of the scale serve for drawing or laying down the figures to the cases in trigonometry and navigation. On the other side of the scale are the following artificial or logarithmic lines, which serve for working or resolving those cases, viz., *S. R.*, the sine rhumbs; *T. R.*, the tangent rhumbs; *Numb.*, line of numbers; *Sine*, sines; *V. S.*, the versed sines; *Tang.*, the tangents; *Meri.*, meridional parts; *E. P.*, equal parts.

GUNWALE, or GUNNEL, OF A SHIP, is that piece of timber which reaches, on either side of the ship, from the half-deck to the fore-castle, being the uppermost bend, which finishes the upper works of the hull in that part, and wherein they put the stanchions which support the waist-trees. This is called the *gunwale*, whether there be guns in the ship or not.—The lower part of any port, where any ordnance is, is also termed the *gunwale*.

GURNARD (*trigla*, Lin.). Τριγλα, which the Romans called *mullus*, does not belong to this genus, though it was included in it by Artedi. These fish, which are marine, all afford excellent food. They have a scaly body, of a uniform shape, compressed laterally, and attenuated towards the tail. The head is broader than the body, and slopes towards the snout, where it is armed with spines; the upper jaw is divided, and extends beyond the lower. The eyes are near the top of the head, large and prominent, particularly the upper margin of the orbits. The dorsal fins are unequal, the first short, high and aculeate; the second long, sloping and radiate. The ventral and pectoral are uncommonly large, and from their base hang three loose and slender appendages. Many of the species utter a peculiar noise when taken; many of the species are provided with pectoral fins, sufficiently large to enable them to spring out of the water. One of the species has been denominated the *lyre fish*, on account of its bifurcated rostrum, which bears a faint resemblance to that instrument.

GUSTAVUS I, king of Sweden, known under the name of *Gustavus Vasa*, born in 1490, was a son of duke Erich Vasa, of Grypsholm, and a descendant of the old royal family. He was one of those great men, whom Nature so seldom produces, who appear to have been endowed by her with every quality becoming a sovereign. His handsome person and noble countenance prepossessed all in his

favor. His artless eloquence was irresistible; his conceptions were bold, but his indomitable spirit brought them to a happy issue. He was intrepid, and yet prudent, full of courtesy in a rude age, and as virtuous as the leader of a party can be. When the tyrant Christian II of Denmark sought to make himself master of the throne of Sweden, Gustavus resolved to save his country from oppression; but the execution of his plans was interrupted, as Christian seized his person, and kept him prisoner in Copenhagen as a hostage, with six other distinguished Swedes. When, at last, in 1519, he heard of the success of Christian, who had nearly completed the subjection of Sweden, he resolved, while yet in prison, that he would deliver his country. He fled in the dress of a peasant, and went more than 50 miles the first day, through an unknown country. In Flensborg, he met with some cattle drivers from Jutland. To conceal himself more securely, he took service with them, and arrived happily at Lübeck. Here he was indeed recognised, but he was taken under the protection of the senate, who even promised to support him in his plans, which he no longer concealed. He then embarked, and landed at Calmar. The garrison, to whom he made himself known, refused to take the part of a fugitive. Proscribed by Christian, pursued by the soldiers of the tyrant, rejected both by friends and relations, he turned his steps towards Dalecarlia, to seek assistance from the inhabitants of this province. Having escaped with difficulty the dangers which surrounded him, he was well received by a priest, who aided him with his influence, money and counsel. After he had prepared the minds of the people, he took the opportunity of a festival, at which the peasants of the canton assembled, and appeared in the midst of them. His noble and confident air, his misfortunes, and the general hatred against Christian, who had marked the very beginning of his reign by a cruel massacre at Stockholm,—all lent an irresistible power to his words. The people rushed to arms; the castle of the governor was stormed; and, imboldened by this success, the Dalecarlians flocked together under the banners of the conqueror. From this moment, Gustavus entered upon a career of victory. At the head of a self-raised army, he advanced rapidly, and completed the expulsion of the enemy. In 1521, the estates gave him the title of *administrator*. In 1523, they proclaimed him king. Upon receiving this honor, he appeared to yield with regret to the wishes of the nation; but he deferred the ceremony of the coronation, that he might not be obliged to swear to uphold the Catholic religion and the rights of the clergy. He felt that the good of the kingdom required an amelioration of the affairs of the church; and he felt, too, that this could only be effected by a total reform. His chancellor, Larz Anderson, advised him to avail himself of the Lutheran doctrines to attain his object. Gustavus was pleased with this bold plan, and executed it more by the superiority of his policy than of his power. While he secretly favored the progress of the Lutheran religion, he divided the vacant ecclesiastical dignities among his favorites; and, under pretence of lightening the burdens of the people, he laid upon the clergy the charge of supporting his army. Soon after, he dared to do still more: in 1527, he requested and obtained from the estates the abolition of the privileges of the bishops. In the mean while, the doctrines of Luther were rapidly spreading. Gustavus anticipated all seditious movements, or suppressed them. He held the malecontents under restraint; he flattered the ambitious; he gained the weak; and, at last, openly embraced the faith which the greater part of his subjects already professed. In 1530, a national council adopted the confession of Augsburg for their creed. Gustavus, after having, as he said, thus conquered his kingdom a second time, had nothing more to do but to secure it to his children. The estates granted this request also, and, in 1542, abdicated their right of election, and established hereditary succession. Although Sweden was a very limited monarchy, Gustavus exercised an almost unlimited power; but this was allowed him, as he only used it for the benefit of his country, and he never violated the forms of the constitution. He perfected the legislation; formed the character of the nation; softened manners; encouraged industry and learning, and extended commerce. After a glorious reign of 37 years, he died in 1560, at the age of 70. (See Von Archenholz's *Geschichte Gustavs Wasa* (History of Gustavus Vasa), published at Tübingen, 1801, 2 vols.)

Gustavus II, Adolphus, the greatest monarch of Sweden, was a son of Charles IX (who ascended the Swedish throne upon the deposition of Sigismund), and a grandson of Gustavus Vasa. He was born at Stockholm, in 1594, and received a most careful education. At the age of

12, he entered the army, and, at 16, directed all affairs, appeared in the state council and at the head of the army, obeyed as a soldier, negotiated as a minister, and commanded as a king. In 1611, after the death of Charles IX, the estates gave the throne to the young prince, at the age of 18, and, without regard to the law, declared him of age; for they saw that only the most energetic measures could save the kingdom from subjection, and that a regency would infallibly cause its ruin. The penetrating eye of Gustavus saw in Axel Oxenstiern, the youngest of the counsellors of state, the great statesman, whose advice he might follow in the most dangerous situations. He united him to himself by the bands of the most intimate friendship. Denmark, Poland and Russia were at war with Sweden. Gustavus, unable to cope at once with three such powerful adversaries, engaged, at the peace of Knared, in 1613, to pay Denmark 1,000,000 dollars, but received back all that had been conquered from Sweden. After a successful campaign, in which, according to his own confession, his military talent was formed by James de la Gardie, Russia was entirely shut out from the Baltic by the peace of Stolbowa, in 1617. But Poland, although no more successful against him, would only consent to a truce for six years, which he accepted, partly because it was in itself advantageous, partly because it afforded him opportunity to undertake something decisive against Austria, whose head, the emperor Ferdinand II, was striving, by all means, to increase his power, and was likewise an irreconcilable enemy of the Protestants. The intention of the emperor to make himself master of the Baltic, and to prepare an attack upon Sweden, did not admit of a doubt. But a still more powerful inducement to oppose the progress of his arms, Gustavus Adolphus found in the war between the Catholics and the Protestants, which endangered at once the freedom of Germany and the whole Protestant church. Gustavus, who was truly devoted to the Lutheran doctrines, determined to deliver both. After explaining to the estates of the kingdom, in a powerful speech, the resolution he had taken, he presented to them, with tears in his eyes, his daughter Christina, as his heiress, with the presentiment that he should never again see his country, and intrusted the regency to a chosen council, excluding his wife, whom, however, he tenderly loved. He then invaded Germany in 1630, and landed, with 13,000 men, on the coasts of Pomerania. What difficulties opposed him on the part of those very princes for whose sake he had come; how his wisdom, generosity and perseverance triumphed over inconstancy, mistrust and weakness; what deeds of heroism he performed at the head of his army, and how he fell, an unconquered and unsullied general, at the battle of Lützen, November 6, 1632, may be seen in the article *Thirty Years' War*. The circumstances immediately attending his death have long been related in various and contradictory ways; but we now know, from the letter of an officer who was wounded at his side, that he was killed on the spot, by an Austrian ball. The king's buff coat was carried to Vienna, where it is still kept; but Bernhard von Weimar carried the body to Weissenfels to give it to the queen. There the heart was buried, and remained in the land for which it had bled.

Gustavus III, king of Sweden, born in 1746, was the eldest son of Adolphus Frederic, duke of Holstein-Gottorp, who was chosen to succeed to the Swedish throne in 1743, and of Ulrica Louisa, sister of Frederic II of Prussia. Count Tessin, to whose care the prince was intrusted from his fifth year, endeavored to form his mind and character with a constant view to his future destination, and was especially anxious to restrain the ambition of the youth, and to inspire him with respect for the constitution of Sweden. His successor, count Scheffer, pursued the same course; but the ambition of the young prince was not eradicated. His docility of disposition, affability of manners, and gentleness, concealed an ardent thirst for power and action. Manly exercises, science and the arts, the pleasures of society, and displays of splendor, united with taste, appeared to be his favorite occupations. Sweden was then distracted by factions, especially those of the *caps* and *hats*, by which names the partisans of Russia and France were distinguished. Both parties, however, were united in their efforts to weaken the royal power as much as possible. The father of Gustavus, a wise and benevolent prince, had found his situation quite perplexing. Gustavus himself encountered, with great boldness and art, the difficulties which met him on his accession to the throne, after his father's death, February 12, 1771. He established the order of Vasa, to gain over some enterprising officers of the army, and a party was formed, principally consisting of young

officers devoted to him. Emissaries were sent to gain over the troops stationed in the other parts of the kingdom. Some influential individuals, among whom were the counts Hermanson and Scheffer, had also joined the royal party. A new plan was devised, and the parts so distributed, that the king's brothers were to begin the revolution in the country, while the king himself should commence operations in the capital. Agreeably to this plan, the commandant of Christianstadt, captain Hellichius, one of the truest and boldest adherents of the king, August 12, 1772, caused the city gates to be shut, and all the entrances to be guarded, and published a manifesto against the states general. Prince Charles then appeared before Christianstadt, and commenced a pretended siege, wherein no one was injured. The king, in the mean time, played his part so perfectly, as to dissipate the suspicions of the secret committee of the states. The committee ordered patrols of the citizens in the capital, which the king always attended, and, by his insinuating address, gained over to his cause the principal part of the soldiery and many of the officers. While he was thus preparing for the decisive moment, he appeared serene and composed; and, on the evening preceding the accomplishment of the project, he held a splendid court, which he enlivened by his affability and gayety. On the following day, August 19, 1772, after taking a ride, the king went to the council of the estates, at the castle, where, for the first time, he entered into a warm dispute with some of the counsellors. He then went to the arsenal, on horseback, where he exercised the guard. In the mean time, the officers, upon whom he thought he could depend, assembled, in consequence of a secret order to that effect, and accompanied him to the castle, where, at that time, they were changing guard, so that those who were retiring, and those who were mounting guard, met. With the entrance of the king into the castle, the revolution began. The king then collected the officers about him, in the guard room, unfolded to them his plan, and demanded their support. Most of them were young men, and were immediately gained over by the thought of delivering their country. Three older officers, who refused, had their swords taken from them by the king. The rest swore fidelity to his cause. The king's address to the soldiers was received with loud acclamations. He then set a guard over the entrances to the hall of the council, and commanded them to remain quiet, after which he returned to the arsenal, amidst the acclamations of the people, and secured the adherence of the regiments of artillery. A public proclamation exhorted the inhabitants of Stockholm to remain tranquil, and to obey no orders but those of the king. Cannon were planted, guards distributed, and several persons arrested, by way of precaution. Thus was the decisive blow struck without bloodshed, and the king returned to the castle, where he received the congratulations of foreign ambassadors, whom he had invited to his table. On the following day, the magistrates of the city took the oath of allegiance in the great market-place, amid the acclamations of the people. But it was necessary for the estates also to approve of the revolution, and to accept the new constitution, by which the royal power was enlarged, not so much at the expense of the estates as of the council. The next day, they were summoned to meet at the castle, where they found themselves without any attendants. The court of the castle was guarded by soldiers, cannon were planted before the hall of assembly, and a cannoneer stationed at each piece with a lighted match. The king appeared with a numerous retinue of officers and unusual pomp, depicted, in a forcible manner, the situation of the kingdom and the necessity of a reform, declared the moderation of his views, and caused the new constitution to be read, which was immediately approved and confirmed by subscription and oath. Almost all the public officers retained their stations; those persons who had been arrested were set at liberty, and the revolution was completed. The king now exerted himself to promote the prosperity of his country. In 1783, he went through Germany to Italy, to use the baths of Pisa, and returned to Sweden the following year through France. During his absence, a famine had destroyed thousands of his subjects; the people murmured; the nobility rose against the king's despotic policy, and the estates of the kingdom, in 1786, rejected almost all his propositions, and compelled him to make great sacrifices. A war having broke out between Russia and the Porte, in 1787, Gustavus, in compliance with former treaties, determined to attack the empress of Russia, who had promoted the dissensions of Sweden. War was declared in 1788; but, when the king attempted to commence operations by an attack on Friedrichsham, he was deserted

by the greatest part of his army, who refused to engage in an offensive war. The king retired to Haga, and thence to Dalecarlia, in search of recruits. He soon collected an army of determined defenders of their country, and delivered Gothenburg, which was hard pressed by the Danes. Meanwhile, however, the insurrection of the Finnish army, which had concluded an armistice with the Russians, still continued. The critical situation of the kingdom required the convocation of the estates. To overcome the opposition of the nobility, he constituted a secret committee, of which the nobility chose 12 members from their own number, and each of the estates, who were devoted to the king, six. The nobility, however, continued their opposition to the king, who, being encouraged by the other estates to avail himself of every measure he might think advisable, finally took a decisive step, arrested the chiefs of the opposition, and exacted the adoption of the new act of union and safety, April 3, 1789, which conferred on him more extensive powers. The war was now prosecuted with great energy and with various success. Bloody battles, especially by sea, were gained and lost; but although Gustavus valiantly opposed superior forces, yet the desperate state of his kingdom, and the proceedings of the congress at Reichenbach (q. v.), inclined him to peace, which was concluded on the plain of Werelæ, August 14, 1790. Untaught by the warnings of adversity, he now determined to take part in the French revolution, and to restore Louis XVI to his throne. He wished to unite Sweden, Russia, Prussia and Austria, and to place himself at the head of the coalition. For this purpose, in the spring of 1791, he went to Spa and Aix-la-Chapelle, concluded a peace with Catharine, and convened a meeting of the estates at Gefle, in January, 1792, which was dissolved, in four weeks, to the satisfaction of the king. Here his assassination was agreed upon. The counts Horn and Ribbing, the barons Bielke and Pechlin, colonel Liliehorn, and many others, had conspired to murder him, and restore the old aristocracy. Ankarstrœm (q. v.), who personally hated the king, begged that the execution might be intrusted to him. A masquerade at Stockholm, on the night of March 15, 1792, was chosen for the perpetration of the crime. Just before the beginning of the ball, the king received a warning note, but he went, at about 11 o'clock, with count Essen, stepped into a box, and, as all was quiet, into the hall. Here a crowd of maskers surrounded him, and, while one of them (count Horn) struck him upon the shoulder, with the words, "Good night, mask," the king was mortally wounded, by Ankarstrœm, with a shot in the back. With remarkable presence of mind, he immediately took all the necessary measures. He expired March 29, after having arranged the most important affairs with serenity (see *Armfelt*), and signed an order for proclaiming his son king.

Gustavus IV, Adolphus, the deposed king of Sweden, was born Nov. 1, 1778, and, on the death of his father, Gustavus III (March 29, 1792), was proclaimed king. He remained 4½ years under the guardianship of his uncle, Charles, duke of Sudermannland, then regent (afterwards king Charles XIII), and ascended the throne Nov. 1, 1796. In his 18th year, he was betrothed to a princess of Mecklenburg, when the empress Catharine invited him to St. Petersburg, with the design of marrying him to her granddaughter Alexandra Paulowna. Every thing was ready for the marriage, and the assembled court waited for the young king, when he refused to sign the marriage contract, because it embraced some articles which he would not concede to the empress; among others, one securing to the young queen the free exercise of the Greek religion in her palace, which was contrary to the fundamental laws of the Swedish kingdom. Nothing could change the determination of Gustavus; he retired, and shut himself up in his chamber, so that a stop was put to the whole ceremony. Soon after (October, 1797), he married Frederica, princess of Baden, sister-in-law of the emperor Alexander and the king of Bavaria. As a striking example of his folly, it is related, that he was once on the point of commencing a bloody war with Russia, because he insisted on painting a boundary bridge, with the Swedish color on the Russian side. When the northern powers were negotiating the renewal of the armed neutrality, directed especially against England, he went to St. Petersburg, in 1801, to hasten the conclusion of the treaty; he was well received by Paul I, who bestowed on him the cross of St. John of Jerusalem. In July, 1803, he visited the court of his father-in-law at Carlsruhe, in order to gain over the emperor and the princes of the empire to the project, which then seemed impracticable, of again placing the Bourbons at the head of the French government. He was in Carlsruhe when (March

15, 1804), the duke D'Enghien was seized in the territories of Baden. Gustavus immediately sent his aid-de-camp to Paris, with a letter to Bonaparte, for the purpose of saving the duke, who, however, was shot before the letter was received. Gustavus sent a remonstrance to Ratisbon, on this subject, and was, excepting Alexander I, the only sovereign who openly expressed his indignation at this deed. His rupture with France, his alliance with Great Britain and Russia, and his coolness towards the king of Prussia, to whom he sent back the black eagle, because it had been bestowed on Napoleon, were the consequence of his hatred of the new emperor of France. It having been calculated that the number 666 was contained in the name of Napoleon Bonaparte, Gustavus believed him to be the beast described in the Revelations, whose reign was to be short, and for whose destruction he was called! His ambassador delivered to the German diet of 1806 a declaration of the king, that he would take no part in its transactions, so long as its acts were under the influence of usurpation; he also rejected the offers of peace made by Napoleon a short time before the peace of Tilsit; and, July 3, 1807, broke the truce with France, and even refused the mediation of Russia and Prussia, after the peace of Tilsit. He returned the Russian order of St. Andrew, as he had formerly the Prussian order of the eagle, and, by his adherence to England, plunged his people into a disadvantageous war with Russia, and became anew the enemy of Prussia, and then of Denmark. Finland was lost, and a Danish army threatened the frontiers of Sweden. Deaf to all solicitations to conclude a peace, he alienated the nobility and the army by his caprices, and exasperated the nation by the weight of the taxes. Having finally provoked the enmity of England, by seizing the English ships in the Swedish ports, when that power endeavored to bring him to reason, it appeared plain to every one, that he was ready to sacrifice the welfare of his people to his passions. A plot was secretly formed against him; the western army, assured that the Danes would not pass the frontiers, took up its line of march to Stockholm, where the principal conspirators were plotting in the immediate presence of Gustavus. It was only 70 miles from the capital when Gustavus heard of its approach. He hastened from Haga, where he was residing with his family, to Stockholm, to defend his capital against the rebels. But he altered his plan, and determined to go to Linkioping with the troops which were in Stockholm. He was about to remove the bank from the capital, but first required it to advance him $2,000,000, or the greatest sum which could be raised. The commissaries refused to comply; Gustavus showed an intention to use force; upon which it was resolved to anticipate him. Such was the situation of affairs on the evening of March 12, 1809. The king spent that night in preparing every thing for his departure, and the moment arrived when he was to take the money from the bank. Three doors of the palace were already secured, and all the officers were assembled, as it was the usual day of parade. Field-marshal Klingspor and general Adlerkreuz, however, once more attempted the effect of conciliatory propositions, when Gustavus highly offended them by his insulting manner. Adlerkreuz then called the marshal Silbersparre and five adjutants, demanded of the king his sword, and declared him a prisoner in the name of the nation. Gustavus attempted to strike him with his sword, but it was wrested from him. Upon his cry for help, some of his faithful followers forced the doors; but they were overpowered by 30 of the conspirators, who rushed in upon them. During this struggle, Gustavus escaped, but was seized upon the stairs and brought back to his chamber by one of his servants, where he broke out into an ungovernable fit of rage. All the entrances of the castle were closely guarded. At noon, Charles, duke of Sudermannland, published a proclamation, declaring that he had taken the government into his own hands. The revolution was completed in a few hours. Gustavus now submitted quietly. Perhaps his religious enthusiasm was the cause of his present state of mind. At one o'clock at night, he was carried to Drotningholm. His wife and children were obliged to remain in Haga. March 24, he was removed to Gripsholm, his favorite place of residence. Here he published (March 29) an act of abdication, expecting the final sentence of the diet, which, on its first session (May 10), solemnly renounced their allegiance to him, and declared the heirs of his body for ever incapable of succeeding to the Swedish throne. Thereupon a formal act was prepared. The dethroned king occupied himself at Gripsholm, principally in studying the Revelation of John. He wished to leave Sweden. The estates, on the proposition of the new king, Charles XIII, settled on him an annual pension for

himself and family. His private property, as well as that of his wife and son, was also left him. He did not occupy the place of residence assigned to him in the island of Wisings-Oe, but (Dec. 6, 1809) went from Gripsholm to Germany and Switzerland, where he lived under the title of *count of Gottorp*. He has since separated from his wife and children; and his marriage was, on the 17th of February, 1812, at his own request, annulled. The same year, he also desired to be admitted among the Moravian Brothers at Herrnhut. Since his separation from his wife, he has been accustomed to wear the mystical religious badge of the order of St. John. He afterwards made several tours without any definite object, visited St. Petersburg, and, in 1811, London. In December, 1814, he was making preparations at Bâle for a visit to Jerusalem. In 1815, he presented a declaration to the congress of Vienna, asserting the claims of his son to the Swedish throne. He finally assumed the name of *Gustavson*, and visited Leipsic, in 1827, as a private individual. His son Gustavus, who was born in 1799, studied in Lausanne and Edinburgh, was present at Vienna and Verona at the time of the congress in 1822, and in 1825 entered the Austrian service, as lieutenant-colonel of the imperial Hulans. He lives at Vienna, and enjoys the title of *royal highness*. He has three sisters, carefully educated by their excellent mother (who died in 1826). The eldest was married, in 1819, to Leopold of Hochberg, margrave of Baden.

Gusto; an Italian word signifying *taste*. It often occurs in music; as, *con gusto*, with taste.

Gut, in the West India islands, particularly in the island of St. Christopher's, or St. Kitt's, is a term for the opening of a river or brook, such river or brook also being often so called.

Guts-Muths, John Christian Frederic, born in Quedlinburg, 1760, was the first German author who wrote extensively on the various exercises included in the modern gymnastics. Guts-Muths was, for a long time, a teacher in the institution of Salzmann, at Schnepfenthal. He wrote several works on gymnastics. His latest is the *Turnbuch* (Frankfort on the Maine, 1818), in which he adopted many exercises, as also the name of the book, from that of *Jahn* (q. v.), as the latter had also adopted many things from him. He wrote, too, a Geography (2 vols., 1810—1813), and edited a *Bibliothek der pädagogischen Literatur*—Library of Works on Education (1800—1820, 55 vols.) Guts-Muths lives, at present, near Schnepfenthal.

Gutta Serena. (See *Cataract*.)

Guttenberg, more properly Gutenberg, John, or Henne Gänsefleisch von Sorgenloch (Sulgeloch), usually called the inventor of printing, was born at Mentz, about 1400. The family of Gutenberg called itself noble. In 1424, Gutenberg was living in Strasburg, and, in 1436, entered into a contract with one Andrew Dryzehn (Dritzehn) and others, binding himself to teach them all his secret and wonderful arts, and to employ them for their common advantage. The death of Dryzehn, which happened soon after, frustrated the undertaking of the company, who had probably intended to commence the art of printing; especially as George Dryzehn, a brother of the deceased, engaged in a lawsuit with Gutenberg, which turned out to the disadvantage of the latter. When and where the first attempts were made at printing cannot be fully decided, as Gutenberg never attached either name or date to the works he printed. This, however, is certain, that, about 1438, Gutenberg made use of movable types of wood. In 1443, he returned from Strasburg, where he had hitherto lived, to Mentz, and, in 1450, formed a copartnership with John Faust, or Fust, a rich goldsmith of this city (who must not be confounded with the famous magician Faust), who furnished money to establish a press, in which the Latin Bible was first printed. But, after some years, this connexion was dissolved. Faust had made large advances, which Gutenberg ought to have repaid; and, as he either could not or would not do it, the subject was carried before the tribunals. The result was, that Faust retained the press, which he improved and continued to use in company with Peter Schöffer of Gernsheim. By the patronage of a counsellor of Mentz, Conrad Hummer, Gutenberg was again enabled to establish a press the following year, when he probably printed *Hermanni de Saldis Speculum Sacerdotum* (in quarto), without the date or the printer's name. Here, likewise, as some maintain, appeared four editions of the Donat (Latin grammar of Donatus), which others, however, ascribe to the office of Faust and Schöffer. In 1457, the Psalter was printed with a typographical elegance which sufficiently proves the rapid advances of the new art, and the diligence with which it was cultivated. Gutenberg's printing-office remained in Mentz till 1465. About this time, he was ennobled by Adolphus of

Nassau, and died Feb. 24, 1468. Little is known of his life and works, or of the early progress of the art of printing, and the introduction of movable types. Valuable statements and suggestions on this subject are to be found in Fischer's *Versuch zur erklärung alter typographischen Merkwürdigkeiten* (Hamburg, 1740); Oberlin's *Beiträge zur Geschichte Gutenberg* (Strasburg, 1801); and in the works of Denis, Lichtenberger, Panzer, and many other writers.

Guttural (from the Latin *guttur*, the throat) signifies, in grammar, a sound produced chiefly by the back parts of the cavity of the mouth. The palatals *g* and *k* are nearly related to them. The Greek χ, the German *ch* after *a*, and *ch* after *i*, and the Dutch *g*, are gutturals. The Arabian language is full of gutturals, and many of them are unknown in most other languages. (See the article *H*, for the relation between *g* and the guttural sound of the German *ch* or the Greek χ.) The modern Greek gives to χ a very strong guttural sound, like that of the German *ch* after *e* and after *a*. The Irish *r* is a true guttural. The French nasal sound, as in *long*, is a true guttural; the English sound in *long* not so much, as it is less nasal. The Spanish ñ has been called, by some, a *nasal-guttural*. The roughness of the dialect of Switzerland is owing to its strong and numerous gutturals; for it not only pronounces all the gutturals of the German language very forcibly, but also gives to *g*, in many cases, the harsh guttural sound of *ch* after *a*.

Guy; a rope used to keep steady any weighty body from bearing or falling against the ship's side while it is hoisting or lowering, particularly when the ship is shaken by a tempestuous sea.—*Guy* is also the name of a tackle, used to confine a boom forward when a vessel is going large, and to prevent the sail from shifting by any accidental change of the wind or course, which would endanger the springing of the boom, or perhaps the upsetting of the vessel.—*Guy* is likewise a large slack rope, extending from the head of the main-mast to the head of the fore-mast, and having two or three large blocks fastened to it. It is used to sustain a tackle to load or unload a ship with, and is accordingly removed as soon as that operation is finished.

Guy, Thomas, the founder of Guy's hospital, was the son of a lighterman in Southwark, and born in 1644. He was brought up a bookseller. He dealt largely in the importation of Bibles from Holland, and afterwards contracted with Oxford for those printed at that university; but his principal gains arose from the disreputable purchase of seamen's prize tickets, in queen Anne's war, and from his dealings in South sea stock, in 1720. By these speculations and practices, aided by the most penurious habits, he amassed a fortune of nearly half a million sterling, of which he spent about £200,000 in the building and endowing his hospital in Southwark. He also erected almshouses at Tamworth, and benefited Christ's hospital and various other charities, leaving £80,000 to be divided among those who could prove any degree of relationship to him. He died in December, 1724, in his 81st year, after having dedicated more to charitable purposes than any private man in English record.

Guy de Chauliac (*Guido de Cauliaco*), a native of Chauliac, on the frontier of Auvergne, France, lived in the middle of the 14th century, and was the physician of three popes. He is to be considered as the reformer of surgery in his time. His *Chirurgia magna* contains most of the opinions of his predecessors. It was long considered as a classical text book; was finished at Avignon in 1363; and was printed at Bergamo (1498, folio). An older edition is mentioned (Venice, 1470, folio). It has been often reprinted, commented on, and translated into modern languages.

Guy Fawkes. (See *Gunpowder Plot.*)

Guy's Hospital, in the borough of London. (See *Guy.*) The hospital was established for 400 sick persons, besides 20 incurable lunatics. It contains 13 wards, and upwards of 400 beds. There are three physicians, three surgeons, and an apothecary. The average number of patients admitted annually is about 2250, besides whom there are 20,000 out-patients. This hospital has a collection of anatomical preparations, and a theatre for the delivery of chemical, medical and anatomical lectures. On one evening in the week, medical subjects are debated.

Guyon, Madame. (See *Quietism.*)

Guys, Pierre Augustin; born at Marseilles, 1721; a merchant in Constantinople, and afterwards in Smyrna; known for his travels and his accounts of them. He subsequently became a member of the institute, and of the academy of Arcadians in Rome. His first work appeared in 1744, and contained an account of his journey from Constantinople to Sophia, the capital of Bulgaria, in a series of letters. In 1748, he published, in the form of let-

ters, an account of his journey from Marseilles to Smyrna, and thence to Constantinople. He was mostly indebted, for his literary fame, to his *Voyage littéraire de la Grèce*, a work in which he compares and contrasts, with much acuteness and truth, the condition of ancient and modern Greece, and their political and civil constitution. Guys also made himself known as a poet, by his Seasons, on the occasion of his journey to Naples, which was received with much applause. On the publication of his *Voyage de la Grèce*, Voltaire addressed some very flattering verses to him, and the Greeks conferred on him the privileges of an Athenian citizen. Guys died at Zante, in 1799, at the age of 79, as he was collecting materials for the third edition of his travels in Greece.—His son, Pierre Alphonse, was appointed secretary of the French embassy to Constantinople, to Vienna, and to Lisbon; afterwards consul in Sardinia; then at Tripoli in Africa; and, finally, at Tripoli in Syria, where he died in 1812. He published letters on the Turks, in which he treats of the rise and decay of their power. He was also the author of the comedy *La Maison de Molière*, in four acts, altered from Goldoni.

Gwinnett, Button, one of the signers of the declaration of independence, was born in England, about the year 1732, and, in 1770, emigrated to Charleston, S. C., where he continued the business of a merchant, in which he had been previously engaged. At the end of two years, however, he abandoned commerce; and, purchasing a plantation with a number of negroes, on St. Catharine's island, in Georgia, devoted his attention to agriculture. Soon after the revolutionary struggle commenced, he took an active part in the affairs of Georgia; and, Feb. 2, 1776, the general assembly of the province elected him a representative to the general congress held at Philadelphia, where he appeared May 20. He was reëlected October 9, and, in February, 1777, was appointed a member of a convention for the purpose of framing a constitution for the state; and the foundation of that afterwards adopted, is said to have been furnished by him. He was soon chosen president of the provincial council; but his conduct in this station was obnoxious to censure, as he employed his powers for the purpose of thwarting the operations of general McIntosh, against whom he had a personal enmity, in consequence of the latter having succeeded in obtaining the post of brigadier-general of a continental brigade, to be levied in Georgia, for which Gwinnett himself had been a candidate. In May, 1777, Gwinnett was a candidate for the chair of governor of the state, but failed; and, on the 27th of the same month, a duel took place between him and McIntosh, on account of some insulting remarks of the latter. Both parties were wounded; but the injury received by Gwinnett terminated his life in the 45th year of his age.

Gwynn, Eleanor, better known by the name of *Nell*, the celebrated mistress of king Charles II, was at first an orange girl of the meanest description, in the play-house. In the first part of her life, she gained her bread by singing from tavern to tavern, and gradually advanced to the rank of a popular actress at the theatre royal. She is represented as handsome, but low of stature. She was mistress, successively, to Hart, Lacy and Buckhurst, before she became the favorite of the king. It is said that, in her elevation, she showed her gratitude to Dryden, who had patronised her in her poverty; and, unlike the other mistresses, she was faithful to her royal lover. From her are sprung the dukes of St. Alban's. She died in 1687.

Gyges; a favorite of the Lydian king Candaules, who, to convince him of the beauty of his queen, showed her to him naked. The queen was so incensed at this shameful act, that she ordered Gyges either to murder the king, ascend his vacant throne, and become her husband, or to atone for his curiosity by death. After having labored in vain to shake the resolution of the queen, he chose the former part of the alternative, murdered Candaules, and was established on the throne in consequence of the response of the Delphian oracle. This is the story as related by Herodotus. There is a fable of a magic ring, which Gyges found in a cavern when a herdsman, and which had the power of rendering its possessor invisible, whenever he turned the stone inwards. By the aid of this ring, he enjoyed the embraces of the queen and assassinated the king. To have the ring of Gyges was afterwards used proverbially, sometimes of fickle, sometimes of wicked and artful, and sometimes of prosperous people, who obtain all they want.

Gymnasium; the name given by the Spartans to the public building where the young men, naked (hence the name, from γυμνος, naked), exercised themselves in leaping, running, throwing the discus and spear, wrestling and pugilism, or in the *pentathlon* (*quinquertium*) so called. This Spartan

institution was imitated in most of the cities of Greece, and in Rome under the Cæsars. Its objects, however, did not remain confined merely to corporeal exercises, but were extended also to the exercise of the mind; for here philosophers, rhetoricians, and teachers of other branches of knowledge, delivered their lectures. In Athens, there were five gymnasia, and among them the Academy, the Lycæum and the Cynosarge. In the first, Plato taught; in the second, Aristotle; and in the third, Antisthenes. They were, at first, only open level places, surrounded by a wall, and partitioned off for the different games. Rows of plane-trees were planted for the purpose of shade, which were afterwards changed into colonnades with numerous divisions. The gymnasia, at last, were composed of a number of connected buildings, spacious enough to admit many thousands. Vitruvius has given an exact description of the arrangement of them in his work on architecture (5, 11). Some gymnasia contained more, and some fewer apartments; and all were furnished with a multitude of decorations. Here were found the statues and altars of Mercury and Hercules, to whom the gymnasia were dedicated; sometimes, also, the statue of Theseus, the inventor of the art of wrestling; statues of heroes and celebrated men; paintings and bass-reliefs, representing subjects connected with religion and history. The Hermes figures (see *Hermes*) were among the most common ornaments of gymnasia. Here was assembled every thing that could improve the youth in the arts of peace and of war; every thing that could elevate and raise their minds; and, while these institutions flourished, the arts and sciences also flourished, and the state prospered. The governor of a gymnasium was called the *gymnasiarch*. Sometimes such a gymnasium was styled *palæstra*, which was, properly, only the part where the *athletæ*, destined for the public exhibitions, exercised themselves. Ignara is of opinion, that a distinction was made between the gymnasium and palæstra, at the time when the philosophers and others commenced their lectures here; that the latter was designed to promote physical, and the former mental education simply. In the latter sense, the high schools in Germany, where young men are fitted for the universities, have been called *gymnasia*, in modern times. In Rome, during the republic, there were no buildings which could be compared with the Greek gymnasia. Under the Cæsars, the public baths bore some resemblance to them; and the gymnasia may be said to have expired with the thermæ. (See *Gymnastics*.)

Gymnasia, German. From the time of the revival of learning, when almost all knowledge was derived through the Latin and Greek,—and certainly no existing literature could be compared to that contained in these two languages,—the study of them obtained such possession of the schools, that it has, ever since, influenced the studies of youth in Europe, and particularly in Germany, to such a degree, that it is very difficult to restore the proper balance in schools of the higher kind. The *gymnasia*, the name of these schools in Germany (derived from the ancient term), taught Latin and Greek, and the branches connected with antiquity, almost to the exclusion of other sciences. But, in modern times, when the natural sciences have made such distinguished progress, and rich stores have accumulated in many modern literatures, and the importance of mathematics has been increased, the faults of this arrangement have become obvious, and some authorities, particularly in Prussia, have already established institutions, in which history, mathematics, natural philosophy and modern languages may be learned without Latin. In the gymnasia themselves, more time is allotted to these branches than formerly. The gymnasia of Prussia probably carry the scholar farther than any institutions of a similar kind elsewhere. No limits are fixed for the stay of the scholar in each class; every year an examination for the next class takes place, to which every scholar is admitted. Classes are generally divided into two sections, and a scholar cannot be promoted from the lower into the higher without an examination. The last examination, to show whether the pupils are fit to enter the university, is very severe: for three days they have to write exercises, on questions proposed to them, in history, the Latin and Greek languages, mathematics, besides themes in German, and in at least one foreign modern language, alone, shut up in a room, without books; or, if several are together, they remain under the eye of a professor, so that they cannot talk to each other. The verbal examination generally lasts one day, in presence of commissioners appointed by government. The compositions of the scholars are sent to the minister of instruction and ecclesiastical affairs. According to the result of the examination, the scholars receive testimonials, marked No. I, II, or III.

The first is difficult to gain, and indicates that the pupil has appeared peculiarly well. If private schools or (as is the case in several cities) orphan asylums wish to send scholars to the university, they must apply to government for commissioners to attend their examination. Persons who have fitted themselves for the university, without attending a gymnasium, or any school, can be examined by a committee appointed by the government, which sits every half year. In order to obtain No. I, the pupil must write Latin and Greek without grammatical faults, and in a pretty good style; be able to translate and explain one of the most difficult classic authors (in some gymnasia, Pindar is even taken for this purpose); be well acquainted with the branches of the lower pure mathematics, viz. all below the integral and differential calculus, and prove this by the solution of problems; have a knowledge of general history, and the most important periods; know, besides the German, one or more modern languages, so that he can write in them pretty correctly (themes are generally taken, by which the scholar shows his logical powers, and the soundness of his ideas). If he is to study theology, he is also examined in Hebrew. If he is deficient in either of these branches, he can only obtain No. II. If he is deficient in all, he receives No. III, which indicates that he is not fit for the university.

Gymnastics (from γυμναστικος, pertaining to exercise), if we understand by this word all bodily exercises, may be most conveniently divided into—1. military exercises; 2. exercises systematically adapted to develope the physical powers, and preserve them in perfection, which constitutes the *art of gymnastics*, properly so called; 3. exercises for the sick, a most important branch, which has been very little attended to. The ancients divided their gymnastics into *gymnastica militaria*, *gymnastica medica* (including under this head our second and third divisions), and *gymnastica athletica*, or, as Galen calls them, *vitiosa*, which were practised by professional athletes at the gymnastic games, and were in bad repute with reflecting men, even in those times, on account of their injurious effects on the health and morals. The class of gymnastics which we have enumerated under the second head, have their origin in the exercises of war and the chase. The preparation of youth for those occupations leads to the introduction of gymnastics; and the chase itself has been considered by many nations as a preparation for war; the Spartans and American Indians are instances. The ancients do not inform us precisely of the origin of gymnastics, considered as a branch of education. We first find them in a systematic form among the Greeks. The first gymnasium is said to have been established in Sparta. In Athens, always disposed to mingle the element of the beautiful in whatever she undertook, gymnastics were refined from the rude military characters, which they bore among the Spartans, into an art; and the gymnasia became temples of the graces. (See *Gymnasium*.) Vitruvius (lib. v) gives a description of a gymnasium. In each, there was a place called *palæstra*, in which wrestling, boxing, running, leaping, throwing the discus, and other exercises of this kind, were taught. Gymnastics were afterwards divided into two principal branches—the palæstric, taking its name from the *palæstra*, and the orchestric. The former embraced the whole class of athletic exercises; the latter, dancing and the art of gesticulation. It is not known, with accuracy, what particular exercises were usually practised in the gymnasia. The enthusiasm for athletic sports among the Greeks, their love of the beautiful, which was gratified in the gymnasia by the sight of the finest human forms in the prime of youth, and by the halls and colonnades adorned with statues and pictures, and occupied by teachers of wisdom and philosophy, rendered these places the favorite resorts of the old and young. Gymnastics even formed an essential part of the celebration of all the great festivals. After a time, however, the character of the competitors at the Olympian, Isthmian, Nemæan, and other great games of Greece, degenerated, as they became more and more a separate class, exercising, at least in many cases, in buildings exclusively devoted to them. Euripides calls them useless and injurious members of the state. It is not precisely known to what extent their exercises were practised in the gymnasia. The Greeks, as well as the Romans, set a very high value upon the art of swimming. In Sparta, even the young women swam in the Eurotas; and a common phrase of contempt, μητε νειν μητε γραμματα επισταθαι (he can neither swim nor write), is well known. It is well worth while to read the observations of Mercurialis on this subject, in lib. iii, cap. 13, of his valuable *Artis gymnasticæ apud Antiquos celeberri-*

mæ Libri sex (Venice, 1569). Running was also much esteemed, and the Olympiads were, for a long time, named from the victors in the race. Riding on horseback was deemed a liberal exercise. Dancing, by which we are not to understand the modern dancing of the two sexes intermingled, but the art of graceful motion, including oratorical gesture, together with certain formal dances performed at festivals, was likewise indispensable to an accomplished man. (See Lucian, περι ορχησεως.) Wrestling was also much valued. There are not many materials remaining, to enable us to judge of the exercises practised by the Grecian women. In later and corrupt times, they took part in the public games with men. With the decline of Greece, the gymnastic art naturally degenerated, and became gradually reduced to the exercises of professional athletæ, which survived for a long time the ruin of the land of their birth. The Olympic games continued to be celebrated several centuries after Christ. Some late travellers have thought that they could find traces of the ancient games remaining even in our day. "You have the Pyrrhic dance as yet," says Byron. The Romans, under the emperors, imitated the gymnasia as they did every thing Grecian; but their establishments were little better than places of vicious gratification. The thermæ, or baths, in Italy, took the place of the gymnasia in Greece. Among the Romans, gymnastics never became national, as they may be said to have been among the Greeks. There are some indications, indeed, of early gymnastic games,—we mean the *consualia;* but with this stern, martial and practical nation, gymnastics took altogether a more military character. They were considered merely as preparatory to the military service, or, when they constituted a part of the exhibitions at festivals, were practised only by a particular class, trained for brutal entertainments, at which large bets were laid among the spectators, as is the custom at the English races. (Martial, ix, 68; Suetonius, *Tit.* 8.) Vegetius gives us information concerning the exercises in which the young soldiers were trained, and they were of very useful character. When all the acquisitions of the human intellect were lost for a season, and some for ever, in the utter corruption of the latter ages of the Roman empire, and the eruption of wandering barbarians, the gymnastic art perished. We may date its revival from the commencement of tournaments, the first of which were held in the 9th and 10th centuries in France, and may have had their origin in the military games of the Romans, aided by the martial spirit of the descendants of the German conquerors of France. They received, however, their full perfection from the spirit of chivalry. The first tournaments were fought with blunt weapons, which were called *armes gracieuses.* At a later period, sharp weapons were introduced, and many fatal encounters happened before the eyes of the ladies. About the year 1066, Godefroy de Preuelly collected the rules and customs of tournaments into a code, which was afterwards generally adopted. At a later period, the character of these celebrations degenerated so much, that they were finally prohibited by the pope and the emperor, as the Roman *ludi* had been several times prohibited by the emperors. With the superiority which, in the course of time, infantry began to acquire over cavalry, as it always does with the advance of civilization and scientific tactics (see Machiavelli's *Treatise on the Art of War*), and the invention of gunpowder, the institutions of chivalry declined. The heavy steel coats were done away, and the art of skilful fencing began to be introduced. The first treatises upon this subject appeared in the 16th century. The Italians were the first teachers, and three different schools, the Italian, French and German, were soon formed. We speak here of fencing with the small-sword; but the Germans also practised the art of fencing with a straight broad-sword, perhaps owing to their neighborhood to the Slavonian nations, who all prefer the cut to the thrust. The weapon of the Slavonians, however, is the crooked sabre. At the same time, vaulting began to be much practised. The Roman *desultores* (Livy, xxiii, 29, and Vegetius), indeed, lead us to suppose that the Romans knew something of this art; and it was no doubt also practised by the knights of the middle ages; but the present art of vaulting is modern in its character, and carried to the greatest perfection in France. Fighting with a dagger, and even with a knife, was taught as useful in this turbulent age, and much skill was attained in Holland, in defence by the weapon last mentioned, perhaps owing to the fondness of the Dutch for public houses (*estaminets*), as this art may be called, by way of excellence, the *fencing of the tavern.* We even recollect having seen, in an appendix to old works on fencing, the art of defending one's self against attacks, with a pewter beer-pot. Wrest-

ling, as an art, also was revived, and many treatises were written on it in the 16th and 17th centuries, from which we learn that it was often practised in connexion with boxing, forming the same compound as the ancient *pancratium*. The famous painter Albert Dürer wrote *Armorum tractandorum Meditatio* (in 1412). It still exists in manuscript at Breslau. Modern horsemanship had its origin in Italy. The first riding-school was established at Naples. In the reign of Henry VIII, it was introduced into England. Running, shooting, hurling, leaping, were not taught systematically; yet much importance was attached to proficiency in them, in many parts of Europe, on account of the numerous popular meetings, like those which still exist in Switzerland. Even at the present day, young women, with kilted coats, run races at a certain festival in Mecklenburg. Swimming, at this period, was not taught as an art. Where there were convenient places for bathing, children naturally learned it. Elsewhere little pains were taken to instruct them in this useful branch of gymnastics; though in many parts of Europe there were races on and in the water. In the age of wigs, gymnastics declined, and effeminate pleasures took their place. Riding, fencing, vaulting and dancing alone remained, and even these were gradually neglected by the people, and confined to the nobility, on which account these exercises were sometimes called the *exercises of the nobles*; at least, this was the case on the European continent. In England, where noble families never formed so distinct a caste as in other countries of Europe, those branches of gymnastics which still survived, were more generally practised. The Greeks had, besides the combats with the *cæstus*, a contest of boxing, termed *sphæromachia*, because the combatants had balls in their hands. Boxing, taught with caution, is an invigorating exercise, and the skilful boxer is always furnished with natural arms. The art of cudgel-playing is a useful exercise, as practised in France, where it is different from that which is practised in England. In the last century, when men broke loose from the yoke of authority, and thinking and thoughtless heads began to speculate deeply or frivolously on the existing order of things, education began to receive its share of attention, and the better sort of teachers saw that gymnastics must soon be introduced among the other branches of instruction. Salzmann, a German clergyman, was the first instructer of youth, at whose institution in Thuringia bodily exercises were taught, in the latter part of the last century. These were principally running, leaping, swimming, climbing, balancing. Guts-Muths wrote a very respectable treatise upon modern gymnastics, which, as the first, deserves much praise. He afterwards wrote a more enlarged work on the same subject. (See *Guts-Muths*.) The results of this system of exercise, aided by the healthy situation of Salzmann's school, are deserving of notice. In thirty-two years, 334 scholars, from various nations, were educated at this establishment; and not one scholar died there. Seven or eight families also were connected with the institution; and from these only three children died during the same period, and two of these were under a year old. In some few existing establishments, this example was imitated; but the age was still too effeminate, formal manners too prevalent, to allow gymnastics a proper place in education. The French revolution broke out, and Europe received a warlike character. Germany was conquered by the French, and the desire to repulse them became general, but no hope of immediate resistance existed. All eyes were naturally turned towards the youth; and while there was a general desire of reviving in the nation a patriotic spirit, Jahn (q. v.) conceived the idea of establishing gymnasia for two reasons—to prepare the young for a future war against the French, and to bring together in the gymnasia youths of all classes, who might be inspired with a love for their common country. Doctor Jahn established his first *Turnplatz*, the German name for gymnasium, near Berlin, in 1811. But the disasters which the French armies experienced in Russia, led the Germans to a war against France much sooner than the most sanguine had hoped. When the peace of Paris was concluded, the gymnasia, which had been closed during the time of war, were reopened; and, when the Germans found themselves disappointed in their expectations of liberal institutions, when the princes broke their solemn promises, the gymnasia were made use of to inspire the youths with an ardor for liberty. Many imprudent steps were taken by the German people, and Jahn himself was not always wise in his conduct. Much had crept into the gymnasia with which the public was dissatisfied, and when Sand (q. v.) assassinated Kotzebue, and the government, which had already become suspicious of the gymnasia, ordered them to be closed, no opposition was made. We must not omit to

mention here, that, some years before, the Prussian government had ordered an investigation into the gymnasia by the government's physicians, whose report was decidedly favorable. When the persecutions against liberals were renewed, in 1824, with greater violence, Mr. Völker, being compelled to seek an asylum in England, established the first gymnasium in London. At the same time, captain Clias, a Swiss, established a gymnasium at Chelsea, in the royal military asylum. He soon after published his work on gymnastics, the only merit of which is its brevity and clearness. Jahn and his pupil Eiselen had published, soon after the peace of Paris, a work on modern gymnastics, which is excellent in many respects, though it is sometimes too minute and pedantic. When the gymnasia were founded in London, *calisthenics*, or exercises for females, were first taught; but though we think that they should never be omitted, yet we consider those exercises which were taught as founded on erroneous principles. A system of healthy and graceful exercises for females may be established; but those which are now generally practised in English boarding-schools are wrong in principle. Gymnasia have since been reopened in some places of Germany, but they are now strictly confined to bodily exercises. In 1825, doctor Beck, a German, and pupil of doctor Jahn, established the first gymnasium in America, in Northampton, Massachusetts. Others have been subsequently established in different parts of the country. Respecting the various exercises themselves, we must refer the reader to a Treatise on Gymnastics taken chiefly from the German of F. L. Jahn (1 vol., 8vo., Northampton, Massachusetts, 1828). The writer of this article has always observed, that the pupils of a gymnasium after a while lose their interest in the exercises. This was observable even in Germany, where patriotic feelings were mingled with the exercises. The reason of this appears to be, that little or no difference is made in the exercises of different ages, and it is natural that an exercise repeated for years should become wearisome. Gymnastics therefore, when they are taught as a regular branch of education, ought to be divided into two courses. In the first course we would include walking and pedestrian excursions; elementary exercises of various sorts; running, 1. quick, 2. long continued; leaping in height, length and depth; leaping with a pole, in length and height; vaulting; balancing; exercises on the single and parallel bars; climbing; throwing; dragging; pushing; lifting; carrying; wrestling; jumping, 1. with the hoop, 2. with the rope; exercises with the dumb-bells; various gymnastic games; skating; dancing; some military exercises; swimming, which we include in the first course, because it can be easily taught to children. Some of these exercises, of course, are not suitable for very young children, and they should be distributed in a regular gradation, which caution and experience will teach. Gymnastics, properly so called, may be begun by a boy from six to eight years old. The second course consists of repetitions of some of the former exercises of vaulting, both on the wooden and the living horse, either standing or running in a circle; boxing, driving, riding on horseback, and fencing with the broad-sword and the small-sword. Fencing with the small-sword appears to us the noblest of gymnastic exercises. No other is so well entitled to the name of an art; no other calls the powers into such active exercise; no other requires such quickness of limb, of mind and of eye, together with so much self-possession; no other developes so completely the whole frame. It is a noble art. Riding, indeed, deserves likewise the name of an art, in which a man may make continual improvement. It cannot, however, be called so pure a gymnastic exercise as fencing, and, in its nature, it is more mechanical. Many excellent horsemen are men of very inactive or limited minds; but all good fencers whom we have known, were men of quick apprehension and lively intellect. This accounts for the circumstance that the artists of the middle ages valued fencing so highly. Almost all the great masters and distinguished poets of those times, were skilful swordsmen, and some of them wrote treatises on the use of their favorite weapon; for instance, Leonardo da Vinci.* Boxing, riding, and the various exercises on the living horse, should not be commenced much before the sixteenth year. For the views of the writer, respecting the manner in which gymnasia should be established and carried on, to afford the greatest advantage, we refer the reader to an article by him in No. V of the American Quarterly Review, where they are given

* Of Tasso it was commonly said, after he had manfully repelled three assailants—

Colla penna e colla spada,
Nissuno vale quanto Tasso.

His father was a distinguished fencer, as was Albert Dürer.

at some length. As to *calisthenics*, or exercises for the female sex, they should be founded chiefly on balancing, which may exercise the frame in a great variety of ways, affording the means of graceful motion, and being sufficiently strengthening for females. Those exercises which enlarge the hand, and make the muscles of the arm rigid, are not suitable for them. The chest may be developed in many ways without exercising the arms too much; an objection to which the exercises with the dumb-bells are liable.

Gymnosophists, or Brachmans; the name given by the Greeks to the Indian philosophers, because, according to tradition, they went naked. They were divided into two sects—Brahmans (Brachmans, Bramins), and Samans (Sarmans, Garmans). Of their philosophical systems we know only that they made philosophy to consist in constant meditation and the severest ascetic habits, by which they sought to overcome sensuality, and to unite themselves with the Deity. They often burned themselves alive, to become pure the sooner, as Calanus did in the presence of Alexander, and Xarimarus at Athens, when Augustus was there. The little acquaintance of the ancients with the Indies gave rise to many wonderful stories respecting them. This name is sometimes given to the sages of Æthiopia.

Gynæceum (γυναικεῖον, γυναικωνῖτις). The Greeks did not live on a footing of friendly intimacy with their wives, like the moderns, but preserved a certain distance, handed down from the earliest ages, when women were regarded as the slaves and the property of their husbands. Hence the former inhabited a different part of the house, termed *gynæceum*, or the females' apartment, the most remote interior room in the building, situated behind the court. Under the Roman emperors, there was a particular establishment of *gynæcea*, being a kind of manufactories, chiefly under the management of women, for the making of clothes and furniture for the emperor's household. In imitation of these, many modern manufactories, particularly those of silk, where a number of females are associated, are called *gynæcea*.

Gynæcocracy; a form of government in which females are eligible to the supreme command.

Gypsies (from *Egyptians*, the name by which they were called in the English statutes); a wandering nation, whose Asiatic form, language and customs differ entirely from those of European nations. The German name *Zigeuner* has been considered, by some, of German origin, and derived from *Zieh-Gauner* (wandering rogues); yet this seems erroneous, for even when they first appeared in Hungary, in the beginning of the 15th century, they were called *Zigani* and *Zingani*. The Italians, Walachians, and even the Turks, called them *Zingari*, *Tschingani* and *Zigani*. This name is not derived from the *Sigynnæ*, who, according to Herodotus, inhabited the country extending from the Pontus to the Adriatic sea; but it appears most probable that it is originally Indian; for at the mouth of the Indus, there is still a similar people, the Tchingani, whom lieutenant Pottinger lately met with in Beluchistan, on the Persian frontiers, and describes as resembling the gypsies in their peculiar customs. The Dutch call the gypsies *Heiden* (heathen). The Swedes and Danes call them *Tartars*; the French, *Bohemians*. The Spaniards call them *Gitanos*, which designates their crafty character. They call themselves *Pharaôn* or *Sinte* (which corresponds to *Sinde*, the Hindoo name of the inhabitants of Hindostan). This people is spread over all Europe, and it is probable there are 700,000 scattered through the different European countries. The greater part, however, appear to lead their strolling life in the south of Spain. In England, there are above 18,000. Sir Walter Scott has given an excellent description of them in Guy Mannering. It is believed in England, that they are of Indian origin, and that they belonged to the race of the Sindes, an Indian caste, which was dispersed, in 1400, by the expeditions of Timour. Their language is the same throughout Europe, with but little variation, and even now corresponds with the dialect of Hindostan. It has been proposed, in England, to establish schools for them, and to convert them by means of missionaries. In Germany and France, there are but few; but they are numerous in Hungary, Transylvania and Moldavia, where their number amounts to about 200,000. They are still more numerous in Bessarabia, the Crimea, near Constantinople, and in the whole of Turkey. They are remarkable for the yellow brown, or rather olive color, of their skin; the jet black of their hair and eyes; the extreme whiteness of their teeth, on account of which many of the gypsy girls, particularly those of Spain, are considered beauties; and for the symmetry of their limbs, which distinguishes even the men, whose general appearance, however, is repulsive and shy. The gypsies

have much elasticity and quickness; they are seldom of a tall or powerful frame; their physiognomy denotes carelessness and levity. They rarely settle permanently any where. Wherever the climate is mild enough, they are found in forests and deserts, in companies. They seldom have tents, but seek shelter from the cold of winter in grottoes and caves, or they build huts sunk some feet in the earth, and covered with sods laid on poles. In Spain, and even in Hungary and Transylvania, there are, however, some who follow a trade. They are inn-keepers, horse-doctors, and dealers in horses; they are smiths, mend old pans and kettles, and make iron utensils, nails and the like. Some work in wood, making spoons, spindles, troughs, or they assist the farmer in the fields. Their talent for music has been remarked, but it is confined to instrumental music, which they chiefly practise by the ear. They play on the violin, Jews-harp, the bugle, flute and hautboy. Their music for dancing is lively and expressive; there are no better musicians for the Hungarian and Polish national dances. Their lively motions are remarkable in their own peculiar dances, and they have great talent for mimicry. The gypsies who formerly traversed Germany supported themselves by tricks, the women telling fortunes with cards; the men dancing on the rope, and performing similar feats. The gypsy women, in their younger years, particularly in Spain, are dancers. As soon as they grow older, they invariably practise fortune-telling and chiromancy. This is their chief occupation in all parts of Europe. The children go perfectly naked until their tenth year. The men wear a shirt and trowsers; the women, petticoats and aprons, red or light blue. In England, they have red cloaks with hoods, and, generally, a handkerchief tied over the head. They are fond of rings and ornaments. Those gypsies who live a settled life are very fond of dress. Their house utensils consist of a pan, dish, kettle and a silver mug; their domestic animals are horses and pigs. In England, they have always donkeys in their caravans; their food is disgusting. They are fond of onions and garlic, according to the Oriental custom. They eat all kinds of flesh, even that of animals which have died a natural death; on which account, a murrain is the most welcome event for them. Some 30 or 40 years ago, they were accused, in Hungary, of having slaughtered human beings and devoured them, and, in consequence of this charge, were treated with the greatest severity. Their guilt, however, has never been proved. Brandy is their favorite beverage; tobacco their greatest luxury; both men and women chew and smoke it with avidity, and are ready to make great sacrifices for the sake of satisfying this inclination. They have no peculiar religion. Amongst the Turks, they are Mohammedans; and in Spain, at least, as well as in Transylvania, they follow the forms of the Christian religion, without, however, caring for instruction, or having any interest in the spirit of religion. In Transylvania, they often have their children baptized repeatedly at different places, for the sake of the money which it is customary in that country for the godfather to give to the poor parents of his god-child. Marriages are formed in the rudest manner. The young gypsy marries a girl, without caring if she is his sister or a stranger, often when he is not more than 14 or 15 years old. In Hungary, another gypsy officiates as priest at the wedding. No gypsy will marry any but one of his race. If he becomes tired of her, he will turn her off without ceremony. There is no idea of education amongst this people. A blind, almost animal love for their children, prevents them from punishing them, so that they grow up in idleness, and are accustomed to steal and cheat. The depravity of this people is so great, that they have a real enjoyment in cruelty; so that they were formerly employed, in preference, as executioners. At the same time, they are great cowards, and only steal where they can do so with safety. They never break into houses at night. The plague having occurred in a certain town of Spain, the gypsies flocked into the houses in hordes, and plundered the unprotected inhabitants. In Transylvania, they are very expert at washing gold. On account of their cowardice, they have never, in Spain, been used for soldiers. In Hungary and Transylvania, they have been occasionally taken into the armies, but they have never distinguished themselves by bravery. It has been repeatedly proposed to banish this people from Europe. In France and Spain, in Italy and Germany, laws were passed against them in the 16th century. But even persecutions were of little avail towards rooting them out. They always appeared again in the southern countries. As they are very numerous in the Austrian states, and have a kind of constitution there amongst themselves, being in a

manner governed by chief gypsies or *waywodes*, the great Maria Theresa formed the plan of converting them into orderly men and citizens. In 1768, she issued an ordinance, that, in future, gypsies should dwell in settled habitations, practise some trade, dress their children, and send them to school. Many of their disgusting customs were prohibited, and it was ordered, that they should forthwith be called *Neubauern* (new peasants), instead of their former name of *gypsies*. This ordinance remaining ineffectual, recourse was had, in 1773, to severe measures; the children were taken from their parents, and brought up in Christian principles. But as little was effected in this way as by the very mild measures adopted by the Russian government. However, the ordinances of Joseph II (1782 et seq.), to forward the improvement of the gypsies, in Hungary, Transylvania and the Bannat, have not been without effect. With regard to their language, most of the words are of Indian origin. They are found, in part, with little variation, in the Sanscrit, in the Malabar and Bengal languages, and many words have been adopted from the different nations amongst whom they reside. Heber, bishop of Calcutta, relates, in his Narrative of a Journey through the Upper Provinces of India, &c. (London, 1828, 2 vols.), that he met with a camp of gypsies on the banks of the Ganges, who spoke the Hindoo language as their mother tongue. Heber found the same people in Persia and Russia. Their grammar is also Oriental, and corresponds with the Indian dialects. This similarity cannot be considered the work of chance, particularly as their persons and customs show much of the Hindoo character. It has even been attempted to derive their origin from a particular caste of the Hindoos. But this cannot be the respectable caste of the mechanics and agriculturists. They are more probably a branch of the Parias, who are considered contemptible by all the other Hindoos, because they live in the greatest uncleanliness, and eat the flesh of beasts, which have died of sickness. It cannot, however, be easily explained, why this particular caste should have left their country and spread throughout Europe. The Tschinganes, a nation at the mouth of the Indus, appear, at least, judging from their name, more likely to be connected with the gypsies. The gypsies also call themselves *Sinde*, a name which doubtless has some correspondence with *Sind* or *Indus*. Mr. Richardson, some time since, described an Indian nation whom he called *Nuts* or *Pentschpiri* and *Basigers*. (See a discussion on the similarity of the gypsy language with the Hindoo, in the *Transactions of the Lit. Society of Bombay*, 1820.) Although they acknowledge the Mohammedan religion, they are much like the gypsies in customs and manners, in their propensity to thieving, fortune-telling and uncleanliness. In 1417, the first mention is made of the gypsies in Germany. They appear to have come from Moldavia into Germany and Italy. At that time, they already wandered about in hordes with a commander at their head. In 1418, the number which entered Italy alone, was estimated at 14,000 men. There were many in Paris in 1429. They were first believed to be pilgrims, coming from the Holy Land; they were, consequently, not only unmolested, but they received letters of protection; for instance, from Sigismund, in 1423. It is known, however, that in later times, they were very expert in counterfeiting similar documents. What may have been the cause of their leaving their country, is not known; but very probably they were induced to fly from the cruelties exercised by Tamerlane, on his march into India, in 1393, when this savage conqueror filled the country with blood and devastation.—See Grellmann's *Histor. Versuch über die Zigeuner* (Historical Inquiry concerning the Gypsies), 2d edit. Göttingen, 1787; and Joh. v. Müller's *Schweizergeschichte* (History of Switzerland), vol. 3. *Sämmtl. Werke*, vol. 21, p. 369 et seq.

Gypsum, sulphate of lime, or common plaster of Paris, is found in a great variety of forms. It is either in regular crystals, in which form it is sometimes called *selenite*, or in large crystalline plates and masses, which are perfectly transparent, and as pure as the finest plate-glass; or it occurs in fascicular or radiated masses, which are also crystallized; it is sometimes found in snow-white, scaly flakes, like foam or snow; it is sometimes semi-transparent, like horn; and, lastly, it is met with most commonly in large, fine or coarse-grained compact masses, forming rocks, and constituting large and extensive strata. In this form, it exhibits a great variety of colors—white, red, brown, blueish white, &c. The variety of gypsum last described, constitutes all the hills and beds of this mineral, which are so frequent among secondary rocks, and in what are called the *salt* and *coal formations*. It occurs rarely, if ever, among the primitive rocks, and not often among

those of the transition class. It is almost always found associated with the rock salt, whereon salt-springs are found. It contains but few vegetable or animal remains; those that occur, are chiefly bones of quadrupeds, amphibia, fresh-water shells, and vegetable remains. Caves are of frequent occurrence in gypsum. The purer semi-transparent specimens of gypsum are used for ornamental works, as vases, urns, &c., and for statuary; for which purposes its softness makes it very useful, and easy to work; but this also renders it difficult to polish. In this last form, it is the alabaster of the arts. It constitutes the material used in making the fine plastering for the internal finishing of costly edifices, and gives the walls a most beautiful whiteness. It is also used, after being burned, for the composition of stucco-work of all sorts. But the great and important use of gypsum, or *plaster*, as it is usually called, is for manuring grass and grain lands; in which cases it is truly invaluable. And it is inconceivable how great an additional quantity of grass will be obtained, by the sprinkling a peck of ground plaster upon the acre of land. It is certainly the cheapest and best manure for grass or grain. It is found in all the countries of Europe, and occurs in very extensive deposits in New York, and in the Western States, in all which great quantities are dug and sold for the uses above described.

GYRFALCON, or JERFALCON. (See *Falcon.*)

GYROMANCY (from the Greek words γυρος, a circle, and μαντεια, prophecy); the art of prophesying by means of a circle, described by the soothsayer with various ceremonies, and around which he walks, saying magic words, and making mysterious motions, the more effectually to deceive the uninitiated.

H.

H; the eighth letter and sixth consonant in the English alphabet. *H* was not always considered a consonant. The other consonants are pronounced with a less opening of the mouth than the vowels, but *h* with a greater opening than even the vowel *a*. In Latin and ancient Greek, it was, therefore, not considered as a consonant, but merely as a breathing. The latter language, as is well known, had no literal sign for it, but merely what is called the *rough breathing* (ʽ); and in Latin prosody, it is not considered as a letter. In languages in which *h* is considered a consonant, it is classed with the gutturals. In connexion with other consonants, it sometimes renders them softer; as, for instance, after *p*; in Italian, however, it serves to give to *c* and *g*, followed by *e* or *i*, the hard sound (that of *g* in *give*, and *c* in *color*); hence *che* is pronounced *ke*, and *ghibellino* like *gibeline* in English. It is a very delicate letter, and is frequently not sounded at all; as, in French, in all words beginning with *h* derived from Latin. It also takes the place of other letters, as of *f* (q. v.), in Spanish, or of *c*; as the people in the environs of Saint-Malo say *hlef* and *hloche* for *clef* and *cloche*. In the article *G*, it is shown how intimately *h* is connected with the two guttural sounds of the German *ach* and *ich*; and, as these are only stronger aspirations than *h*, *g* is intimately connected with *h*, as we find to be the case in the Sclavonic languages. In the Bohemian, Wendish and Sclavonic languages, *h*, at the beginning of a word, particularly before *l* and *r*, is frequently pronounced like *g* or *gh*; as, for instance, *Hlubos* is pronounced *Glubosh*; *Huspodar*, *Gospodar*. The name of the German town *Glaucha* comes from the Wendish *Hluchowe*; and in the Russian alphabet, *g* and *h* have only one character. In the ancient Frankish dialect, *h* often stood before *l*, *r* and *i*; and, at a later period, it was sometimes suppressed, sometimes changed into *ch* or *k*; as *Hlothar*, *Hrudolf*, *Hlodowig*, have become *Lothaire* and *Clothaire*, *Rudolf*, *Ludwig*. But we must not suppose that *h* was not pronounced, wherever it would be difficult for us at present to sound it; because we find the aspirates *h*, *v*, *w*, before *l*, *n*, &c., in the dialects of the North American Indians. An erroneous aspiration early crept into the Latin, of which Cicero complains (*Orat.* 48), and on which Ca-

tullus made an epigram (c. 83). The orthography of *pulcher*, *triumphus*, *cohors*, &c., was then substituted for *pulcer*, *triumpus*, *coors*, which, as well as that of *Gracchus* and *Bacchus*, although quite foreign from the Latin, was gradually adopted as the correct one. The Italians have almost entirely banished *h* as an independent letter; they leave it out at the beginning of words, with few exceptions, because it is not pronounced; and instead of *ph*, they write *f*. In the English language, *h* is used, in connexion with *t*, to designate the lisping sound which the Spaniards denote by *z*, and the Greeks by *θ*. The French and German *th* are pronounced like simple *t*. The H of the Greeks was the long *e*, but was sometimes used as an aspirate, as in words in which it precedes *e*, as HEKATON. It was formed by the union of the two breathings, the rough ⊦ and the smooth -⊦. On Roman coins, inscriptions, and in manuscripts, H has a diversity of meanings, as *honestas*, *hic*, *hæres*, *homo*, *habet*, *hora*, *honos*, *Hadrianus*, &c. On modern French coins, it means the mint of Rochelle. H, among the Greeks, as a numeral, signified 8; in the Latin of the middle ages, 200, and H with a dash over it, 200,000. In music, *h* is the seventh degree in the diatonic scale, and the twelfth in the chromatic; in the solmization called *b mi*, being the seventh major of *c*, the pure fifth of *e*, and of *g* the third major.

Haarlem, or Haerlem; a city of the Netherlands, in North Holland, on the river Spaaren, about three miles from the sea. It communicates with Amsterdam, Leyden and the lake of Haarlem, by several navigable canals. It was formerly a place of strength, but the ramparts are now converted into public promenades. A number of canals traverse the town in different directions, some of them bordered with trees. Among the public edifices are the *stadthouse*, an elegant building, containing a valuable collection of pictures, a mansion or palace of the royal family, and several charitable institutions. The number of churches, great and small, is 15; the principal one is said to be the largest in Holland, and contains a collection of antiquities of the time of the crusades, and a remarkable organ. The other objects of interest are, the town library, the anatomical theatre, and the botanical garden. The scientific institutions are, the academy of sciences, founded in 1752, and the horticultural society; to the former belongs a valuable museum. Here are several manufactures on a small scale, viz., jewelry, cotton, linen and silk stuffs, thread and ribbons. Haarlem has long been celebrated for its bleaching grounds. It carries on an extensive traffic in flowers, particularly tulips. Population, 22,000; 11 miles west of Amsterdam; lon. 4° 38′ 19″ E.; lat. 52° 22′ 56″ N.

Habakkuk; a Jewish prophet, who flourished about 600 B. C. His prophecy is in an elevated religious, lyrical style. Lamentations for the fearful devastations of the Chaldæans in Judæa, and the approaching downfall of the kingdom, consolations and cheering hopes for the future, the humiliation of the conquerors, and a new period of happiness for the Jews, form the contents of his writings. His sentiments and language are greatly admired. With all the boldness and fervor of his imagination, his language is pure, and his verse melodious. His expressions are characteristic and lively. His denunciations are terrible; his derision bitter; his consolation cheering. *Habakkuk* seems to signify *struggler*. He is one of the 12 minor prophets.

Habeas Corpus. It is one of the first objects of all civil institutions, to secure to every member the rights of personal liberty, or, in other words, the control and disposition of his own person, at his own will and pleasure, in such manner, however, as not to violate the laws or infringe upon the rights of others. It may seem, upon the first consideration of the subject, that this is not an object of the institutions and laws of an arbitrary government, since the sovereign, and those representing him in an executive or military capacity, may seize and imprison any one, with or without cause, or upon grounds more or less important and excusable, according as the government is, in its principles and in its administration, more or less arbitrary. But a slight reflection will show, that, even in the most arbitrary governments, the first object is, to secure one subject from the seizure of his person, or the violation of his rights, whether of person or property, by another; for in a community of men, where every member should be left at liberty to seize upon and imprison any other, if he had the physical power to do so, there would be, substantially, and to practical purposes, no government at all. There might be an association of men acting under the orders of the prince, and in concert with each other, who should have more power than any other association in the community, and who might, accordingly, by the right of the strongest, seize

persons and property at their own will and pleasure; but such an association would hardly deserve the name of civil polity or government, which signifies not merely physical power and superiority of force, which exists among brutes as well as men, but a body of laws more or less extensive, whereby the liberty and rights of the subjects are secured more or less effectually, according to the degree of improvement and perfection in the constitution and laws of the state. In every government, therefore, whether arbitrary or free, or occupying any one of the various degrees in the scale of freedom, one of the first and most important objects, is the security of the persons from violence or detention, not authorized by law. There is, then, this essential difference, in this respect, between different governments;—in those which are arbitrary, the present will of the sovereign, and, accordingly, of those representing him in civil and military capacities, is the law; whereas, in others, the law is a fixed rule, which every citizen or subject may know and conform to, if he chooses; the sovereign and the magistrates being bound by this law no less than the other members of the society. This fixed law settles, beforehand, all the cases in which any person may be detained or imprisoned; and the term *imprisonment*, in this application, does not signify merely shutting up in a gaol, since the voluntary detention of a person in a private house or in the streets, says sir William Blackstone, is an *imprisonment*. The cases, in which imprisonment is lawful, being thus ascertained by the law, the great provision of *magna charta* intervenes, namely, "That no freeman shall be seized or imprisoned, but by the judgment of his equals or the law of the land." The term *equals* or *peers*, here, has reference to an indictment or trial by jury, or other body, of which the office and functions are equivalent to those of jurors, as is the case in regard to the house of lords, in respect to certain parties and offences. This particular mode of accusation or trial might as well be omitted, and the rule would then stand, that no man should be imprisoned but by the law of the land. It is the law alone that can imprison, and not the sovereign, or any representative of the sovereign, whether the sovereignty resides in one individual, or a body, or more than one body of men. This principle constitutes the leading feature of *magna charta*, and lies at the foundation of every free government. In order to secure personal liberty, and, at the same time, to maintain government, which requires, in the case of crimes and some others, the restraint of the person, it is absolutely essential that the law should not only specify, explicitly, the cases in which the citizen may be seized or imprisoned, but also provide that he shall not be arrested, or restrained of his liberty, in any other case whatever; and such is the law in England and in all of the U. States. Nor is this principle confined to the person, it being no less the law that a man's goods, than that his person shall not be seized and detained, otherwise than by order of the law. Such being the rules that lie at the foundation of civil society, the very important question occurs, How these rules are to be enforced; how is the law, most effectually, to guaranty to every one of its subjects, the inviolability of his person and property? The first and most obvious security is that derived directly from the law of nature, and not surrendered among the other sacrifices made by the members of a community to each other, as a condition precedent to the forming of civil society. The law permits every man to defend his person and property, and to repel, by force, any unlawful invasion of either. It will not justify him in using extreme force, and committing any outrageous, disproportionate or wanton injury, in resisting and repelling even an unlawful injury of his person or property; but it will justify him in using a reasonable degree of force, proportioned to the injuriousness or atrocity of the violence attempted by the assailing party. But the law of nature affords but a feeble protection, and men unite in communities, for the purpose of obtaining more effectual defences against wrong, and reparations for injuries when committed; and the very first provision of the law is to inflict punishment for any wrongs and violence, whereby the public is disturbed, and also to make reparation to a party injured. If one man unlawfully seizes the property, or imprisons the person of another, he is, by the laws of every community, liable to make amends in damages. As far, therefore, as an injury is such that it can be repaired by a pecuniary compensation, and as far as the trespasser is able to make such reparation, the remedy is complete. But since trespassers are not always able to make reparation for injuries, and some injuries are such that pecuniary damages are not an adequate reparation, and, also, because the law intends to prevent wrongs, as well as to provide for punishments and compensations

where they have been committed, it provides certain processes for immediate prevention, in case of a violent and unauthorized invasion of property or person. Of this character are the processes on complaint for forcible entry on real estate, the action of replevin in respect to goods and chattels, and the writ *de homine replegiando*, or writ of *habeas corpus*, in respect to the person. The writ *de homine replegiando* is similar to that of replevin, and is, in fact, as its name imports, *the replevying of a man*. When a man's person has been carried out of the country, so that he cannot be found, then a process takes place somewhat similar to that adopted when goods are carried off, so as not to be repleviable. In the case of the goods, a process *in withernam* issues, by which other goods are taken. So in the case of the man; the person who thus conveyed him away, is himself taken in a process *in withernam*, as a pledge for the restoration of the person sought to be replevied. This process of replevying a man is very ancient in the English law; forms of the writ being given by Fitzherbert, and also found in the Register of Writs. But it was not until more than 400 years after the date of *magna charta*, that an adequate remedy was adopted, whereby the great privilege, provided for in that charter, was effectually secured. This security was effected by the *habeas corpus* act, passed in the thirty-first year of Charles II, c. 2, which has been adopted, in substance, in all the U. States; and many of the state constitutions expressly guaranty to the citizens the right to this writ, as one of the fundamental principles of the government; and by the constitution of the U. States, the privilege of this writ is secured, at all times, except in cases of rebellion or invasion, when the public safety may require its suspension. The right is liable to be suspended in England in the same cases, it being sometimes necessary to clothe the executive with an extraordinary power, as the Romans were in the habit of choosing a dictator in emergencies, when the public was in danger. This, as sir William Blackstone says, is the sacrifice of the security of personal liberty for a time, the more effectually to secure it in future. At all times, when the privilege is not suspended by law, every citizen has a right to this writ. It is, however, to no purpose that the party should be brought before a judge, on *habeas corpus*, to be immediately remanded to prison. The laws, accordingly, except certain cases; thus the laws of New York provide, that if a person is not a convict, or in execution by legal process, or committed for treason or felony, plainly expressed in the warrant, and has not neglected to apply to be released for two whole terms, he is entitled to this writ. An application may be made to a judge, either in court or out of court, for this writ; and if it does not appear that the person is imprisoned under some of the circumstances above-named, or, if it be in some other state than New York, if it does not appear to the judge, that his case comes under some of the exceptions provided by the law of the state (and the laws except only the plainest cases), then it is the absolute duty of the judge to grant the writ, directed to the gaoler, officer or person who detains the complainant, ordering him to bring the prisoner before him. The laws of England provide, that, if the chancellor or any of the 12 judges refuses the writ when the party is entitled to it, he incurs a very heavy forfeiture to the complainant. It is universally, in the U. States, the imperative duty of the judge to order the complainant to be immediately brought before him, unless his case plainly comes within one of the exceptions pointed out by the law. The party being thus brought up, the judge determines whether he is entitled to be discharged, absolutely, or to be discharged on giving a certain bail, or must be remanded to prison. If the imprisonment is wholly unauthorized, the complainant is discharged; if it be not unauthorized, but is yet for a cause in which the party is entitled to be discharged on giving bail, the judge orders accordingly. This is the writ which is justly denominated the *great bulwark* and second *magna charta* of British liberty. And it is no less the bulwark of American than of British liberty; for it not only protects the citizen from unlawful imprisonment, at the suggestion of the civil officers of the government, in behalf of the public, but also against groundless arrests at the suit or instigation of individuals. There are other writs of *habeas corpus*, but the one we have described is always intended when the terms are used without explanation.

Habitation. (See *Domicil*, *Appendix* to vol. iv, page 613; also *Dwelling*.)

Hache d' Armes (*French*); the battle-axe, or mace, of the knights.

Hacienda (*Spanish*); a farm, singly situated; also public revenue.

Hackberry, or Hoop Ash (*celtis crassifolia*), is a western tree, abundant in the basin of the Ohio and beyond the Missis-

sippi, and occurring sometimes on the eastern slope of the Alleghanies, especially in the basins of the Susquehanna and Potomac. It grows to a great height, but the thickness of the trunk is not proportional. The leaves, which are not unlike those of the mulberry, are larger than in the other species of nettle-tree, ovate and acuminate; the small white flowers are succeeded by one-seeded berries, of a black color, and resembling peas in size and shape. The wood, on account of its aptitude to decay, is little used, but is said to make very fine charcoal.

Hackert, Philip; a distinguished German landscape-painter, born at Prentzlow, in the Ukermark, in 1737, died at Florence, 1806. His four younger brothers were also distinguished in the arts, three of them in painting, and one (George) in engraving. In 1768, Philip Hackert went to Italy. On his return from Naples (in 1770) to Rome, Catharine, empress of Russia, employed him to paint six pictures representing the two battles of Tschesme. These laid the foundation of his fame. In order to enable the artist to form a correct notion of the explosion of a vessel, count Orloff caused a Russian frigate to be blown up in his presence. The singularity of this model, many months before spoken of in all the European papers, contributed not a little to increase the fame of the picture. In 1782, he was presented to Ferdinand, king of Naples, whose favor he soon gained. In 1786, he received an appointment in Naples. When the revolutionary wars broke out, being considered by the royalists as a republican, and by the French as a royalist, he was obliged to retire to Florence, where he died in 1806. His forte lay in painting scenes. To originality of composition his pictures have no claim. He was also skilful in restoring pictures, as appears by his letter to lord Hamilton, *Sull' uso della vernice nella pittura* (1788). He communicated fragments to Göthe, on landscape painting, who published *Ph. Hackert's Biographische Skizze, meist nach dessen eignen Aufsätzen*. This work contains anecdotes of king Ferdinand, such as his formal distribution of pieces of wild boar's flesh among his favorites, according to their rank, and other stories of the same sort, illustrating the imbecility of the Neapolitan court, depicted, likewise, in Collingwood's Letters.

Hackmatack; a term applied, in many parts of the United States, to the American larch. (See *Larch.*)

Hackney; a large and populous village and parish of England, in Middlesex, two miles from London, to which it is joined by several new rows and streets. It has a receptacle for lunatics. St. John's palace, an ancient house in Well's street, now let out in tenements to poor families, is believed to have been the residence of the prior of the order of St. John of Jerusalem. In this parish, south of Seabridge, are the Temple mills, once belonging to the knights Templars. Population 22,494.

Hackney; a horse kept to let. This term in England is often shortened into hack.—*Hackney coach*; a coach kept to let. In the United States, such coaches are commonly called *hacks*. Hackney coaches began first to ply, under this name, in London, in 1625, when they were twenty in number. (See *Coaches.*)

Haddock (*gadus æglefinus*). This fish appears in such shoals as to cover a tract of many miles, keeping near the shore. In stormy weather, they will not take the bait. The fishermen assert, that they then bury themselves in the mud, and thus shelter themselves till the agitation of the water has ceased. In proof of this, they allege that those which are taken immediately after a storm are covered with mud upon the back. The common size of the haddock is 12 inches. It has a brown back, a silvery belly, and a black lateral line. On each side, about the middle, is a large black spot, the prints, as is superstitiously believed, of the finger and thumb of St. Peter, when he took the tribute money from its mouth; but, unfortunately, the haddock is not the only fish thus distinguished. It derives its specific name from *eaglefin*, which was anciently its common appellation.

Hades. (See *Pluto.*)

Hadjy; the title of a Mohammedan who performs a pilgrimage to Mecca—a religious act, which every true believer is directed to perform, at least, once. *Hadj* is the name of the celebration which takes place on the arrival of the caravans of pilgrims at Mecca. (For an account of it, see the article *Arafat.*) A very interesting description of the *hadj*, and the numberless pilgrims, together with Mecca and the Caaba, is to be found in Burckhardt's Travels (2 vols. 4to., London).

Hadley, John, vice-president of the royal society of London, who (in 1731) is said to have invented the reflecting quadrant. The invention is also attributed to Thomas Godfrey, of Philadelphia. (See *Godfrey.*)

Hadriatic. (See *Adriatic.*)

Hæma (from the Greek αἷμα, blood); a word which appears in a great number of

scientific compounds, particularly in botany, mineralogy and medicine.

Hæmatics (from αἷμα, Greek, *the blood*); the branch of physiology which treats of the blood.

Hæmatite, Red, and Brown. (See *Iron, Ores of.*)

Hæmus, in ancient geography; a chain of mountains running eastwardly from the ancient Orbelus to the Pontus Euxinus, and separating Mœsia from Thrace. It terminated in a cape on the Black sea, called *Hæmi Extrema*, at present *Eminetagh*. The modern name of the Hæmus is *Balkan*. (q. v.) Fable derives this name from Hæmus, king of Thrace, who, considering himself equal to Jupiter, was changed, with his wife, who compared herself to Juno, into this mountain.

Hænke, Thaddeus, a Bohemian natural philosopher and traveller, was invited by the Spanish government to accompany Malaspina on his voyage round the world, in 1789. He arrived at Cadiz 24 hours after the expedition had set sail. He followed it in the next vessel that sailed to the river Plata, but was wrecked on the coast of Montevideo. Hænke swam safe ashore, with his Linnæus and his papers in his cap; and, finding that the expedition had already set sail, he determined to seek captain Malaspina in St. Jago, by crossing the Andes. Without any knowledge of the language of the country, and without any assistance, this courageous predecessor of Humboldt surmounted all obstacles, and succeeded in joining Malaspina. Hænke never returned to Europe; he died in America, perhaps purposely detained. The royal Bohemian national museum possesses his collections of natural history. It published at Prague, in 1825, *Reliquiæ Hænkeanæ, seu Descriptiones et Icones Plantarum quæ in America Merid. et Boreali, in Insulis Philippinis et Marianis collegit Thaddeus Hænke* (with 12 engravings).

Haff, an antiquated German word, signifying the sea, and also a large bay, which appears in geographical names, as *Curische-Haff*. *Hâvre*, in French, as *Hâvre de Grace*, is derived from it; and *havn*, in the Danish, *Kiœbenhavn* (Copenhagen), port of merchants, is connected with it; as are also the Swedish *ham* or *hamn*, signifying *port*, as in *Friedrichsham* (Frederic's port), the English *haven*, and the German *hafen*.

Hafiz, or Hafez, Mohammed Schemseddin, one of the most celebrated and most charming poets of Persia, was born at the beginning of the 14th century; studied theology and law, sciences which, in Mohammedan countries, are intimately connected with each other. The surname Hafiz was given him because he knew the Koran by heart. He preferred independent poverty, as a dervise, to a life at court, whither he was often invited by sultan Ahmed, who earnestly pressed him to visit Bagdad. He became a sheik, or chief of a fraternity of dervises, and died, probably at Shiraz, in 1389, where a sepulchral monument was erected to him, which has been often described by travellers; but, in October, 1825, an earthquake at Shiraz destroyed, among many other buildings, the monument of Hafiz, together with that of the celebrated Sadi. Some idea of his style and sentiments may be obtained through the medium of translations. Sir William Jones published translations of two of his odes, which are extremely beautiful; besides which, may be noticed Nott's Select Odes of Hafiz, translated into English Verse, with the Original Text (1787, 4to.), and Hindley's Persian Lyrics, from the Divan-I-Hafiz, with Paraphrases in Verse and Prose (1800, 4to.) The songs of Hafiz were collected into a *divan*, after his death, which was published complete (Calcutta, 1791), and translated into German by the celebrated Orientalist von Hammer (2 vols., Stuttgard, 1812—1815). The poems of Hafiz are distinguished for sprightliness and Anacreontic festivity. He is not unfrequently loud in praise of wine, love and pleasure. Some writers have sought a mystic meaning in these verses. Feridoun, Sururi, Sadi and others, have attempted to explain what they supposed to be the hidden sense.

Hagar (i. e., the *stranger*); an Egyptian slave in Abraham's house. She was presented, by her mistress Sarah, to Abraham, in order that Abraham might not die without descendants, Sarah herself being barren. Hagar bore Ishmael; but Sarah soon became jealous of her, and treated her severely. Hagar fled, but afterwards returned, and, when Sarah bore Isaac, was sent away by Abraham, who, the Bible informs us, had received a divine order to dismiss her. She suffered much distress in the desert, but was relieved by an angel, and married her son to an Egyptian woman. (*Gen.* i, 16, 21.) Saint Paul makes her the allegorical representation of the Israelites, who were deprived of any participation in the gospel, as she with her son did not inherit any thing from Abraham. (*Gal.* iv. 21.)

Hagedorn, Frederic von, a German poet, native of Hamburg, was born in 1708. He received a good education, and dis-

played talents for poetry when young; but, becoming an orphan at the age of 14, he found himself dependent on his own exertions for support. He, however, continued studying in the gymnasium at Hamburg, till 1726, when he removed to the university at Jena, as a law student. In 1729, he published a small collection of poems; and the same year he went to London, in the suite of the Danish ambassador, baron von Sœlenthal, with whom he resided till 1731. He obtained, in 1733, the appointment of secretary to the English factory at Hamburg, which placed him in easy circumstances. It was not till 1738 that he again appeared before the public as an author, when he printed the first book of his Fables, which were much admired. In 1740, he published the Man of Letters, and, in 1743, his celebrated poem On Happiness, which established his reputation as a moral writer. The second book of his Fables appeared in 1750; and he afterwards produced many lyric pieces in the style of Prior. He died of dropsy in 1754. Wieland, in the preface to his poetical works, terms him the *German Horace*.

Hagen, Frederic Henry von der, professor in the university of Berlin, was born Feb. 19, 1780, at Schmiedeberg, in the Ukermark. In his 18th year, he went to Halle to study law, but Wolf's lectures won him over to the belles-lettres, in the study of which he was still more confirmed by the turn which German literature received from Schiller, Göthe, Novalis, Tieck. In 1807, Hagen published, in Berlin, a collection of old popular songs. On his travels, he became acquainted with many of the most eminent literati, and particularly Eschenburg, who liberally permitted him to make use of his important collections. In 1808, he published, with Büsching, German Poems of the Middle Ages (1 vol., 4to.); in 1809, *Das Buch der Liebe*, a collection of old German tales, in prose; 1809—1812, the *Museum für altdeutsche Literatur und Kunst*, in connexion with several other literati. In 1810, he was appointed professor of the German language and literature, at the new university of Berlin. In 1812, he published, with Büsching, the *Grundriss zur Geschichte der altdeutschen Dichtkunst*, and lectured on the *Nibelungenlied*. In 1811, he was appointed professor in Breslau. At a later period, he lectured on the old German and northern mythology; but his most important work was a new edition of the *Heldenbuch*. (q. v.) In 1812, he published a collection of the songs of the Edda; and, afterwards, a body of old northern *Sagas*; and, in 1814—1815, translations of the *Wilkina* and *Niflunga Saga* (originally taken from the German), and of the *Wolsunga Saga*. He then travelled in Italy and the south of Germany, partly in company with professor Raumer, the historian. In 1820, he published his 3d edition of the *Nibelungenlied*. In 1823, he went to Paris, to make use of the manuscripts of the Manessean collection of 140 old German poets. In 1824, he was again appointed professor at Berlin. He has published numerous other works illustrative of old German literature.

Hager, Joseph; born about 1750, at Milan, of a German family; a distinguished Orientalist, professor of the Oriental languages in the university of Pavia. He first distinguished himself in the literary world by the discovery of the fraud of a Sicilian monk, named Vella, who had attempted to impose on the court of Palermo by some forged documents relative to the history of Sicily. Hager left Palermo for England, where he in vain endeavored to excite the attention of the public in favor of his researches concerning Chinese literature. His pretensions as an Oriental scholar were questioned by doctor Antonio Montucci, an Italian resident in that country, who was engaged in similar pursuits. Hager published an Explanation of the elementary Characters of the Chinese, with an Analysis of their Symbols and Hieroglyphics (London, 1801, folio), and a Dissertation on the newly-discovered Babylonian Inscriptions (1801, 4to.). He then went to Paris, where he produced the following works: the Monument of Yu, the most ancient Inscription in China (1802, folio); a Description of the Chinese Medals in the imperial Cabinet of France (1805, 4to.); the Chinese Pantheon, or a Comparison of the religious Rites of the Greeks with those of the Chinese (1806, 4to.). From Paris Hager removed to Milan, where he published, in Italian, Illustrations of an Oriental Zodiac, preserved in the Cabinet of Medals at Paris, and which was discovered near the Site of ancient Babylon (1812, folio). In his *Miniere*, he intended to show that the Turks were formerly connected with the Chinese. His Observations on the Resemblance between the Language of the Russians and that of the Romans (Milan, 1817), is full of hypotheses. Julius Klaproth has shown that Hager's works, though they have great merit, contain gross mistakes. He died at Milan, June 27, 1820.

Hagerstown; a post-town of Maryland, and capital of the county of Wash-

ington, on Antietam creek, 69 miles N. W. of Washington, 71 W. by N. of Baltimore; population, in 1820, 2690. (For the population in 1830, see *United States.*) It is a pleasant and flourishing town, regularly laid out and well built, a great part of the houses being of brick or stone. It is situated in a fertile and well cultivated tract of country, which is one of the best districts in the U. States for raising wheat. The town contains a court-house, a jail, a town-house, a masonic hall, an academy, and five houses of public worship, for German Lutherans, German Calvinists, Episcopalians, Roman Catholics, and Methodists, one each.

Haggai; one of the minor prophets, who, immediately after the return of the Jews from exile, urged the rebuilding of the temple, as a condition of the divine blessing for the new state. (*Ezra* v. 12; vi. 4.) He therefore lived in the time of Darius Hystaspes, Ezra and Zacharias. Some critics have thought that the writings now bearing his name are only summaries of his works, because, they say, they show a poverty of ideas and imagination. The best modern edition of Haggai is in Rosenmüller's *Schol. in Vet. Test.*, p. 7, vol. iv, where the former commentaries are also to be found.

Hagiographa (ἅγιος, holy). The Jews divide the Old Testament into three parts: 1. the law, which comprehends the five books of Moses; 2. the prophets; and, 3. the writings termed by them *Cetubim*, and by the Greeks *Hagiographa*, whence the word has been introduced into the English language. The *Cetubim* comprehended the books of Psalms, Proverbs, Job, Daniel, Ezra, Nehemiah, Chronicles, Ruth, Lamentations, Ecclesiastes, and Esther. The *Hagiographa* were distinguished from the prophecies, because the matter contained in them was not received by the way of prophecy, but simply by direction of the Spirit.

Hague, the (German, *Haag*; Dutch, *Gravenhage*); a beautiful town in South Holland, 10 miles S. S. W. Leyden, and 30 S. W. Amsterdam, and nearly 3 from the sea-coast. It yields to few cities in Europe in the beauty of its streets, the stateliness of its buildings, and the pleasantness of its situation. The principal streets of the Hague are wide, straight and handsome. There are here six squares and a fine park, all of which form pleasant promenades. Of the public buildings, the old palace is an enormous pile, presenting specimens of almost every species of architecture. The mansion of the family of Bentinck, that of prince Maurice, and the new palace begun by William III, are all deserving of attention. The number of churches is 14; and there are also several charitable institutions. The greatest defect in this pleasant town arises from the neglect of the canals, several of which are stagnant, and emit a disagreeable smell, which forms a strange contrast to the general cleanliness of the place. On the south-east of the Hague, at a distance of about a mile and a half, is the castle of Ryswick, which gave its name to the well known treaty of 1697. The Hague became, in 1250, the residence of the governors or counts of Holland. It suffered greatly in its importance after the erection of Holland into a kingdom by Bonaparte. Before the late revolution, it was, alternately with Brussels, the residence of the king and place of meeting of the states. (See *Netherlands.*) Population, 44,000.

Hahn, Philip Matthew, a celebrated mechanical genius, born in 1739, at Scharnhausen, was fond, when a very young boy, of making experiments with sun-dials. In his 13th year, finding in his father's library an account of the mode of constructing them, he immediately set about making one. At the age of 17, he went to the university of Tübingen, where he spent his leisure hours in making sun-dials and speaking-trumpets, grinding glasses, &c. To learn the construction of watches, he lived upon bread and water till he had saved money enough to enable him to purchase one. He continued his labors with unremitting assiduity, and eventually produced works of great ingenuity; as, a clock showing the course of the earth and the other planets, as well as that of the moon and the other satellites, and their eccentricities; a calculating machine; and many others. He died in 1790.

Hahnemann, Samuel Christian Frederic, doctor of medicine, and counsellor of the duke of Anhalt-Cothen, was born April 10, 1755, at Meissen, in Saxony. His father educated him with much care. While at the university of Leipsic, Hahnemann was obliged to support himself by translating English medical books, and thus even provided himself with means to continue his medical studies at Vienna. After a year's residence in this city, he was appointed physician, librarian and superintendent of a museum of coins, by baron von Brückenthal, governor of Transylvania. After some years, he returned to Germany, studied another year in Erlangen, and took his degree of doctor of physic in 1779, on which occasion he de-

fended a dissertation, *Conspectus Affectuum spasmodicorum*. He then practised at Mansfeld, Dessau and Magdeburg. He afterwards relinquished the practice, and devoted himself to chemistry, and to writing on medical subjects. At this time, he conceived the first idea of the system which he afterwards developed. While engaged in translating Cullen's Materia Medica, he was dissatisfied with the explanation of the antipyretic principles in the Peruvian bark, given by that celebrated physician, and he determined to discover, by experiments, on what the power of the bark, in intermittent fevers, depended. He took it, in considerable quantity, while in perfect health, and found that it produced an ague similar to the intermittent marsh fever. He seized upon this hint of nature in his practice, which he had again commenced in the insane hospital in Georgenthal, at Brunswick and Königslutter, where, by many experiments of the effects of simple medicines on himself and his family, he acquired so much knowledge of their nature, that he effected many remarkable cures by homœopathic applications. The physicians and apothecaries immediately began to persecute him, and, at last, effected his removal by authority, on the ground of his having violated the law forbidding physicians to furnish themselves the medicines that they prescribed, which, in his way of proceeding, was necessary. He then practised in different places in the north of Germany; and, at Torgau, he wrote his *Organon der rationellen Heilkunde* (Dresden, 1810). A dispute was carried on, for 12 years, on the merits of his homœopathic system. In Leipsic, where he again defended a thesis, *De Helleborismo Veterum* (1812), in order to obtain the privileges of a doctor in Leipsic, and taught and practised medicine, with success, for 11 years, the excitement respecting his system became, at length, so great, that government, yielding to the petition of the apothecaries, reminded Hahnemann of the above-mentioned law, forbidding physicians to administer medicines prepared by themselves—a law quite common in Germany. He could, therefore, no longer practise medicine, in that city, according to his system; and duke Ferdinand of Anhalt-Cothen offered him an asylum. In 1821, Hahnemann went to Cothen, where he now resides. He has endeavored to cure the most inveterate and protracted diseases, during the last six years, by a new application of the homœopathic remedies; but, for want of a clinical hospital, has not been able, properly, to exhibit his system. Hahnemann's autobiography to 1791 is contained in Elwert's *Nachrichten von dem Leben und den Schriften Deutscher Aerzte* (Hildesheim, 1799). Among his works are, *Die Kennzeichen der Güte und Verfälschung der Arzneimittel* (Dresden, 1787); *Der Caffee in seinen Wirkungen* (Leipsic, 1803). Of his *Organon*, a 2d and improved edition appeared in 1819 (Dresden), under the title *Organon der Heilkunst*, and, in 1824, the 3d edition (translated into French, English and Italian)—*Reine Arzneimittellehre* (6 vols., 1811 to 1821, 2d edition, enlarged, Dresden, 1822 et seq. (See *Homœopathy.*)*

Hai (*sea*); a Chinese word, appearing in many geographical words; as, *Kan-hai* (Sand-sea).

Hail appears to be a species of snow, or snowy rain, which has undergone several congelations and superficial meltings, in its passage through different zones of the atmosphere, some temperate and others frozen. It is generally formed in sudden alternations of the fine season. Hailstones are often of considerable dimensions, exceeding sometimes the length of an inch. They sometimes fall with a velocity of 70 feet a second, or about 50 miles an hour. Their great momentum, arising from this velocity, renders them very destructive, particularly in hot climates. They not only beat down the crops, and strip trees of their leaves, fruits and branches, but sometimes kill even large beasts and men. The phenomena attending the formation and fall of hail are not well understood. But it is certain that they are connected with electricity. This fact we find noticed by Moses, who relates that "the Lord sent thunder and hail, and the fire ran along upon the ground" (*Gen.* ix, 23). This has been supposed to account for the great variations of temperature to which the hail has evidently been subjected, in its passage through the different strata of the atmosphere. Artificial hail can be produced by an electrical apparatus, and volcanic eruptions are often followed by a fall of hailstones of great size. Hail-rods have been erected, at the suggestion of Volta, in countries much exposed to the ravages of hail-storms, on the same principle as light-

* In Germany, there is a mixture bearing his name, which is used particularly to discover whether wine contains lead, as spurious wines often do. Its composition is as follows: 1 dram of sulphate of lime, and the same quantity of tartaric acid, are dissolved in 16 ounces of cold distilled water, well shaken and corked. After pouring off the pure liquid, 1 dram of pure concentrated muriatic acid is added.

ning-rods. They consist of lofty poles, tipped with metallic points, and having metallic wires communicating with the earth. By thus subtracting the superabundant electricity from clouds, he imagined that the formation of hail might be prevented. These rods are used in Germany and Switzerland, but their success is not proportionate to the expectations entertained of them. The violence with which hail is discharged upon the earth, under an oblique angle, and independently of the wind, would be explained by Volta's supposition, that two electrical clouds are drawn towards each other in a vertical direction, and by their shock produce hail, which, by the law of the composition of forces, would be projected in the diagonal of its gravity, and of the result of the direction of the clouds. In Germany, there are companies which insure against damage by hail.

Hailing; the salutation or accosting of a ship at a distance, which is usually performed with a speaking-trumpet; the first expression is *Hoa, the ship ahoay*, to which she answers *Holloa;* then follow the requisite questions and replies, &c.

Hainaut, or Hainault (*Hene-gowen* in Dutch, *Hennegau* in German); a province of the Netherlands, bounded north by East Flanders and South Brabant, east by Namur, south and south-west by France, and north-west by West Flanders; population, 497,819. It sends eight members to the second chamber of the states general; the provincial estates consist of 90 members. Square miles, 1683. It is divided into three districts,—Mons, the capital, Tournay and Charleroy. It is generally level, with beautiful undulating plains and a fruitful soil. Grain is abundant, pastures excellent; minerals,—iron, lead, marble, but especially coal; in the eastern part are considerable forests. The principal rivers are the Scheldt, the Selle, the Haine, the Sambre and the Dender. In the time of the French republic and empire, it belonged to the department of Jemappes. Part of it was formerly under the Austrian government, and was called *Austrian Hainault.*

Hair; the fine, threadlike, more or less elastic substance, of various form and color, which constitutes the covering of the skin, particularly of the class of mammalia. It is of a vegetative nature, and appears also in animals of the lower orders, and, indeed in all animals which have a distinct epidermis; therefore in insects. In the crustaceous animals, it sometimes appears in particular places, as the feet, on the margins of the shell, on the outside of the jaws, and grows in tufts. Hair is most distinctly developed in those insects—as caterpillars, spiders, bees,&c.—which have a soft skin; in this case, it even appears of a feathery form; and butterflies are covered all over with a coat of woolly hair, of the most variegated and beautiful colors. The same variety and brilliancy are displayed in the feathers of birds, which may be considered as analogous to hair, whilst the two other classes of animals—fishes and reptiles—have no hair whatever. No species of mammalia is without hair in an adult state, not even the *cetacea.* In quadrupeds, it is of the most various conformation, from the finest wool to the quills of a porcupine or the bristles of the hog. The hair, which is spread over almost the whole of the skin, is comparatively short and soft. On particular parts, a longer, thicker and stronger kind is found; as, for instance, the mane, fetlocks and tail of the horse, the lion's mane, the covering of man's occiput, his beard, the beard of goats. The color of the hair generally affords an external characteristic of the species or variety; but climate, food and age produce great changes in it. The human body is naturally covered with long hair only on a few parts; yet the parts which we should generally describe as destitute of it, produce a fine, short, colorless, sometimes hardly perceptible hair. The only places entirely free from it are the palms of the hands and the soles of the feet; but the body of the male often produces hair like that of the head, on the breast, shoulders, arms, &c. Each hair originates in the cellular membrane of the skin, from a small cylindrical root, which is surrounded by a covering, or capsule, furnished with vessels and nerves, called the *bulb.* The root is tubular, and contains a clear gelatinous fluid. The pulp on which the hair is formed, passes through the bottom of the bulb, in order to enter the tube of the hair, into which it penetrates for a short distance, never, in common hairs, reaching as far as the external surface of the skin. According to Vauquelin, black hair consists of, 1. an animal matter, which constitutes the greater part; 2. a white concrete oil, in small quantity; 3. another oil, of a grayish-green color, more abundant than the former; 4. iron, the state of which in the hair is uncertain; 5. a few particles of oxide of manganese; 6. phosphate of lime; 7. carbonate of lime, in very small quantity; 8. silex, in a conspicuous quantity; 9. lastly, a considerable quantity of sulphur.

The same experiments show that red hair differs from black only in containing a red oil instead of a blackish-green oil; and that white hair differs from both these only in the oil being nearly colorless, and in containing phosphate of magnesia, which is not found in them. The human hair varies according to age, sex, country and other circumstances. The fœtus has, in the fifth month, a fine hairy covering, which is shed soon after birth, and appears again at the age of puberty. With the seventh month, the first traces of hair on the head are visible in the embryo. At birth, an infant generally has light hair. It always grows darker and stiffer with age. The same is the case with the eyelashes and eyebrows. At the age of puberty, the hair grows in the armpits, &c., of both sexes, and on the chin of the male. At a later period, it begins gradually to lose its moisture and pliability, and finally turns gray, or falls out. These effects are produced by the scanty supply of the moisture above mentioned, and a mortification of the root. But age is not the only cause of this change; dissipation, grief, anxiety, sometimes turn the hair gray in a very short time. It begins to fall out on the top of the head. The hair of men is stronger and stiffer; that of females longer (even in a state of nature), thicker, and not so liable to be shed. Blumenbach adopts the following national differences of hair:—1. brown or chestnut, sometimes approaching yellow, sometimes black, soft, full, waving; this is the hair of most nations of central Europe; 2. black, stiff, straight and thin, the hair of the Mongolian and native American races; 3. black, soft, curly, thick and full hair; most of the inhabitants of the South Sea islands have it; 4. black, curly wool, belonging to the negro race. The hair, with the nails, hoofs, horns, &c., is one of the lower productions of animal life. Hence, in a healthy state, it is insensible, and the pain which we feel when hairs are pulled out arises from the nerves which surround the root. It grows again after being cut, and, like plants, grows the more rapidly if the nutritive matter is drawn to the skin by cutting; yet, in a diseased state, and particularly in the disease called the *plica polonica*, it becomes sensitive and inflamed to a certain degree, bleeds, and is clotted by a secretion of lymph, which coagulates into large lumps. Hair not only serves as a cover or ornament to the body, but exercises an important influence on absorption and perspiration; where the hair is thick, the perspiration is freer. If the root is destroyed, there is no means of reproducing the hair; but if it falls out, without the root being destroyed, as is often the case after nervous fevers, the hair grows out again of itself. If the skin of the head is very dry and scurvy, mollifying means will be of service; strengthening ointments should be applied, in case the skin is weak. This shows how little reason there is in recommending oils in all cases, while the falling out of the hair may be owing to very different causes. Though hair, in a healthy state, grows only on the external parts of the body, cases are not unfrequent in which it is formed inside of the body in diseased parts. How much the hair differs in its character from the other parts of the body (being, as we have said, of a vegetable nature), is strikingly shown from the circumstance that it continues to grow after death. As the hair is a very conspicuous object, and capable of much alteration, the arrangement of it has always been one of the most important duties of the toilet. The comb is one of those simple and yet useful inventions, which must have naturally suggested themselves in the early periods of our race. (See *Comb*.) For some rules respecting the dressing of the hair, and an account of some curious customs connected with it, we refer the reader to the Young Ladies' Book (London, 1830; Boston and Philadelphia, 1831). The ancient Hebrews esteemed fine hair a great beauty, as several passages of Scripture show; and baldness is even threatened as a sign of God's anger. (*Isaiah* iii, 17, 24). The Mosaic law gives rules respecting the hair (third book of Moses, xix, 27). The Hebrew women paid very great attention to their hair; plaited it, confined it with gold and silver pins, and adorned it with precious stones. (*Isaiah* iii, 22). The misfortune of Absalom shows that men also valued long fine hair highly. (2 *Samuel*, xiv, 26.) Strong hair, as many passages show, was considered a proof of strength, and means were used to strengthen it; it was anointed with perfumed oil. According to Josephus, the body-guard of Solomon had their hair powdered with gold dust, which glittered in the sunshine. Artificial hair is a very early invention. It was used by the Greeks and Carthaginians, and particularly by the Romans, among whom artificial tresses were sold. In the time of Ovid, the Romans imported much blond hair, which was then fashionable, from Germany; and those Roman ladies who did not wear wigs, and yet wished to con-

form to the fashion, powdered their hair with a kind of gold dust. The art of dyeing hair has been ascribed to Medea, and was, of course, much practised by the Romans. (For more information respecting this point, see Böttiger's *Sabina*, or Morning Scenes at the Toilette of a Roman Lady (written in German, and translated into French)—a work of great interest.) A hair-dresser was called, in Greek, βοστρυχόπλοκος, τριχιβοστρυχος; in Latin, *ciniflo*, *cinerarius*; the female hair-dresser, *ornatrix*. Circular pins of silver have been found in Herculaneum, which served to keep together the different rows of curls arranged all round the head; this being, among the Roman ladies, the most general fashion; and the higher the hair could be towered up, the better; though they also wore the Spartan knot behind (for a well-formed head, a very graceful and becoming dress). They likewise wore hanging curls on the side. Fashion also regulated the dress of the hair of the men, in the later times of Rome. It was cut, for the first time, when a boy had attained his seventh year, and the second time when he was fourteen years old. On the introduction of Christianity, the apostles and fathers of the church preached against the prevailing fashion of dressing the hair. It became more common for men to cut the hair short, at least it was considered more proper; hence the clergy soon wore the hair quite short, and afterwards even shaved their heads in part. (See *Tonsure*.) But even the excommunications fulminated in the middle ages against long hair and the extravagant ornamenting of it, could not put a stop to the custom. It must be remembered that, among the ancient Greeks and Romans, cutting the hair was a great dishonor. Hence prisoners of war, and slaves who had committed any offence, had their heads shaved or hair cut. With the Lombards, it was a punishment for theft under a certain small sum; and, according to the old law of the Saxons (*Sachsenspiegel*), for stealing three shillings in the day time. Hence the former expression in Germany, *jurisdiction of the skin and hair*, that is, jurisdiction over minor offences, the highest punishment of which was flogging and cutting the hair; and *jurisdiction of the neck and hand*, that is, jurisdiction over aggravated offences, with the right to punish by death. The ancient Gauls wore their hair short, but the Franks long, and combed back, or in a knot behind; the magistrates wore it on the top in a tuft, as some North American Indians still do. Among the Frankish kings, it was at first a privilege of the princes of the blood to wear the hair long; and, on the dethronement of a Frankish prince, his hair was cut, and he was sent into a convent. Long hair soon became a privilege of the nobility. Women, in the beginning of the Frankish monarchy, wore the hair loose, but soon after began to wear caps. From the time of Clovis, the French nobility wore short hair; but, as they became less martial, they allowed the hair to grow longer. In the time of Francis I, king of France, long hair was worn at court; but the king, proud of his wound on the head, himself wore short hair, in the Italian and Swiss fashion, which soon became general. In the reign of Louis XIII, the fashion of wearing long hair was revived, and, as it became desirable to have the hair curl, the wigs were also restored. We hasten to close this history of fashion and folly, lest our article should become as long as one of the peruques of the beginning of the last century, or that of the lord chancellor of England. It was reserved for the French revolution, which overturned so many institutions of the "good old time," to bring back Europe to natural and unpowdered hair. The French, the leaders in almost all fashions, are preëminent in hair-dressing. We may remark that, in the north of America, hair does not grow so full as in Europe, and hence much more artificial hair is worn. In southern Asia, the men turn their whole attention to the beard, and shave the head. But the women cultivate their hair with great care, and dye and ornament it in every possible way. The African tribes generally grease their hair. (See the travels of Caillé and others.)

Hair's Breadth; a measure of length, being the 48th part of an inch.

Hake (*gadus merluccius*). This fish belongs to that division of the genus which has two dorsal fins. In shape, it is not very unlike a pike, and has hence been termed the *sea-pike* by the French and Italians. The mouth is large, and is furnished with double rows of sharp teeth. The back part of the tongue, the palate, and the throat, are also armed with sharp spines or teeth. Hakes are very abundant in particular situations on the Irish coast; but, after appearing for a number of years, they seem to take a dislike to their accustomed haunts, and seek others. This is not peculiar to the hake, as the herring and various other fish are in the habit of relinquishing their stations for a considerable time, and then reappearing. Natu-

ralists have not given any satisfactory explanation of this singularity in the migration of fish. It may, in some instances, be occasioned by the close pursuit of an unusual number of predatory fish, to avoid the voracity of which, they may be driven upon shores that they were formerly unaccustomed to frequent; or a deficiency of their usual food may force them to abandon a residence where they could no longer be supported.

Hakim; a Turkish word, originally signifying *sage*, *philosopher*, and then, very naturally, a *physician*, as medicine and natural philosophy, among all nations in a low degree of civilization, are the same. *Hakim bashi* is the physician of the sultan, that is to say, the chief of the physicians, always a Turk; whilst the true physicians in the seraglio under him are western Europeans, Greeks and Jews. Under Achmet I, there were 21 physicians in the seraglio, besides 40 Jews. How well a Christian physician is received in the Turkish empire, in comparison with other *infidels*, may be seen from the travels in that country; for instance, in Madden's.

Hakluyt, Richard, one of the earliest English collectors of voyages and maritime journals, was born in 1553. He entered Christ-church college, Oxford, and became so eminent for his acquaintance with cosmography, that he was appointed public lecturer on that science. In 1582, he published a small Collection of Voyages and Discoveries, which formed the basis of a subsequent work, on a larger scale. About 1584, he went to Paris, and staid there five years. After his return home, he was chosen, by sir Walter Raleigh, a member of the corporation of counsellors, assistants and adventurers, to whom he assigned his patent for the prosecution of discoveries in America. In consequence of this appointment, he prepared for the press his collection of The principal Navigations, Voyages and Discoveries of the English Nation, made by Sea, or over Land, within the Compass of these 1500 Years. The first volume, in folio, was published in 1589, and the third and last in 1600. Besides narratives of nearly 220 voyages, these volumes comprise patents, letters, instructions and other documents, not readily to be found elsewhere. He died in 1616, and was interred in Westminster abbey. He published several other geographical works; among them is Virginia richly valued, by the Description of Florida (London 1609, 4to.). An edition of his works was published in London, 1809—1812, 5 vols. 4to. The manuscript papers of Hakluyt were used by Purchas. (q. v.)

Halbard, or Halbert, in the art of war, a well known weapon carried by the sergeants of foot, is a sort of spear, the shaft of which is about six feet long. Its head is armed with a steel point, edged on both sides; but, besides this sharp point, which is in a line with the shaft, there is a cross piece of steel, flat, and pointed at both ends, but generally with a cutting-edge at one extremity, and a bent sharp point at the other, so that it serves equally to cut down or push with.

Halberstadt, a Prussian city, in the province of Saxony and government of Magdeburg, has 14,700 inhabitants, and manufactures cloth, linen and leather. It was the capital of the *ci-devant* principality of Halberstadt. It has 10 churches, besides the cathedral of St. Stephen. It is a place of great antiquity, and is supposed to have been built by the Cherusci. The buildings are in the Gothic style, and of antique appearance. A remarkable diet of the German empire was held here in 1134. It is a walled city. Lat. 51° 53′ 55″ N.; lon. 11° 4′ E.

Halde, John Baptiste du, a learned Jesuit, was born at Paris in 1674. He was intrusted by his order with the care of collecting and arranging the letters sent by the society's missionaries from the various parts of the world. He was also secretary to father Le Tellier, confessor to Louis XIV. He died in 1743, much esteemed for his mildness, piety and patient industry. He is chiefly known as the editor of the *Lettres édifiantes et curieuses*, from the 9th to the 26th collection, to which he wrote useful prefaces; and also for his compilation entitled *Description historique, géographique, et physique, de l'Empire de la Chine, et de la Tartarie Chinoise* (4 vols. folio, Paris, 1735). The latter work, which, with some retrenchments, has been translated into English, is deemed the most complete general account of that vast empire which has appeared in Europe.

Haldenwang, Christian; born May 14, 1770; one of the most distinguished living engravers of Germany. He was obliged, when a boy, to labor in the vineyards and on the fields of his father, a surgeon at Durlach. After he was admitted to the drawing school of his native place, he made great exertions to improve himself. In 1796, he received an invitation to Dessau, from the chalcographic society, where he remained eight years, devoting himself to aquatinta; but, at a later period, he was recalled, by his sovereign, to

Carlsruhe. Since that time, he has resigned aquatinta, and now works only with the burin and the etching-needle. In the *Musée Napoléon* are two landscapes of Ruisdael and Poussin, one after Claude Lorraine, and one after Elsheimer, engraved by him.

HALE, in the sea language, signifies *pull*.

HALE, sir Matthew, an eminent English judge, was born at Alderley, in Gloucestershire, in 1609. He received his early education under a Puritanical clergyman, and afterwards became a student at Magdalen Hall, Oxford, whence he removed, in his 21st year, to Lincoln's Inn. He is said to have studied 16 hours daily, extending his researches to natural philosophy, mathematics, history and divinity, as well as the sciences more immediately connected with his profession. He was called to the bar previously to the commencement of the civil war; and, in the conflict of parties which took place, his moderation, accompanied, as it was, by personal integrity, and skill in his profession, secured him the esteem of both royalists and parliamentarians in his own time. Imitating Atticus rather than Cato, he adhered to the triumphant party, and scrupled not to take the covenant, and become a lay-member of the famous ecclesiastical assembly at Westminster; yet he acted as counsel for the accused on the trials of the earl of Strafford, archbishop Laud, and even of the king himself. In 1652, he was placed on the committee appointed to consider of the propriety of reforming the law. In 1654, he became a judge of the common bench (the former king's bench), in which station he displayed firmness of principle sufficient to give offence to the protector; and, finding he could not retain his office with honor, he refused to preside again on criminal trials. After the death of Oliver Cromwell, he refused a new commission from his son and successor. He was a member of the parliament which restored Charles II, and he was one of the members most active in passing the act of indemnity. In November, 1660, he was knighted, and made chief baron of the court of exchequer. He presided at the condemnation of some persons arraigned for witchcraft, at Bury St. Edmund's, in 1664, and was the last English judge who sanctioned the conviction of culprits for that imaginary crime. He was raised to the chief-justiceship of the king's bench in 1671, where he sat till 1676, towards the end of which year he died. After his death appeared his History of the Pleas of the Crown, The Jurisdiction of the Lords' House, and The History of the Common Law of England; of which there have been repeated editions, with comments. His valuable collection of manuscripts relating to history and jurisprudence, is preserved in the library of Lincoln's Inn. Sir Matthew Hale also wrote several works on scientific and religious subjects.

HALE, Nathan, an officer in the revolutionary army, was born in Coventry, Connecticut, and was graduated at Yale college, in 1773. As the contest between the mother country and the colonies was then waging, he offered his services to the latter, and obtained a captain's commission in colonel Knowlton's regiment of light infantry, which formed the van of the American army. After the retreat of general Washington from Long Island, by which it was left in the possession of the British, that commander applied to colonel Knowlton to adopt some means of gaining information concerning the strength, situation and future movements of the enemy. The colonel communicated this request to captain Hale, who immediately volunteered his services; and, conquering his repugnance to assume a character foreign to his nature, in the hope of being useful to his country, passed in disguise to Long Island, examined every part of the British army, and obtained all the requisite information. In attempting to return, however, he was apprehended, and brought before sir William Howe, who ordered him to be executed, the next morning, on his acknowledging who he was, and what was his object, when he found the proof against him too strong to be gainsayed. This sentence (conformable, it is true, to the laws of war) was carried into effect in the most unfeeling manner. He was refused the attendance of a clergyman; and the letters which he wrote, a short time before his death, to his mother and others, were destroyed, in order, as was said by the provost marshal, "that the rebels should not know they had a man in their army who could die with so much firmness." The untimely end of this promising but unfortunate young man resembled that of major Andrè, in the circumstances which led to it; but the celebrity of the two has been widely different. The memory of the Englishman has received every honor, not only in his own country, but likewise in this; while that of the martyr to the cause of American liberty hardly survives even here. The monument of the former stands in Westminster abbey, amongst those of sages and he-

roes, whilst the grave of the patriot is not even marked by a stone or an inscription.

Halen, don Juan van, a Spaniard of Dutch extraction, was born in the Isle of Leon, Feb. 16, 1790. As some interest is attached to the name of this man from his having been for a time at the head of the military forces of the insurgents in the late revolution in Brussels (1830), we give the following account of him, extracted from the Narrative of Don Juan van Halen's Imprisonment in the Dungeons of the Inquisition at Madrid, and his Escape in 1817 and 1818; to which are added his Journey to Russia, his Campaign with the Army of the Caucasus, and his Return to Spain in 1821, edited from the original Spanish Manuscript, by the Author of Don Esteban and Sandoval (London, 1828.) For the entire authenticity of the account we do not vouch, as the book has in many parts the air of a fiction. His father was employed in the Spanish navy; and before the subject of the present article had attained his 16th year, he had served in two naval expeditions, the last of which terminated in the battle of Trafalgar. Halen was made lieutenant, and wounded on board the flotilla of Malaga. May 2, 1807, he was wounded again, having taken part with the people of Madrid against the French. He then served against the French, was made prisoner when Soult captured Ferrol, and took the oath of submission to king Joseph, with whom he went to France, but was, after some time, dismissed. In 1813, when all the *afrancesados* (q. v.) were invited back to Spain, he returned; but, anxious to perform some service for his country, he dressed himself as a French officer, and, having fraudulently obtained a copy of the seal of marshal Suchet, presented himself successively before the fortresses of Lerida, Mequinenza and Monzon, as an aid-de-camp of the marshal, with forged orders to their commandants to evacuate their posts immediately. The artifice, strange to say, succeeded completely, and Spain recovered three important places without losing a drop of blood. The French troops were afterwards taken prisoners on their march. The Spanish regency appointed van Halen captain, for having "reconquered the strong places," &c. Van Halen served, in his new rank, in the Catalonian army, until the return of Ferdinand VII. When this perjured king violated his solemn promises to the nation, secret societies were formed, in order to induce or compel the king to keep his word. Van Halen became a member of one of them, but not until he had been causelessly suspected and imprisoned. In September, 1817, he was imprisoned a second time, in Murcia, in the dungeons of the inquisition, to the prisons of which society, in Madrid, he was removed in October. After having had an audience of the king, he was put to the torture (which he describes in his Narrative, mentioned above), escaped from the dungeons of the holy office through the kindness and ingenuity of the daughter of the turnkey, went to France and England, and, in 1818, entered the Russian service as major, in a regiment of dragoons, which formed part of general Yermelow's army, in Georgia, and was employed to repress the turbulent mountaineers on the northern side of the Caucasus. But the new revolution having broken out in Spain, the emperor gave orders for Halen's immediate dismission; he returned to Spain, and, on the entrance of the French army, fled to the U. States. In the late revolution of Belgium, he received a command in the independent troops; but, for reasons unknown to us, he was afterwards arrested.

Hales, Alexander de; surnamed the *irrefragable doctor;* an English ecclesiastic, celebrated among the controversialists of the 13th century. He studied at the universities of Oxford and Paris, in which latter city he died in 1245.

Half Mark; a noble, or six shillings and eight pence.

Half Moon, in fortification; an outwork composed of two faces, forming a salient angle, whose gorge is in form of a half moon.

Half Pike; a defensive weapon, composed of an iron spike, fixed on an ashen staff. Its use is to repel the assault of boarders in a manner similar to the defence of the charged bayonet among infantry; hence it is frequently termed a *boarding pike.* It takes the epithet of *half* from its having a much shorter staff than the whole pike.

Halibut. (See *Holibut.*)

Halicarnassus; the capital of Caria, in Asia Minor, and the residence of the Carian kings. It was once an important commercial city. The present name is *Bodrun* or *Budron.* It lies opposite the island of Stanchio. Queen Artemisia erected here the celebrated mausoleum in honor of her husband, king Mausolus. Halicarnassus was the native place of Herodotus, Dionysius the historian, and Dionysius the musician (who wrote on music in the time of Adrian); also of the poets Hecatæus and Callimachus. For a

description of its charming situation, see the *Travels of the Younger Anacharsis.*

Halifax; a city, and the capital of Nova Scotia, on Chebucto bay. The harbor of Halifax is one of the best in America; a thousand ships may ride in it in safety. It is in lat. 44° 40′ N., and lon. 63° 40′ W. from Greenwich. It is easy of access at all seasons of the year. Its length from N. to S. is about 16 miles, and it terminates in a beautiful sheet of water, called Bedford Basin, within which are ten square miles of good anchorage. The harbor is well fortified, and has an extensive dock-yard. The city of Halifax is situated on the western side of the harbor, on the declivity of a commanding hill, whose summit is 256 feet above the level of the sea. There are eight streets running through the body of the town, and these are intersected by fifteen others. The town and suburbs are upwards of two miles long, and the general breadth is about half a mile. Halifax was first settled by a colony under the command of the honorable Edward Cornwallis, in 1749. In 1790, it contained 4000 inhabitants; in 1828, the number of houses was 1580, and the population 14,439. At the same period, there were two Episcopal churches, a large and splendid Catholic chapel, two meeting-houses for Presbyterians, one for Methodists, two for Baptists, and one for Sandemanians. The most important of the government establishments is the dock-yard. It has a high wall on the side towards the town, and contains very commodious buildings for the residence of the officers and their servants, besides stores, ware-houses and work-shops. The province-building is an elegant edifice, and contains the various provincial offices, and apartments for the council, house of assembly, and superior court. There are several other public buildings of good construction; but, in general, the large buildings of the city are of freestone, and are not designed for splendor. Dalhousie college was established in 1820, but has not gone into operation. There are several good schools, but education is less attended to than in most of the cities of the U. States. There are no periodicals published, nor are any European or American books reprinted at Halifax. The only publications in Nova Scotia are the newspapers, of which there were, in 1828, six at Halifax and one at Picton. (See Haliburton's *Account of Nova Scotia*, Halifax, 1829.)

Halifax, lord. (See *Montague.*)

Hall, Lyman, whose name is affixed to the declaration of independence, was born in Connecticut, about the year 1731, and, after receiving a classical education, commenced the study of medicine. In 1752, he removed to South Carolina, and, in the same year, to Sudbury, in the district of Medway, in Georgia, where he practised his profession until the commencement of the revolutionary troubles. In July, 1774, he was sent, as representative of the parish of St. John, to a general meeting of the republican party in Georgia, which was held at Savannah. The proceedings of the meeting were of too temporizing a nature to please the ardor of the inhabitants of that parish, and they, in consequence, separated themselves from the other parishes of the colony, and, March 21, 1775, elected doctor Hall their delegate to the general congress, assembled at Philadelphia. May 13, he was admitted to a seat in the house, though he was not allowed a vote when the sentiments of the body were taken by colonies, as he could only be considered the representative of a small portion of a province. But in June of the same year, the convention of Georgia having, at length, acceded to the general confederacy, its representation was rendered complete by the election of four other delegates. The names of but two of his colleagues, however, appear in conjunction with doctor Hall's on the declaration, the remaining two being absent. The last time doctor Hall appeared in congress was in 1780. In 1782, he was chosen governor of the state of Georgia, and, after his retirement from public life, settled in Burke's county, where he died in the 60th year of his age. He possessed a strong mind and a placid disposition. He made great sacrifices, both of comfort and property, in his country's service. When the British took possession of Georgia, his estate was confiscated.

Hall, Robert, was born at Arnsby, Leicestershire, in August, 1764. He is the son of the reverend Robert Hall, a Baptist minister of Arnsby. His father early remarked his precocity of talent, and observed to a friend, that, at "nine years, he fully comprehended the reasoning in the profoundly argumentative treatises of Jonathan Edwards on the will and affections." In 1773, he was placed under the instruction of the eccentric, yet learned and pious John Ryland of Northampton. At about 15 years of age, he became a student in the Baptist college at Bristol. On reaching his 18th year, Mr. Hall entered king's college, Aberdeen, having obtained an exhibition. Here he commenced his ac-

quaintance with sir James Mackintosh, who was his fellow student. After receiving his second degree, he was chosen as colleague with doctor Evans, in the ministry at Bristol, and adjunct professor in the institution. Mr. Hall soon became followed and admired by a class of hearers whose approbation might well be valued by any man. His public services were crowded to excess. But, in the midst of his popularity, a dark cloud arose, which threatened to deprive the Christian world of a bright ornament; his friends trembled as they witnessed the most unequivocal symptoms of a disordered mind. After confinement from public life, and a long course of judicious treatment, his lofty mind regained its liberty and power. In 1791, Mr. Hall removed to Cambridge, and became successor to the extraordinary Robert Robinson. He soon became celebrated as a writer, by his publication of a pamphlet entitled Christianity not inconsistent with the Love of Freedom. This was shortly after followed by his Apology for the Freedom of the Press, which remains, to the present day, a standard work. Dugald Stewart deemed it the finest specimen of English composition extant at the time when it appeared. But his Sermon upon Modern Infidelity established his fame as a divine. In 1802, Mr. Hall's mind again received a shock, which required his abandonment of pulpit labors. On recovering from his malady, he became pastor of the church at Leicester. His ministry in that populous town was equally successful. Here Mr. Hall, for 20 years, exercised his talents for the good of an affectionate people; but, in 1825, the church at Broadmead, Bristol, which had enjoyed his earliest labors, having lost their pastor, the learned and venerable doctor Ryland, president of the college, invited him to labor amongst them; and, in 1826, Mr. Hall removed to Bristol, where his popularity is as great as it has been in other places. Benevolence and humility are the prominent features of his moral character. The late doctor Parr was his intimate friend, and left him a valuable and flattering legacy. He says of him, in his last will and testament, "Mr. Hall has, like Jeremy Taylor, the eloquence of an orator, the fancy of a poet, the subtlety of a schoolman, the profoundness of a philosopher, and the piety of a saint." Mr. Hall's voice is feeble, but very distinct; as he proceeds, it trembles under his energy. The plainest and least labored of his discourses are not without delicate imagery and the most felicitous turns of expression. He expatiates on the prophecies with a kindred spirit; he often conducts his audience to the top of the "delectable mountains," to quote John Bunyan, where they can see from afar the gates of the eternal city. He seems at home among the marvellous revelations of St. John, and, while he dwells upon them, he leads his hearer breathless through ever-varying scenes of mystery, far more glorious and surprising than the wildest of Oriental fables. He stops where they most desire he should proceed,—when he has just disclosed the dawnings of the inmost glory to their enraptured minds; and leaves them full of imaginations of things not made with hands,—of joys too ravishing for similes.

Halle; a Prussian city, province of Saxony, on the right bank of the Saale, with 2152 houses, and 23,873 inhabitants; lat. 51° 29′ 5″ N.; lon. 11° 58′ 10″ E. Halle is first mentioned in 806, when Charlemagne erected a castle here against the Vandals. The name is derived from the salt-works of this city, among the most ancient of Germany, and producing at present from 14,000 to 16,000 tons of salt annually. These works are still called, by way of eminence, *die Halle*.* The country around Halle is very fertile, and agriculture is flourishing; there are also many coal mines. But this city is particularly famous for her university, founded by Frederic I, king of Prussia, and opened in 1694; hence called the *Frederic university*. The great elector of Brandenburg had founded an academy in 1688, which, in 1694, was changed into a university, when Thomasius came hither from Leipsic, followed by a number of students. A series of distinguished professors, and the liberal provisions of government, have raised this university to the rank of one of the first in Europe, in almost all branches; for instance, Meckel, Reil, J. A. Wolff, Vater, Gesenius, Tholuck, Wegscheider, Pfaff, &c. Napoleon suppressed the university, after the battle of Jena, in 1806. After the peace of Tilsit, it was reëstablished under the kingdom of Westphalia, and received also professors from the universities of Rinteln and Helmstädt, then abolished; but the number of students never exceeded 300 or 400. In 1813, many students having left Halle to join the Prussian troops, Napoleon again abolished the university, and measures were already taken for carrying the order into effect, which were interrupted by the battle of Leipsic. A Prussian ordinance of April

* There are also places in Suabia, the Tyrol, Brabant, called *Halle*, from salt-works.

15, 1815, united the university of Wittemberg (quite near to Halle) with that of Halle. The institution thus formed now bears the name of the *United Frederic university of Halle-Wittemberg*. The university has since that time advanced rapidly. In 1828, there were 1385 students. In 1824, there were 760 students of theology. The theological faculty has six ordinary and four extraordinary professors. The library of the university contains 50,000 volumes, with a collection of coins, engravings, &c. Halle was, for a long time, the seat of a theology which adhered strictly to the views and dogmas of the first reformers, or, if it deviated from them at all, inclined rather to mysticism, but has lately become the chief seat of rationalism in Germany, principally through Gesenius and Wegscheider. The Prussian government has ordered an inquiry into the tenets of these professors, which will most probably lead to nothing decisive. (See the articles *Franke's Institution*, and *Canstein*.)

Halle, or Hall, Edward; an English chronicler, whose works rank with those of Holingshed and Stow. He was a native of London, and was a lawyer by profession, having attained the rank of a serjeant, and the office of a judge in the sheriff's court. He had a seat in the house of commons, and was a zealous Catholic, though he lived at the period of the reformation. His death took place in 1547. Halle's Chronicle was published in 1548, by Richard Grafton, who is reported to have written the latter part of it. The work is curious, as affording delineations of the manners, dress and customs of the age.

Hallein, a town of the Austrian empire, in Salzburg, containing 600 houses and 6000 inhabitants, on the Salza, at the foot of the Dürrenberg, has important salt. works. The salt is here, as in the neighboring Berchtesgaden (q. v.), obtained from brine. About 20,000 tons are made annually. Pins are made here in great quantity, and the cotton manufactures in the vicinity employ 12,000 people.

Halleluja, or Hallelujah, or Alleluja (*Hebrew*); praise the Lord; an expression which occurs often in the Psalms, and which was retained when the Bible was translated into the various languages, probably on account of its full and fine sound, which, together with its simple and solemn meaning, so proper for public religious services, has rendered it a favorite of musical composers. The vowels in it are very favorable for a singer. The Roman Catholic church does not allow it to be sung on the Sundays during Lent, on account of the mournful solemnity of the season; and in that church it is not sung again before Easter. It is no longer sung in masses for the dead, as formerly. The Greeks made an earlier or more common use of the Halleluja than the Latin church. The Jews call the Psalms 113—117, the *Great Halleluja*, because they celebrate the particular mercies of God towards the Jews, and they are sung on the feast of the Passover, and on the feast of Tabernacles.

Haller, Albert von; a celebrated Swiss physician, distinguished not only for his acquaintance with the physical sciences, but also for his general knowledge of literature, and his talents as a poet. His father, Nicholas von Haller, was an advocate and citizen of Berne, where the son was born in October, 1708. The early display of his abilities was most extraordinary; and it is related, that, when but ten years old, he could translate from the Greek; that he compiled a Chaldee grammar, and a Greek and Hebrew dictionary, for his own use; extracted 2000 biographical articles from Bayle and Moreri, and gave other proofs of his devotion to literary studies. He was sent to a public school after his father's death, in 1721; and, in 1723, he was removed to the house of a physician at Bienne, for the study of philosophy. Here he pursued a somewhat desultory course of reading, and exercised himself in poetical composition. However, at the close of the year last mentioned, having chosen the medical profession, he went to the university of Tübingen, where he studied comparative anatomy; and, in 1725, he removed to Leyden, then the first medical school in Europe, Boerhaave and Albinus being among the professors. He took his degree at Tübingen, whither he went for that purpose, and sustained a thesis, *De Ductu Salivali Coschwiziano*, which topic he farther pursued, in another thesis, at Leyden, in 1727. That year, he visited England, and formed an acquaintance with sir Hans Sloane, Cheselden, doctor James Douglas, and other eminent men. Thence he went to Paris, and dissected under Ledran; but he was obliged to leave that metropolis, in consequence of having caused subjects for dissection to be brought to his lodgings—a piece of indiscretion which attracted the notice of the police. He then went to Basil, to study mathematics under John Bernoulli, continuing at the same time his anatomical investigations. Here he first imbibed a taste for botany, and laid the plan of a work, which he long after published, on

the plants of Switzerland. Here, too, he indulged his predilection for poetry, and in his twenty-first year composed his poem On the Alps, followed by various ethical epistles and other pieces, which gave him a reputation in Germany. In 1729, Haller returned to his native city, and entered on his professional career as a public lecturer on anatomy. He did not, however, obtain among his countrymen that encouragement which his talents deserved, owing, in some measure, to a satirical spirit, which occasionally displayed itself in his poetical compositions. In the summers, he made botanical excursions in Switzerland, in the course of which he also applied himself to the study of mineralogy and zoology. In 1736, he was invited, by George II, to accept the professorship of anatomy, surgery and botany, in the newly founded university of Göttingen. He accepted this offer; but his removal to Hanover was attended with a domestic misfortune, the death of his wife, whom he had married in 1731, and to whom he was much attached. He endeavored to alleviate his sorrow by close application to scientific pursuits. Through his influence, the university was enriched with a botanical garden, an anatomical theatre, a school for midwifery, and a college of surgery. His own researches in physiology alone, were enough to immortalize his name. After the death of his master, Boerhaave, in 1738, Haller published his Prelections, with much original matter, in six volumes, which appeared successively from 1739 to 1745. But his own discoveries and improvements tended to render this work obsolete; and in 1747, appeared the first edition of his *Primæ Lineæ Physiologiæ*, a synopsis of his own system of that important branch of medical science, as subsequently developed in a larger work. This is a truly valuable production, which, long after the death of the author, was used as a text-book in schools of medicine, and has only been superseded since the extraordinary scientific discoveries of our philosophical contemporaries. In 1752, he first advanced his opinions on the properties of sensibility and irritability, as existing in the nervous and muscular fibres of animal bodies; doctrines which attracted much attention, and excited great controversies in the medical world. He was, in 1748, elected a member of the royal society of Stockholm, and of that of London in the following year. He likewise received the title of physician and counsellor to king George II, at whose request Francis I gave him a patent of nobility, as a baron of the German empire. After seventeen years' residence at Göttingen, his disagreements with his colleagues induced him to return, in 1753, to Berne, where his countrymen received him with the respect due to his great fame and talents. He settled again among them; and having been elected a member of the sovereign council of the state, he soon obtained by lot one of its magistracies, and entered with zeal on the duties of a citizen. He did not neglect his scientific pursuits. He continued to contribute to the Göttingen *Gelehrte Anzeigen* (for which he wrote more than 12,000 articles), to hold the presidency of the royal society of science, and to receive his academical pensions. In 1754, he published at Lausanne, in French (which he wrote with facility), some memoirs on irritability and sensibility, and on the motion of the blood. He was elected, in 1754, one of the foreign associates of the Paris academy of sciences. In 1758, he accepted the appointment of director of the public salt-works at Bex and Aigle, with a small salary. He resided six years at La Roche; and, in the course of his superintendence, he introduced many improvements in the manufacture of salt. While thus engaged, he began the publication of his *Elementa Physiologiæ Corporis humani* (Lausanne, 1757—1766). His next important literary labors were the *Bibliothecæ*, containing chronological catalogues of works of every age, country and language, relative to subjects connected with medical science, with concise analyses, and notices of peculiar and important facts and opinions. These libraries of professional knowledge were published in the following order: *Bibliotheca botanica* (1771, 2 vols. 4to.); *Bibliotheca anatomica* (1774, 2 vols. 4to.); *Bibliotheca chirurgica* (1774, 2 vols. 4to.); *Bibliotheca Medicinæ practicæ* (1776—1788, 4 vols. 4to., the last two volumes having appeared posthumously). On his return from La Roche, he was chosen member of the chamber of appeal for the German district, of the council of finance, and of other bodies; and also perpetual assessor of the council of health. His various duties as a statesman, a physician and a medical teacher, occupied his attention till his death, which happened December 12, 1777. He had previously suffered much from illness; but his last moments were peculiarly tranquil. Placing his finger on his wrist, to observe the motion of the artery, he suddenly exclaimed to his physician, "My friend, I am dying; my pulse stops;" and he immediately expired. He is considered one of the greatest German

poets of the 18th century. His philosophical and descriptive poems display depth of thought and richness of imagination. He had to contend with a language which was then imperfect, and to the polishing of which his writings contributed. His style is not, however, wholly faultless; for, in aiming at conciseness and compression, he sometimes becomes obscure. He wrote, in prose, three philosophico-political romances,—Usong, Alfred the Great, and Fabius and Cato,—designed to exhibit the respective advantages of different forms of government; and corresponded, in German, Latin, Italian, English and French, with all parts of Europe. His Letters to his Daughter, on the Truth of the Christian Religion, were translated into English; and he also wrote Letters on Free-Thinking, designed to confute the reasonings of French sceptical philosophers, who had borrowed arguments in favor of their speculations from his physiological theories.

Haller, Charles Louis von, a modern writer, noted for his support of the doctrine of divine right, and for his secret conversion to the Catholic religion, was born at Berne, Aug. 7, 1768, and is the son of a literary man, who died in 1786. In his *Lettre de M. Ch. L. De Haller à sa Famille pour lui déclarer son Retour à l'Église Catholique, Apostolique et Romaine* (Paris, 1821), he calls himself *peu instruit, dont l'éducation fut assez négligée.* When Berne was changed from an aristocracy into a democratic republic, he emigrated, and conceived, "as it were, a fixed idea," that a spiritual fraternity was necessary to oppose democratic principles. At the same time, he conceived the idea, "almost, as he believed, inspired by God," that "the lord was before the vassal, the prince before the subject." Certainly a divine idea! This gave origin to his work, "destined by God for the restoration of Europe," *Restauration der Staatswissenschaft, oder Theorie des natürlichen-geselligen Zustandes, der Chimäre des künstlich-bürgerlichen entgegengesezt* (Restoration of Political Science, or Theory of the natural-social State, opposed to the Chimera of the artificial-civil State; Winterthur, 1816—1820, 4 vols.). Like Salmasius and Mackenzie of old, he defends the divine right of rulers and of nobles, and endeavors to overthrow the theory of the social contract. His work has been, and still is considered, by the aristocrats of Germany, almost as a code. Yet we confess, if choose we must, we should much prefer sir Robert Filmer's theory of divine right to Haller's. Haller's system rests on the fiction that powerful and far-sighted men appropriated certain tracts to themselves, when the earth was yet undivided; and, when less powerful or sagacious persons came afterwards to dwell on the same land, they were obliged to subject themselves to the rules which the first occupant prescribed. A divine idea, indeed! His disposition to run a tilt against the principles which have sprung up out of the French revolution, led him to Catholicism, in which, as he thinks, the best security against democratic principles is to be found. Von Haller has been a professor at Berne, a member of the sovereign council, and has held some other important offices. As a member of the council, he was obliged to take an oath of belief in the doctrines of Protestantism. Since 1808, he says, he has been a Catholic in his heart. In 1818, a French abbé strengthened him in his belief; and, in 1819, prince Adolphus of Mecklenburg-Schwerin rendered him happy, by assuring him that he might be secretly a Catholic, and receive dispensation from all the outward observances of the Catholic system; nay, that many ostensible Protestants were in fact Catholics. The Catholic bishop of Friburg confirmed this. In 1820, he published, under the character of a Protestant, his work on the Spanish constitution, in which he praises the inquisition and the torture. In the same year, the fourth volume of his Restoration was published, in which he recommends Catholicism very strongly. October 17, 1820, the bishop received him at the country seat of a friend into the bosom of the Catholic church. Some rumor of this got abroad, and when his relations questioned him concerning it, he replied by asking them whether they had ever seen him observe Catholic ordinances. After Mr. von Haller had taken the oath prescribed, by Pius IV, to converts, which binds them to use all their efforts for the propagation of Catholicism, he renewed (December, 1820) his official oath as a Protestant. This oath also binds him to act faithfully towards the state, and to maintain the Protestant religion. June 11, 1821, he was expelled from the council as guilty of perjury. There are, it is true, 15 Catholic members in this council; but they, of course, do not take the oath. Haller then went to France, where he first wrote for the *Journal des Débats.* Charles X allowed him to enjoy the privileges of a citizen. In 1825, the 6th volume of his Restoration appeared. When the revolution of 1830 broke out, Haller was an officer under Polignac, and was, of course, immediately dismissed.

Halley, Edmund, a distinguished mathematician and astronomer, was born in London, in 1656, and was sent first to St. Paul's school, and then to Queen's college, Oxford, of which he became a commoner in his 17th year. Before he was 19, he published A direct and geometrical Method of finding the Aphelia and Eccentricity of Planets, which supplied a defect in the Keplerian theory of planetary motion. By some observations on a spot which appeared on the sun's disk in July and August, 1676, he established the certainty of the motion of the sun round its own axis. August 21st, the same year, he fixed the longitude of the cape of Good Hope, by his observation of the occultation of Mars by the moon. Immediately after, he went to St. Helena, where he staid till 1678, making observations on the fixed stars of the southern hemisphere, which he formed into constellations. In 1679, he published *Catalogus Stellarum Australium, sive Supplementum Catalogi Tychonici*, &c., which procured him the appellation of the *southern Tycho*. He then went to Dantzic to settle a dispute between the English philosopher Hooke, and the famous Hevelius, relative to the use of optical instruments in astronomical researches, deciding in favor of the latter. In 1680, he set off on a continental tour, and at Paris made acquaintance with Cassini. After visiting Italy, in 1681 he returned to England, and settled at Islington, where he fitted up an observatory for his astronomical researches. In 1683, he published his Theory of the Variation of the magnetical Compass, in which he endeavors to account for that phenomenon, by the supposition of the whole globe of the earth being one great magnet, having four circulating magnetical poles, or points of attraction. His theory, though unsatisfactory, is ingenious. The doctrines of Kepler relative to the motions of the planets next engaged his attention; and finding himself disappointed in his endeavors to obtain information on the subject from Hooke and sir Christopher Wren, he went to Cambridge, where Newton, then mathematical professor, satisfied all his inquiries. In 1691, he was a candidate for the Savilian professorship of astronomy at Oxford, which was obtained by doctor David Gregory. According to Whiston, he lost this office in consequence of his character as an infidel in religion. For the purpose of making further observations relative to the variation of the compass, he set sail on a voyage in 1699, and, having traversed both hemispheres, arrived in England in September, 1700. The spot at St. Helena, where he erected a tent for making astronomical observations, is distinguished by the appellation of *Halley's Mount*. As the result of his researches, he published a general chart, showing at one view the variation of the compass in all those seas where the English navigators were acquainted. He was next employed to observe the course of the tides in the English channel, with the longitudes and latitudes of the principal headlands; in consequence of which, he published a large map of the channel. In 1703, he was engaged by the emperor of Germany to survey the coast of Dalmatia; and, returning to England in November of that year, he was elected Savilian professor of geometry on the death of doctor Wallis; and he was also honored with the diploma of LL. D. He subsequently published a Latin translation from the Arabic of a treatise of Apollonius Pergæus, a Greek geometer, to which he made additions, to supply the place of what was lost. He next assisted his colleague, doctor Gregory, in preparing for the press Apollonius On Conic Sections. In 1719, he received the appointment of astronomer royal at Greenwich, where he afterwards chiefly resided, devoting his time to completing the theory of the motion of the moon, which, notwithstanding his age, he pursued with enthusiastic ardor. In 1721, he began his observations, and, for the space of 18 years, he scarcely ever missed taking a meridian view of the moon, when the weather was not unfavorable. In 1729, he was chosen a foreign member of the academy of sciences at Paris. He died Jan. 14, 1742, at Greenwich; and he was interred at the church of Lee, in Kent. In 1752 appeared his Astronomical Tables, with Precepts, in English and Latin, for computing the places of the Sun, Moon, Planets and Comets (4to.); and he was the author of a vast multitude of papers in the Philosophical Transactions. Lalande styles him "the greatest astronomer of England."

Hallowell; a post-town in Kennebec county, Maine, on the Kennebec, near the mouth of the river; 54 miles N. N. E. of Portland, 168 N. N. E. of Boston; lat. 44° 14′ N.: population in 1820, 2919; the population in 1830 was over 3900. Hallowell is a thriving town, and has a flourishing commerce. It is situated in a tract of country which has a strong and fertile soil, particularly excellent for grazing. The exports consist of beef, pork, pot and pearl ashes, Indian

corn, wheat, rye, oats, butter, hay, lumber, fish, &c. Loaded vessels of 150 tons may come up the river as far as the wharves.

Halo is an extensive luminous ring, including a circular area, in the centre of which the sun or moon appears; whose light, passing through an intervening cloud, gives rise to the phenomenon. Those about the moon are most common. When the sun or moon is seen through a thin cloud, a portion of the cloud round the sun or moon appears lighter than the rest, and this luminous disc is called a *corona*. Coronas are of various sizes, but they seldom exceed 10° in diameter; they are generally faintly colored at their edges. Frequently, when a halo encircles the moon, a corona surrounds it. *Parhelia*, or mock suns, vary considerably in general appearance: sometimes the sun is encircled by a large halo, in the circumference of which the mock suns usually appear, which have often small halos round them.

Hamadryads, in mythology; eight daughters of Hamadryas, by her brother. They received their names from trees, and are the same as the Dryads. (q. v.) They were conceived to inhabit each a particular tree, with which they were born, and with which they perished. Whoever spared a tree to their entreaties, they rewarded, while the destroyer of groves was sometimes severely punished. (See *Erisicthon.*)

Hamah; a place in Syria, famous as Abulfeda's birthplace. It has, according to Burckhardt, from 60 to 100,000 inhabitants, who live chiefly by manufacturing silk and cotton.

Haman; a name meaning *full of grace*. (See *Esther.*)

Hamann, John George, who called himself the *Northern Magian*, was born at Königsberg, in 1730, travelled about in different parts of his native country, was private tutor in several places, received an office in the customs at Königsberg, in 1777, and died at Münster, in 1788. Between 1759 and 1784, he published several humorous works, whose value the public did not then appreciate; but since Herder, Jacobi, Göthe and Jean Paul Richter have spoken of them with approbation, they have been republished (Leipsic, 1821—1825).

Hamburg, the most considerable of the free cities of Germany, is situated about 80 miles from the mouth of the Elbe, upon the northern bank of the river, which is navigable for large vessels as far as this port. The circuit of the city is about 22,000 feet. In the northern part is a lake, formed by the small river Alster, which runs through the city into the Elbe, and turns several mills. An arm of the Elbe enters the city from the east, and is there divided into a number of canals, which take various directions, till they unite, and join the Alster in the southern part of the city, where they form a deep harbor for ships, which communicates with the main branch of the river. Here is a large space enclosed by strong piles, where ships may lie in safety; it is called *Rummelhaven*. Canals intersect the lower part of the city in all directions, and almost all the stores are built upon their banks. In this part of the city, and also in that which lies on the east of the Alster, the streets are, for the most part, narrow and crooked. Many of those in the western or New Town, are broader and straighter. The city contains 19 churches, of which 16 are Lutheran, one Catholic, and two Calvinistic, with some synagogues for 8000 Jews. In the suburb of St. George, there are 1200 houses and a Lutheran church. The church of St. Michael, with its tower, 456 feet in height, built by Sonnin (q. v.), and intended for astronomical observations and for experiments in natural philosophy, was finished in 1786. This building, and some of the private houses, are remarkable for their architecture. The exteriors of the exchange and the council-house are also handsomely ornamented. Among the most remarkable buildings are the bank, the admiralty buildings, the orphan asylum, the new general hospital, the theatres, the exchange, the city and commercial libraries, Röding's museum, &c. The gymnasium and the Johanneum are excellent institutions for education. The building for the school of navigation, opened in 1826, is provided with an observatory, and a botanic garden is also annexed to it. In institutions for the relief of the destitute, for the sick, and for the education of poor children, Hamburg is inferior to no city in Germany. Most of these are under the direction of private individuals, and they are principally supported by voluntary contributions. The constitution of Hamburg is aristocratic. The government consists of four burgomasters and 24 counsellors, and fills its own vacancies by an artful combination of chance and of choice. Three of the burgomasters and 11 of the counsellors are lawyers; the rest are merchants. To the senate are attached four syndics and four secretaries. Cal-

vinists are excluded from the government of Hamburg, as Lutherans are from that of Bremen. The ordinary public business, both internal and external, is transacted by the senate alone; matters of more importance are regulated in connexion with the citizens possessed of a certain property. These are divided into five parishes, each of which sends 36 members to the assembly or college of the 180. From these are chosen the members of the council of 60, and again from these 15 elders. Each of these colleges has peculiar privileges. The senate and the elders alone receive salaries. Justice is administered by several courts. The court of appeal of the free cities of the Germanic confederacy, is the supreme tribunal. The public revenues were formerly considerable, without the taxes being oppressive; but the heavy debts incurred by the city, of late years, have greatly increased the taxes. The citizens are provided with arms, and accustomed to military exercises, so as to form a body of infantry, cavalry and artillery, in regular uniform, amounting to about 10,000 men. The removal of the old fortifications was commenced, in 1804, and the great French works have also been since demolished. The wall has been turned into a park. The territory of Hamburg (116 square miles) is bounded by that of Holstein on the north and west; the city of Altona, in the territory of Holstein, is not two miles distant from the gates of Hamburg. Towards the east, the Hamburg territory borders on Lauenburg, and on the south it is separated by the Elbe from the territories of Hanover. Some of the islands in the Elbe belong also, either wholly or in part, to Hamburg, together with the village of Moorburg on the left bank. Besides this, it has jurisdiction over the bailiwic of Ritzebüttel, which contains the important town of Cuxhaven (q. v.), at the mouth of the Elbe. Hamburg, in common with Lübeck, also has jurisdiction over the bailiwic of Bergedorf, with the small town of the same name, over the Vierlands, and a few places in Lauenburg. The population belonging to the city of Hamburg is about 122,000, and that of the lands over which it has separate or concurrent jurisdiction, about 28,000. The city owes its foundation to the emperor Charlemagne, who, in the beginning of the ninth century, built a citadel and a church on the heights between the Elbe and the eastern bank of the Alster, as a bulwark against the neighboring pagans. The adaptation of the place for commerce and fishing, attracted many settlers. Although its barbarous neighbors frequently destroyed this settlement, it was as often reëstablished, and the city was enlarged by new buildings. It became important as a commercial city in the 12th century, and in the 13th it was one of the founders of the Hanseatic league. (q. v.) Even after the decline of the confederacy, it maintained its freedom and flourishing commerce. The Hanseatic league with Lübeck and Bremen subsisted till 1810, and has been renewed since 1813 and 1814. Until 1500, the city was confined to the strip of land between the Elbe and the eastern bank of the Alster. The western bank was gradually built upon, principally by exiles from the Netherlands. Thus arose the New Town, which was so important, even in the early part of the 30 years' war, that it was enclosed within the fortifications, and thus gave to the city its present extent. In 1618, Hamburg was formally acknowledged a free city of the empire, although the archbishops of Bremen continued to maintain possession of the cathedral, which fell to Sweden at the peace of Westphalia, and was afterwards ceded, with the duchy of Bremen, to Hanover. The 30 years' war, amidst the devastations of which Hamburg was spared, increased the number of its inhabitants, as late wars in Europe have also done, during which many persons emigrated there from the Rhine, from the Netherlands, and from France. Its commerce increased in the same proportion, and compensated, in a great degree, for the loss in its manufactures, occasioned by the awakened spirit of industry, and by the non-importation acts of foreign powers. Its sugar-refineries, manufactories of whale-oil, ship-yards, and establishments for printing cotton, are still important. The commerce of Hamburg was increased, particularly, by its direct intercourse with the U. States of America, and by the war in the Netherlands and on the Rhine, by which it obtained a considerable share of the commerce of those countries. Thus, at the beginning of the present century, Hamburg was one of the richest and most prosperous of the free cities. Its reverses began, in 1803, with the entrance of the French into Hanover. They took possession of Ritzebüttel, and closed the Elbe to the English, who, in turn, closely blockaded the mouth of the river. Hamburg was now obliged to carry on its maritime commerce through Tönningen and Husum; and whatever was exported

through Hanover and the Elbe, had to be accompanied with certificates that it did not come from British hands, for which certificates the French authorities asked a high price. The city was obliged to advance 2,125,000 marcs banco to the states of Hanover. After the battle of Lübeck, Mortier entered Hamburg (19th Nov. 1806), and, although the French troops evacuated it again after the peace of Tilsit, and it yet retained, for a few years, the shadow of its former independence, it was still, during this period, oppressed in a thousand ways by French commanders. Then came the decrees of Napoleon, which gave, as far as was possible, a final blow to the commerce and industry of Hamburg. At last, Hamburg, with the whole north-western part of Germany, was formally incorporated in the French empire (13th Dec., 1810), and became the capital of the newly created department of the Mouths of the Elbe. But at the beginning of the year 1813, the approach of Tettenborn obliged the French to fly (13th March). This encouraged Hamburg to reëstablish its free constitution, which had been overthrown, and to prepare to take a part in the great struggle. More than 2000 men enlisted for military service; and they were to form a Hanseatic legion with the bands already raised by Lübeck, and those expected from Bremen. In addition to this, a guard of citizens was formed, at first of volunteers, and afterwards by a formal decree of the council and citizens. About 7000 men were enlisted for this purpose. In April, a part of the Hanseatic troops was able to take the field, and their cavalry distinguished itself at Ottersberg on the 22d. But the French, being reinforced, drove back the troops of the allies. They made themselves masters of the left bank of the Lower Elbe, and, May 12, took Wilhelmsburg (the castle of Harburg had voluntarily surrendered to them), and on the night of the 20th, they began to bombard the town. The hope of deliverance, awakened on the 21st, by the entrance of two Swedish battalions, vanished on the 25th, when the Swedes retreated. Misunderstandings arose between the military commanders and the senate, which sought for the mediation of the Danes. On the 29th, Tettenborn evacuated the city; and Von Hess, the commander of the guard of citizens, dismissed them. Before a capitulation had been signed, the Danes entered the city as allies of the French, and, on the evening of the 31st, Eckmühl and Vandamme appeared with a large number of French troops. Partly to secure possession of the city, and partly to punish its resistance, the severest measures were taken. A contribution of 48,000,000 francs was levied upon the citizens, and a part of it was exacted immediately. At the end of the year, 40,000 persons, of every age and sex, had been driven from the city, and exposed to all the rigors of winter. At the same time, the dwellings of about 8000 persons, in the nearest environs of the city, were consumed by fire with such rapidity, that these poor people could only escape with their lives. As the troops which approached Hamburg, first under Wallmoden, and afterwards under Bennigsen, were too weak to undertake a siege, the city could not obtain deliverance from its oppressors, until after the end of the war in France. In the latter part of May (1814), the French troops first left the city, carrying with them the fruits of their exactions. A rent of 500,000 francs was the trifling compensation which France made to Hamburg, for its disastrous ravages within and without the city. The Russians, under Bennigsen, entered in the place of the French, and remained till the end of the year. Then first was the quiet of Hamburg restored.

Hamburg Marc Courant and Banco. (See *Coin.*)

Hamburg Bank. (See *Bank.*)

Hamilcar. (See *Hannibal.*)

Hamilton, Anthony, count; a poet, courtier and man of letters in the 17th century. He was descended from a younger branch of the family of the dukes of Hamilton, in Scotland, but was born in Ireland about 1646. His parents were Catholics and royalists, in consequence of which they removed to France, after the death of Charles I, and young Hamilton became domiciliated in that country. He, however, made frequent visits to England, in the reign of Charles II. His sister was married to count Grammont. It is said that the count, after having paid his addresses to the lady, and been accepted, changed his mind, and set off for the continent. Her brother followed him, and, overtaking him at Dover, asked him if he had not forgotten something to be done, previously to his leaving England. "O, yes," replied Grammont, "I forgot to marry your sister;" and he immediately returned and fulfilled his engagement. When James II was obliged to contend for his crown in Ireland, he gave count Hamilton a regiment of infantry, and made him governor of Limerick; but, on the ruin of the

royal cause, he accompanied James to France, where he passed the rest of his life. His wit and talents secured him admission into the first circles, where he was generally esteemed for his agreeable manners and amiable disposition. He died at St. Germain, in 1720. Count Hamilton is chiefly known as an author by his Memoirs of Count Grammont, a lively and spirited production, exhibiting a free, and, in the general outline, a faithful delineation of the voluptuous court of Charles II. The count's other works are Poems and Fairy Tales, which, as well as the Memoirs, are in French, and display elegance of style and fertility of invention.

Hamilton, Elizabeth, a lady of considerable literary attainments, was born at Belfast, in Ireland, 25th July, 1758. Having become an orphan at an early age, she was brought up under the care of her uncle, who resided near Stirling, in Scotland, and, during her residence in his family, made herself intimately acquainted with those national peculiarities which she afterwards delineated so admirably in her Cottagers of Glenburnie. Besides this little work, which attracted much attention, she wrote the Letters of a Hindoo Rajah (2 vols. 8vo.); the Life of Agrippina (3 vols. 8vo.); and Memoirs of Modern Philosophers; works which, under the popular form of novels, are replete with sound sense and information. Her other writings are, Hints for Public Schools; Popular Essays (2 vols. 8vo.); Rules of the Annuity Fund, &c.; Exercises in Religious Knowledge (12mo.); Letters on the Formation of the Religious and Moral Principle (2 vols.); and On the Elementary Principles of Education. She was never married, but enjoyed an extensive acquaintance, especially among the talented of her own sex, one of whom, Miss Benger, after her decease, printed a selection from her correspondence, with a prefatory account of her life and habits. She died July 23, 1816.

Hamilton, sir William, K. B., was born in Scotland, in 1730. His mother having been nurse to George III, that prince, before his accession to the throne, extended his patronage to young Hamilton, and made him his equerry. In 1764, he received the appointment of ambassador to the court of Naples, where he resided 36 years, returning to England in 1800. A considerable part of this term being a season of political repose, he devoted his leisure to science, making observations on Vesuvius, Ætna, and other volcanic mountains of the Mediterranean; and the result of his researches is detailed in the Philosophical Transactions, and in his *Campi Phlegræi*, or Observations on the Volcanoes of the Two Sicilies (2 vols. fol.). His communications to the royal society were also republished, with notes, in 1772 (8vo.). He drew up an account of the discoveries made in Pompeii, printed in the fourth volume of the *Archæologia*, and collected a cabinet of antiquities, of which an account was published by D'Hancarville. The French revolution gave rise to a treaty of alliance between his Britannic majesty and the king of the Two Sicilies, which was signed by sir William Hamilton, July 12, 1793. By this treaty, the Neapolitans engaged to furnish 6000 troops, four ships of the line, &c., for war against France in the Mediterranean; but Ferdinand IV made peace with the French republic in 1796, without having taken any active part in the contest. On this occasion, and in the subsequent events of 1798 and 1799, when the court emigrated to Sicily, sir William appears to have acted but a secondary part as a political agent, and he was recalled not long after. He died in London, April 6, 1803. After his death, his collection of antique vases was purchased by parliament for the British museum.

Hamilton, lady (before her marriage, Emma Lyon or Harte). According to the memoirs which appeared under her name in 1815, her mother was a poor servant woman, who, with her child in her arms, wandered back, in the year 1761, from the county of Chester, to her home in Wales. Her memoirs say, that she went into service as a children's maid at the age of 13. At 16, she went to London, and served a shop-keeper, and soon after became chambermaid to a lady of rank. The leisure which she here enjoyed, she devoted to novel reading. She soon acquired a taste for the drama. She studied the attitudes and motions of the actors, and exercised herself in representing by attitudes and gestures the different passions. She thus laid the foundation of her extraordinary skill in pantomimic representations. Her attention to these studies caused her to lose her place, and she became a maid servant in a tavern, frequented by actors, musicians, painters, &c. According to her own memoirs, she retained her virtue in the midst of this scene of licentiousness, and the subsequent sacrifice of it she represents as an act of generosity. A countryman and relation of hers had been pressed upon the Thames. To obtain his release, she has-

tened to the captain; she pleased him, and her request was granted. The captain loaded her with presents, and had her natural capacity improved by instruction. She then found a new admirer, who, with the consent of her former lover, took her to his country seat. But at the close of the summer, disgusted by her extravagance, and induced by domestic considerations, he dismissed her. Again thrown helpless upon the world, she wandered through the streets of London, in the lowest stage of degradation. She then met with a quack doctor, who made her his goddess *Hygeia*, and exhibited her as such, wrapped in a light veil. Painters, sculptors and others paid their tribute of admiration at the shrine of this new goddess, and among them the celebrated painter Romney, who fell in love with her. With him she practised all the reserve of modesty and virtue. But she ensnared Charles Greville, of the family of Warwick, who had three children by her, and was on the point of marrying her, when he was suddenly disgraced, in 1789, and deprived of all his offices. Unable to support her any longer, he sent her to Naples, where his uncle, sir William Hamilton, was ambassador. Sir William was so charmed with her, that he made an agreement with Greville, to pay his debts, on condition that he would give up his mistress. She now behaved with more decorum; she supplied, as far as possible, all the deficiencies in her education, and soon became remarkable for her social talents. Artists of all kinds, who had access to sir William Hamilton's house, began to pay their court to her, and she displayed before them her skill in attitudes. A piece of cloth was all she needed to appear as a daughter of Levi, as a Roman matron, or as a Helen or an Aspasia. It was she who invented the seducing shawl dance. Hamilton, who became each day more and more enamored of her beauty, at last determined to marry her; and their nuptials were celebrated in London, in 1791. Soon after his return to Naples, he presented her at court, and she soon took an active part in the festivals of the queen. She was the only witness of the secret suppers of the queen and Acton, and often slept in the chamber of her royal friend. This favor, and her haughtiness, displeased the ladies of the court, who could not conceal their jealousy; some of them were, on that account, treated as criminals of state. At that time began her acquaintance with Nelson, who soon became intimate with the ambassador and his wife. Through them the English government received information, that the king of Spain had determined to declare war. After the victory of Aboukir, Nelson was received in Naples with extravagant rejoicings. Lady Hamilton was the heroine of the crowd, to whom Nelson appeared as a liberating deity. Several months passed in festivities, until the advance of the French obliged the royal family, in December, 1798, to escape, with Nelson's assistance, to Sicily. Some months after, Italy was delivered by the victories of the Austrians and the Russians, and Nelson's fleet returned to the bay of Naples. Lady Hamilton accompanied the slave of her charms; and it is asserted, that the violent measures then used, contrary to the capitulation, were partly intended as acts of vengeance upon her personal enemies. When the court returned to Naples, in 1800, things were replaced upon their former footing, and remained so till the English cabinet recalled sir William Hamilton. Nelson resigned his command at the same time, and appeared in London with the lady and the ambassador. But the intimacy between Nelson and lady Hamilton here attracted general disapprobation. She was delivered of a daughter, which bore the name of Nelson. Soon after, sir William died, and his widow retired to Merton place, a country seat which Nelson had bought for her. Abandoned to herself after his death, in 1805, she again gave herself up to her corrupt inclinations, and was soon reduced to poverty. Limited to a small pension, she left England, took her daughter with her, and hired a house in the country, near Calais, where she died, in 1815. Lady Hamilton was without education, but full of art. To her beauty, and her skill in heightening its effect by the voluptuous attitudes of the dancing girl, she owed her fame and her good fortune. In violation of all sensibility and decency, she sold or published the secret letters of Nelson to her, and thus threw a merited stain upon the memory of this hero.

Hamilton, William Gerard; a statesman and parliamentary orator of the last century, who, on account of the extraordinary impression produced by the first and almost the only speech he ever delivered in the English house of commons, obtained the appellation of *Single Speech Hamilton*. He was born in 1729. In 1754, he obtained a seat in parliament, when he made his memorable speech; and he was subsequently made one of the lords of trade and plantations. On the appoint-

ment of lord Halifax to the vice-royalty of Ireland, Hamilton went thither as his secretary, and was accompanied by the celebrated Edmund Burke as his own secretary. In the Irish parliament, he supported the reputation he had previously gained as an orator, and for many years held the office of chancellor of the exchequer in that kingdom. He relinquished that post in 1784, and spent the latter part of his life in literary retirement. His death took place in 1796. The letters of Junius have also been attributed to this gentleman. His works were published in 1808.

Hamilton, Alexander, was born in 1757, in the island of Nevis. His father was a native of England, and his mother of the island. At the age of 16, he became a student of Columbia college, his mother having emigrated to New York. He had not been in that institution more than a year, before he gave a brilliant manifestation of the powers of his mind in the discussion concerning the rights of the colonies. In support of these he published several essays, which were marked by such vigor and maturity of style, strength of argument, and wisdom and compass of views, that Mr. Jay, at that time in the meridian of life, was supposed, at first, to be the author. When it had become necessary to unsheath the sword, the ardent spirit of young Hamilton would no longer allow him to remain in academic retirement; and before the age of 19, he entered the American army, with the rank of captain of artillery. In this capacity, he soon attracted the attention of the commander-in-chief, who appointed him his aid-de-camp, with the rank of lieutenant-colonel. This occurred in 1777, when he was not more than 20 years of age. From this time, he continued the inseparable companion of Washington during the war, and was always consulted by him, and frequently by other eminent public functionaries, on the most important occasions. He acted as his first aid-de-camp at the battles of Brandywine, Germantown, and Monmouth, and, at the siege of Yorktown, he led, at his own request, the detachment that carried by assault one of the enemy's outworks, Oct. 14, 1781. In this affair, he displayed the most brilliant valor. After the war, colonel Hamilton, then about 24, commenced the study of the law, as he had at that time a wife and family depending upon him for support. He was soon admitted to the bar. In 1782, he was chosen a member of congress from the state of New York, where he quickly acquired the greatest influence and distinction, and was always a member and sometimes chairman of those committees to which were confided such subjects as were deemed of vital interest to the nation. The reports which he prepared are remarkable for the correctness and power which characterize every effort of his pen. At the end of the session, he returned to the practice of his profession in the city of New York, and became eminent at the bar. In 1786, he was chosen a member of the legislature of his state, and was mainly instrumental in preventing a serious collision between Vermont and New York, in consequence of a dispute concerning territorial jurisdiction. He was elected a delegate of New York to the convention which was to meet at Philadelphia, in order to form a constitution for the U. States. As the doors of the convention were closed during its sittings, and its records have never been given to the world, it is not possible to state the precise part which he acted in that body. It is well ascertained, however, that the country is, at least, as much indebted to him for the excellences of the constitution, as to any other member of the illustrious assembly. Hamilton and Madison were the chief oracles and artificers. After the adoption of the constitution by the convention, he associated himself with Mr. Madison and Mr. Jay, for the purpose of disposing the public to receive it with favor. The essays which they wrote with that design, addressed to the people of New York, during the years 1787 and 1788, are well known under the name of the *Federalist*, and contributed powerfully to produce the effect for which they were composed. The larger portion of them was written by Hamilton. In 1788, he was a member of the state convention of New York, which met to deliberate on the adoption of the federal constitution, and it was chiefly in consequence of his efforts that it was accepted. On the organization of the federal government, in 1789, he was appointed to the office of secretary of the treasury. This was a situation which required the exercise of all the great powers of his mind; for the public credit was, at that time, in the lowest state of depression; and, as no statistical account of the country had ever been attempted, its fiscal resources were wholly unknown. But before Hamilton retired from the post, which he did after filling it during somewhat more than five years, he had raised the public credit to a height altogether unprecedented in the

history of the country, and, by the admirable system of finance which he established, had acquired the reputation of one of the greatest financiers of the age. His official reports to congress are considered as masterpieces, and the principles which he advocated in them still continue to exercise a great influence in the revenue department of the American government. Whilst secretary of the treasury, he was, *ex officio*, one of the cabinet counsellors of president Washington; and such was the confidence reposed by that great man in his integrity and ability, that he rarely ventured upon any executive act of moment without his concurrence. He was one of the principal advisers of the proclamation of neutrality issued by Washington in 1793, in consequence of an attempt made by the minister of France to cause the U. States to take part with his country in the war then waging between it and England. This measure he defended in a series of essays, under the signature of *Pacificus*, which were successful in giving it popularity. In 1795, Hamilton resigned his office, and retired to private life, in order to be better able to support a numerous family by the practice of his profession. In 1798, however, when an invasion was apprehended from the French, and a provisional army had been called into the field, his public services were again required. President Adams had offered the chief command of the provisional army to Washington, who consented to accept it on condition that Hamilton should be chosen second in command, with the title of inspector-general. This was accordingly done; and, in a short time, he succeeded in bringing the organization and discipline of the army to a high degree of excellence. On the death of Washington, in 1799, he succeeded, of course, to the chief command. The title of lieutenant-general, however, to which he was then entitled, was, from some unexplained cause, never conferred on him. When the army was disbanded, after the cessation of hostilities between the U. States and France, general Hamilton returned again to the bar, and continued to practise, with increased reputation and success, until 1804. In June of that year, he received a note from colonel Burr,—between whom and himself a political had become a personal enmity,—in which he was required, in offensive language, to acknowledge or disavow certain expressions derogatory to the latter. The tone of the note was such as to cause him to refuse to do either and a challenge was the consequence. July 11, the parties met at Hoboken, and on the first fire Hamilton fell, mortally wounded, on the same spot where, a short time previously, his eldest son had been killed in a duel. He lingered until the afternoon of the following day, when he expired. The sensation which this occurrence produced throughout the U. States, had never been exceeded on this continent. Men of all political parties felt that the nation was deprived of its greatest ornament. His transcendent abilities were universally acknowledged; every citizen was ready to express confidence in his spirit of honor and his capacity for public service. Of all the coadjutors and advisers of Washington, Hamilton was, doubtless, the one in whose judgment and sagacity he reposed the greatest confidence, whether in the military or civil career; and, of all the American statesmen, he displayed the most comprehensive understanding and the most varied ability, whether applied to subjects practical or speculative. A collection of his works was issued in New York, in three octavo volumes, some years after his death. His style is nervous, lucid and elevated; he excels in reasoning, founded on general principles and historical experience. General Hamilton was regarded as the head of the federalists in the party divisions of the American republic. He was accused of having preferred, in the convention that framed the federal constitution, a government more akin to the monarchical; he weakened the federal party by denouncing president Adams, whose administration he disapproved, and whose fitness for office he questioned. But his general course, and his confidential correspondence, show that he earnestly desired to preserve the constitution, when it was adopted, and that his motives were patriotic in his proceedings towards Mr. Adams. Certain it is, that no man labored more faithfully, skilfully and efficiently, in organizing and putting into operation the federal government.

Hamilton College. (See *Clinton*.)

Hammer; a well-known tool used by mechanics, of which there are various sorts; but they all consist of an iron head fixed crosswise to a handle of wood. Among blacksmiths, there are the hand-hammer, the uphand sledge, the about sledge (which is swung over head with both arms), &c.

Hammer, in German geographical names, means *forge*.

Hammer, Joseph von, one of the first Orientalists of the present day, interpreter

of Oriental languages to the court of Vienna, was born in 1774, at Grätz, in Stiria, where his father was a member of the provincial council. In 1787, Hammer, already distinguished for his talents, was placed in the Barbara institution, at Vienna, and, in 1788, in the Oriental academy, founded by prince Kaunitz. He was afterwards employed as an assistant in publishing the Arabic, Persian and Turkish lexicon, known as Meninsky's. In 1796, he was appointed secretary to the baron von Jenisch. About this time, he first translated a Turkish poem on the end of all things, and wrote several poetical pieces, which appeared in the German Mercury. The year 1798 he spent in travelling and study. In 1799, Hammer went to Constantinople, as an interpreter, in the suite of the learned internuncio, baron von Herbert, who was sent to open a communication, for Austria, with Persia and the East Indies. On the conclusion of the treaty of El Arish, stipulating the departure of the French army from Egypt, he sent Hammer to that country, on a mission connected with the imperial consulate. Among the fruits of this journey are, the Ibis mummies, the collection of Arabian letters, the voluminous romance of chivalry, *Antar*, in the Arabic language, a curiosity even in the East, the stone inscribed with hieroglyphics, from the catacombs of Sakara, and several other valuable articles, preserved in the imperial library. As the treaty was not ratified, Hammer accompanied Hutchinson, sir Sidney Smith and Jussuf Pacha, as secretary and interpreter, in their campaign against Menou. In the fall of 1801, he went through Malta and Gibraltar to England; in April, 1802, he returned to Vienna; and, in August, to Constantinople, as secretary of legation to the Austrian internuncio, baron von Stürmer. In 1806, he went, as consular agent, to Moldavia, at the important crisis of the war between Russia, Prussia and France; remarkable, also, for the passage of admiral Duckworth through the Dardanelles. The French minister, Reinhardt, himself a learned man, at that time ambassador to the hospodar of Moldavia and Walachia, treated the learned Hammer with great distinction. Since the summer of 1807, Hammer has been established in Vienna. In 1811, he was appointed acting imperial counsellor, and interpreter to the privy court and state chancery. In October, 1815, he was appointed first keeper of the imperial court library, which office he did not accept. The emperor of Russia bestowed upon him the order of saint Anne of the second class, and the king of Denmark the order of the Danebrog. In 1816, he married the eldest daughter of Mr. von Hennickstein; in 1817, he was made imperial court counsellor; and, in 1819, a knight of the order of Leopold. He has published Sketches of a Journey from Vienna, through Trieste, to Venice, and through Tyrol back to Salzburg (1798); General View of the Learning of the East (1804), according to the great Bibliography of Hadschi Khalfa; Ancient Alphabets and hieroglyphical Characters explained, with an Account of the Egyptian Priests, their Classes, Initiation and Sacrifices, in the Arabic Language, by Ahmed Ben Abubekr Ben Washie, and, in English, by Joseph Hammer (London, 1805); the Trumpet of the Holy War, edited by John Müller (1806); Resmi Ahmed Effendi's Reports on his Embassies to Vienna (1757) and Berlin (1763, 1809); Topographical Remarks upon a Journey to the Levant (1811); Constitution of the Ottoman Empire (1816); History of Persian Belles-lettres (1818); Remarks on a Journey (1804) from Constantinople to Brussa and Olympus, and back through Nicæa and Nicomedia (1818); History of the Assassins, from Oriental Sources (1818). He translated the three greatest lyric poems of the nations of Eastern Asia—the Divan of Hafiz, from the Persian, in 1813; the Motenebbi, from the Arabic, in 1823; and the Baki, from the Turkish, in 1825. His poem, Memnon's Trilogy (Vienna, 1823), contains an Indian pastoral, a Persian opera, and a Turkish comedy. He has written, also, poems and other contributions for several periodicals. With the assistance of count Wenzel Rzewusky, he established the excellent journal *Fundgruben des Orients* (Mines of the East)—a rallying point for the Orientalists of all Europe. His Essay on the Influence of Mohammedanism gained the prize of the national institute, in 1806. The 6th volume of his History of the Ottoman Empire was published in 1830.

Hammock, in naval affairs; a piece of hempen cloth, six feet long and three feet wide, gathered together at the two ends by means of a clew, and slung horizontally under the deck, forming a receptacle for a bed. There are about from 14 to 20 inches in breadth allowed between the decks for every hammock in a ship of war. In preparing for battle, the hammocks, with their contents, are all firmly corded, taken upon deck, and fixed in va-

rious nettings, so as to form a barricade against small shot.

Hammond, James, an English elegiac poet, born in 1710, received his education at Westminster school, where he formed an intimacy with lords Cobham, Chesterfield and Lyttelton, and others afterwards distinguished in literature. He was appointed equerry to Frederic, prince of Wales; and, in 1741, was chosen member of parliament for Truro. He died the following year, his health, if not his intellect, having been disordered by an unfortunate attachment to a young lady who rejected his addresses. After his death, a small volume of his Love Elegies was published, with a preface by lord Chesterfield. They are chiefly imitations of Tibullus, and display a cultivated taste and warm imagination.

Hampden, John, celebrated for his patriotic opposition to taxation by prerogative, was born in London, in 1594, and, at an early age, was entered a gentleman commoner at Magdalen college, Oxford. On leaving the university, he took chambers in one of the inns of court, in order to study law; but the death of his father putting him in possession of an ample estate, he indulged in the usual career of country gentlemen, until the aspect of the times, and the natural weight of his connexions and character, produced greater strictness of conduct, without any abatement of his cheerfulness and affability. He was cousin-german, by the mother's side, to Oliver Cromwell. He entered parliament in 1626; and, although for some years a uniform opposer of the arbitrary practices in church and state, and one of those who, in 1637, had engaged a ship to carry them to New England, he acted no very distinguished part. Hume sneers at the motives of this intended emigration, as merely Puritanical; but the conduct of Hampden in regard to the demand for ship-money, which immediately followed the prohibition to depart the kingdom, forms a conclusive answer to this insinuation. His resistance to that illegal impost (to use the language of lord Clarendon) made him the argument of all tongues, especially as it was after the decision of the judges in favor of the king's right to levy ship-money, that Hampden refused to pay it. Being prosecuted in the court of exchequer, he himself, aided by counsel, argued the case against the crown lawyers for 12 days, before the 12 judges; and, although it was decided against him by eight of them to four, the victory, as far as regarded public opinion, was his. From this time, he received the title of the *patriot Hampden*; and his temper and his modesty on this great occasion acquired him as much credit as his courage and perseverance. Henceforward he took a prominent part in the great contest between the crown and the parliament, and was one of the five members whom the king so imprudently attempted, in person, to seize in the house of commons. When the appeal was made to the sword, Hampden acted with his usual decision, by accepting the command of a regiment in the parliamentary army, under the earl of Essex. Prince Rupert having beaten up the quarters of the parliamentary troops, near Thame, in Oxfordshire, Hampden eagerly joined a few cavalry that were rallied in haste, and, in the skirmish that ensued, received a wound which proved fatal six days after its infliction, on the 24th June, 1643. It is said that the king testified his respect for him by sending his own physician to attend him. His death was a great subject of rejoicing to the royal party, and of grief to his own. That the joy of the former was misplaced, there is now much reason to believe, as he would probably have proved a powerful check upon the unprincipled ambition of his relative Oliver. Clarendon sums up an elaborate character of this eminent leader, by declaring that, like Catiline, "He had a head to contrive, a tongue to persuade, and a hand to execute, any mischief." But his character and conduct, from first to last, evince his conscientiousness, and he has taken his rank by acclamation on the one side, and tacitly on the other, high in the list of English patriots.

Hampden Sidney College; a college in Prince Edward county, Virginia, 80 miles S. W. of Richmond, and central to the southern section of the state. It was founded in 1775. The corporation consists of 27 men, most of whom are graduates from other colleges. The president of the college is the professor of mental philosophy, rhetoric, moral philosophy and natural law. There is a professor of chemistry and natural philosophy, one of mathematics, and one of the learned languages. There are two college buildings, which are very commodious. The number of undergraduates is about 100. There are four libraries belonging to the institution and the students, comprising more than 2000 volumes. The college year has two sessions. There is no town or village in the vicinity of the college. The Union Theological seminary, a Pres-

byterian institution, established in 1824, is situated near the college, and contained, in 1830, 35 students.

HAMPSHIRE, HANTS, SOUTHAMPTON; one of the southern counties of England, on the English channel, including, also, the Isle of Wight, and, in some points of jurisdiction, the more distant islands of Jersey and Guernsey.

HAMPSHIRE, NEW. (See *New Hampshire.*)

HAMPSTEAD; a populous village of England, in Middlesex. It is situated on the declivity of a high hill, from which there is one of the best and most charming prospects of the metropolis and the adjacent counties. According to tradition, this was formerly a hunting seat of James II. Population of the parish, 7263. Four miles N. London. This place is much resorted to in summer, by the inhabitants of London.

HAMPTON COURT; a royal residence, on the northern bank of the Thames, about 13 miles from London. It was erected by cardinal Wolsey, who lived here magnificently. The palace was said to be provided with 280 beds for visitors of rank. Wolsey presented it to Henry VIII, in 1526, after which it was much resorted to by the English kings and queens, until lately. The palace and appurtenances are very spacious, and are described at length in the various Guides of London. Much of the celebrity of Hampton court is owing to the gallery of paintings, in which the famous cartoons of Raphael are preserved. They are called, by way of excellence, *the cartoons.* They are part of a series of designs made for tapestry, and were purchased by Charles I. They are deservedly reckoned among the finest of Raphael's works, and consequently among the finest works of art. Richardson has given an accurate historical and critical description of them; and, in his opinion, they are more fitted to convey a true idea of the genius of Raphael, than even the *loggie* of the Vatican. The tapestries that have been wrought from them are but shadows of the originals, yet are preserved with great veneration at Rome, and only shown on a few days in the year, in the gallery which leads from St. Peter's to the Vatican, and never fail to attract an immense crowd. Towards the end of the year 1797, the French government exhibited, in the *Salon du Musée*, several tapestries worked at Brussels, which were said to have been executed after the designs of Raphael. The cartoons at Hampton court have been several times engraved, first by Gribelin, in queen Anne's reign, next by Dorigny, and since that by several inferior artists, most probably from the other engravings. They have also been engraved lately, of a small size, by Fittler, and of a very large size, and in a splendid and superior manner, by Holloway. One of the most admired of these cartoons is St. Paul preaching at Athens. (For more information respecting them, and the other valuable pictures at Hampton court, see *British Galleries of Art* (London, 1824).—Hampton, the village near Hampton court, contains 3549 inhabitants, and is 14 miles distant from London.

HANAPER; an office in chancery, under the direction of a master, whose deputy and clerks answer, in some measure, to the *fiscal* among the Romans. The clerk of the hanaper receives all fines due to the king for seals of charters, patents, commissions and writs. He attends, also, the keeper of the seal daily, in term, and at all times of sealing, and takes into his custody all sealed charters, patents, &c.

HANAU, a province of Hesse-Cassel, in the Wetteravia, constituted, from 1809 to 1813, part of the grand-duchy of Frankfort. It contains 572 square miles, with 88,100 inhabitants, mostly Protestants, who formed a religious union in 1818. The capital is Hanau, on the Kinzig; lat. 50° 51′ N.; lon. 8° 51′ E.; with 1479 houses and 9700 inhabitants; famous for the battle fought here, Oct. 30, 1813, between the Bavarian general Wrede and Napoleon, on the retreat from Leipsic. The victory was, at first, decidedly for the French; but the allies claimed the advantage, because they had seriously embarrassed the retreat of Napoleon. Military writers have reproached general Wrede for his bad tactics. He was himself severely wounded. The allies did not advance before November 2, and therefore could not have gained any great advantage. It is said that the French lost 15,000 killed and wounded, and 10,000 prisoners, in the combats in and near Hanau.

HANCOCK, John, was born at Quincy, near Boston, and was the son and grandson of eminent clergymen, but, having early lost his father, was indebted for his liberal education to his uncle, a merchant of great wealth and respectability, who sent him to Harvard university, where he was graduated in 1754. He was then placed in the counting-house of his benefactor, and not long afterwards visited England, where he was present at the coronation of George III, as little prescient

as the monarch himself of the part which he was destined to act in relation to the English government. On the sudden demise of his uncle, in 1764, he succeeded to his large fortune and extensive business; both of which he managed with great judgment and munificence. As a member of the provincial legislature, he exerted himself with zeal and resolution against the royal governor and the British ministry, and became so obnoxious to them, in consequence, that in the proclamation issued by general Gage, after the battle of Lexington, and a few days before that of Bunker hill, offering pardon to the *rebels*, he and Samuel Adams were specially excepted, their offences being "of too flagitious a nature to admit of any other consideration than that of condign punishment." This circumstance gave additional celebrity to these two patriots, between whom, however, an unfortunate dissension took place, which produced a temporary schism in the party they headed, and a long personal estrangement between themselves. In fact, they differed so widely in their modes of living and general dispositions, that their concurrence in political measures may be considered one of the strongest proofs of their patriotism. Hancock was a magnificent liver, lavishly bountiful, and splendidly hospitable; Samuel Adams had neither the means nor the inclination for pursuing a similar course. He was studiously simple and frugal, and was of an austere, unbending character. Hancock was president of the provincial congress of Massachusetts, until he was sent as a delegate from the province to the general congress at Philadelphia, in 1775. Soon after his arrival there, he was chosen to succeed Peyton Randolph as president of that assembly, and was the first to affix his signature to the declaration of independence. He continued to fill the chair until the year 1779, when he was compelled by disease to retire from congress. He was then elected governor of Massachusetts, and was annually chosen from 1780 to 1785. After an interval of two years, during which Mr. Bowdoin occupied the post, he was reëlected, and continued in the office until his death, Oct. 8, 1793, at the age of 56 years. In the interval, he acted as president of the convention of the state for the adoption of the federal constitution, for which he finally voted. (An able sketch of his character is contained in Tudor's Life of Otis.) The talents of Hancock were rather useful than brilliant. He seldom spoke, but his knowledge of business, and facility in despatching it, together with his keen insight into the characters of men, rendered him peculiarly fit for public life. As the president of a deliberative assembly, he excelled. His voice was sonorous, his apprehension of questions quick; he was well acquainted with parliamentary forms, and he inspired respect and confidence by his attention, impartiality and dignity. In private life, he was eminent for his hospitality and beneficence. He was a complete gentleman of the old school, both in his appearance and manners; dressing richly, according to the fashion of the day, keeping a handsome equipage, and being distinguished for politeness and affability in social intercourse. When Washington consulted the legislature of Massachusetts upon the propriety of bombarding Boston, Hancock advised its being done immediately, if it would benefit the cause, although nearly his whole property consisted in houses and other real estate in that town.

Hand; a measure of four inches, or of the clenched fist. In painting and sculpture, it signifies also the style of the artist. Hands are borne in coats of armor, right and left, expanded or open; and a bloody hand in the centre of an escutcheon, is the badge of a baronet of Great Britain.

Handbreadth; a measure of three inches.

Handcuffs; an instrument formed of two circular pieces of iron, each fixed on a hinge on the ends of a very short iron bar, which, being locked over the wrists of a malefactor, prevents his using his hands.

Handel, properly Haendel, George Frederic. This celebrated composer was a native of Halle, in the duchy of Magdeburg, in Lower Saxony, where his father practised with considerable reputation as a physician and surgeon. He was born Feb. 24, 1684. His father, intending him for the law, discouraged, as much as possible, the strong passion which he evinced early in life for the science of music. But, although he was forbidden the use of musical instruments, the young musician contrived to secrete a small clavichord in a garret, where he amused himself during great part of the night after the rest of the family had retired, and made such progress that, on paying a visit to the court of Saxe-Weissenfels, where his brother held a subordinate situation in the household, he played on the church organ with such power and effect, that the duke, who accidentally witnessed his performance, used his influence successfully with his father, to permit him to follow his inclination. He was accordingly placed under the

tuition of Zachau, organist of the cathedral, and at the age of nine was so far advanced in the practical part of the science, as to be able to officiate occasionally as deputy to his instructer, while his theoretical proficiency enabled him to compose a service, or spiritual cantata, weekly, for nearly three years. On the death of his father in 1703, he repaired to Hamburg, then celebrated for the excellence of its musical performances, and procured an engagement in the orchestra at the opera there. At this period of his life, he commenced an acquaintance with Matheson the composer, which, though untoward in its commencement, ripened into a strict friendship. A breach of etiquette during the performance of the latter's opera of Cleopatra, on the 4th of December, 1704, produced a quarrel between the young men, which terminated in a duel. Fortunately, Matheson's sword broke against one of Handel's buttons, which ended the rencounter, and a reconciliation took place. On the 30th of the same month, Handel brought out his first opera, Almira, which, in the February following, was succeeded by his Nero, Matheson performing the principal character in each. Having at length saved 200 ducats,—enough to warrant him in making a journey to Italy,—he proceeded in succession to Florence, Venice, Naples and Rome; in which latter capital he formed an acquaintance with Corelli, at the house of cardinal Ottoboni. On his return to Germany, in 1710, he entered the service of the elector of Hanover, afterwards George I of England, as chapelmaster; but, having received pressing invitations from several of the British nobility to visit London, he, with the permission of that prince, set out for England, where he arrived in the latter end of 1710. The flattering reception which he met with in that country, induced him to break his continental engagement, in violation of a positive promise which he had given to return within a specified time; and he was, in consequence, on the accession of his royal patron to the throne of Great Britain, in much disgrace, till the good offices of baron Kilmansegge restored him to favor, and the pension of £200, granted him by queen Anne, was doubled. From 1715 to 1718, Handel resided with the earl of Burlington, and then quitted that nobleman for the service of the duke of Chandos, who entertained him as *maestro di capella* to the splendid choir which he had established at his seat at Cannons. For the service of this magnificent chapel, Handel produced those anthems and organ fugues, which alone would have been sufficient to immortalize him. After two years dedicated to this munificent patron, the royal academy of music was instituted; and this great composer, whose fame had now reached its height, was placed at its head; and this, for a short period, may be considered as the most splendid era of music in England. The warmth of his own temper, however, excited by the arrogance and caprice of Carestini, Cuzzoni, and others of his principal Italian singers, gave birth to many violent quarrels; and, public opinion becoming to a certain extent enlisted in favor of his opponents, his popularity began to wane, and, after ten years' duration, the operas under his direction were abandoned. In 1741, he brought out his *chef-d'œuvre*, the oratorio of the Messiah. This sublime composition was not, however, duly appreciated at its first representation—a circumstance which may be accounted for by the offence which its author had just given, in refusing to compose for Senesino, who had insulted him. Disgusted at its reception, Handel set out for Ireland towards the close of the same year, where it was much more successful; and when, after an absence of nine months, which had turned out most profitably both to his purse and fame, he returned to London, the hostility against him had much abated, and his oratorios were constantly received at Covent-garden theatre, with the greatest approbation, by overflowing audiences: the Messiah, in particular, increased yearly in reputation. Some time previously to his decease, he was afflicted by total blindness; but this misfortune had little effect on his spirits, and he continued not only to perform in public, but even to compose. His own air, however, from the oratorio of Sampson, Total Eclipse, is said always to have affected and agitated him extremely after this melancholy privation. April 6, 1759, he was, as usual, at his post in the orchestra, but expired, after a very short illness, on the 13th of the same month. His habits of life were regular; and although, in his contests with the nobility, he lost at one time the whole of his savings, amounting to £10,000, yet he afterwards recovered himself, and left £20,000 at his decease. His appetites were coarse, his person large and ungainly, his manners rough, and his temper even violent; but his heart was humane, and his disposition liberal. His early and assiduous attention to his profession prevented him from acquiring much literary information, but he spoke several modern languages. His musical powers can hardly be estimated too high-

ly. In boldness and strength of style, and in the combination of vigor, spirit and invention in his instrumental compositions, he was never surpassed. His choruses have a grandeur and sublimity which have never been equalled. A very honorable national tribute of applause was given to Handel in 1785, by a musical commemoration at Westminster abbey, in which pieces selected exclusively from his works were performed by a band of 500 instruments, in the presence of the royal family, and the principal nobility and gentry of the three kingdoms. This great composer never married; he was buried in Westminster abbey, where a monument by Roubilliac is erected to his memory.

Handspike; a wooden bar or lever to heave round the windlass, in order to raise the anchor from the bottom; or for stowing the anchor, provisions or cargo, in the ship's hold. The *gunner's handspike* is shorter than the former, and armed with two claws for managing the artillery.

Hanging. (See *Death, Punishment of.*)

Hang-tcheou; a city in China, of the first rank, capital of Tche-kiang; 600 miles S. S. W. of Peking; lon. 119° 46′ E.; lat. 30° 20′ N. It is one of the richest and largest cities of the empire, called by the Chinese the *terrestrial paradise*, and said to contain 1,000,000 souls; situated between the basin of the grand canal and the river Tsien-tang, which falls into the sea at the distance of little more than 60 miles to the eastward. The tide, when full, increases the width of this river to about four miles, opposite to the city. It has nothing grand in its appearance except its walls. The houses are low; none exceed two stories; the streets are narrow; they are paved with large, smooth flags in the middle, and with small flat stones on each side. The chief streets consist entirely of shops and warehouses, many not inferior to the most splendid of the kind in Europe. A brisk and extensive trade is carried on in silks, and not a little in furs and English broadcloths. The country around produces great quantities of excellent silk; and the people of the place say that 60,000 persons are employed in raising it in the neighboring towns and villages.

Hanmer, sir Thomas, was born in 1676, and succeeded his uncle in his title and the family estate of Hanmer. In 1713, he was chosen speaker of the house of commons. This distinguished office he filled during the remainder of his parliamentary career. Towards the close of his life, he withdrew altogether from public business, and occupied himself in elegant literature; the fruits of which appeared in a corrected and illustrated edition of Shakspeare's dramatic works, in six quarto volumes. He died in 1746.

Hannibal, or Annibal; son of Hamilcar Barcas; born B. C. 247. At the age of 9 years, his father, whom he was eager to accompany in the war against Spain, made him swear at the altar eternal hatred to the Romans. He was a witness of his father's achievements in Spain; but Hamilcar having fallen in battle, in Lusitania, nine years afterwards, and his son-in-law Hasdrubal having been appointed to succeed him, Hannibal returned home. At the age of 22, he returned to the army, at the request of Hasdrubal. The soldiers perceived in him the spirit of Hamilcar, whom they had so highly esteemed; and, in three campaigns, his talents and his courage were so conspicuous, that the army, on the murder of Hasdrubal, in 221, conferred on him the chief command by acclamation. Faithful to his early vow, the young general of 26 years soon manifested his determination to violate the treaties with Rome, whenever an opportunity should offer. This object was effected by the capture of Saguntum, which he took, with the consent of the Carthaginian senate, after a siege of eight months. The Romans, alarmed by the fate of this city, sent ambassadors to Carthage to demand that Hannibal should be delivered up. The demand being refused, they declared war. Hannibal raised a powerful force, and conceived the bold design of attacking the Romans in Italy. After providing for the security of Africa, and having left his brother Hasdrubal with an army in Spain, he began his march with 90,000 foot-soldiers, 40 elephants and 12,000 horsemen, traversed Gaul in the depth of winter with incredible rapidity, and reached the foot of the Alps. In nine days, he crossed the summit of the Little St. Bernard. At least this is the spot fixed upon by the careful investigations of general Melville; but, according to Reichard, he crossed the Genevre. Of the troops with which he had set out, however, he had now only 20,000 foot-soldiers and 6000 horse remaining; and these were little more than skeletons. But his courage remained unshaken, and his only alternative was victory or death. The capture of Turin secured him a supply of provisions, and encouraged the people of Cisalpine Gaul to join him. These auxiliaries would have been still more numerous, had not Publius Scipio approached, by forced marches, at the head of a Roman army, which had

landed at Pisa. On the banks of the Ticinus the armies engaged, and a charge of the Numidian horse left Hannibal master of the field. Scipio avoided a second battle, and retreated beyond the Trebia, leaving the strong town of Clastidium in the enemy's hands. Meanwhile Sempronius arrived with a second army, which held the Carthaginian leader in check for a while; but Hannibal soon provoked his impetuous adversary to an engagement, disposed an ambuscade near the Trebia, and surrounded and destroyed the Roman forces. The Romans lost their camp and 26,000 men. Hannibal now retired to winter quarters among his allies, in Cisalpine Gaul; and, at the opening of the next campaign, he found two new armies awaiting his approach in the passes of the Apennines. He determined to engage them separately, and destroy Flaminius before the arrival of his colleague. He deceived him, therefore, by feigned marches, crossed the Apennines, and traversed the Clusian marsh. For four days and nights the Carthaginians were marching through water. Even Hannibal, who had mounted the only remaining elephant, saved himself with difficulty, and lost an eye in consequence of an inflammation. He had scarcely regained firm footing, when he employed every means to compel Flaminius to a battle. He wasted the whole country with fire and sword, and feigned a march to Rome; but suddenly formed an ambush in a narrow pass, surrounded by almost inaccessible rocks. Flaminius, who inconsiderately followed him, was immediately attacked; a bloody engagement took place near the lake Thrasymenus, in which Roman valor was overcome by artifice and superior skill. Assailed on every side, the Roman legions were cut in pieces without being able to display their columns. Enriched with the spoils of the conquered, Hannibal now armed his soldiers in the Roman manner, and marched into Apulia, spreading terror wherever he approached. Rome, in consternation, intrusted her safety to Fabius Maximus, the dictator, who determined to exhaust by delay the strength of the Carthaginians. He attacked Hannibal with his own weapons, and hung upon him every where without attempting to overtake him, convinced that the Carthaginians could not long hold a desolated territory. These were led by their general into the plains of Capua, with the design of separating the terrified cities from their alliance with the Romans, and drawing down Fabius from the mountains. But he suddenly found himself in the same toils in which Flaminius had perished. Shut up between the rocks of Formiæ, the sands of Lecsternum, and impassable marshes, he was indebted for his safety to a stratagem. Having collected a thousand oxen, and fastened burning torches to their horns, he drove the furious animals at midnight into the defiles which were guarded by the Romans. Panic-struck at the terrible sight, they abandoned the heights, and Hannibal forced his way through their ranks. The Romans, dissatisfied with the delay of Fabius, now made Minutius Felix, master of the horse, his colleague in the dictatorship. Eager for combat, he fell into an ambush at Gerunium, and would have perished, but for the aid of Fabius. After this campaign, the other Roman generals seemed unwilling to trust any thing to chance, and imitated the delay of Fabius. Hannibal saw with grief his army slowly wasting away, when the new consul, Terentius Varro, an inexperienced and presumptuous man, took the command of the legions. Hannibal had occupied Cannæ (q. v.), and reduced the Romans to the necessity of risking an engagement. The two armies were drawn up in presence. Paulus Æmilius, the colleague of Varro, wished to put off the battle, on account of the disadvantageous position of the Romans; but Varro chose the day of his command, gave the signal for the attack, and the Roman army was destroyed. Hannibal now marched to Capua, which immediately opened its gates. Although the soldiers were enervated by a residence in this luxurious city, no Roman general, after the battle of Cannæ, ventured to show himself in the plain. Hannibal, however, was no longer in a condition to prosecute his successes. His army was enfeebled; and, notwithstanding his splendid success and the influence of his party in Carthage, his enemies had gained such an ascendency, that his brother Hasdrubal with difficulty procured him a small reinforcement of 12,000 foot and 2500 horse, which he was obliged to conduct by the way of Spain. Hannibal was therefore compelled to assume the defensive. Capua was invested by two consular armies, and was on the point of surrendering. Hannibal hoped to save it by a bold diversion. He marched to Rome, and encamped in sight of the capitol, B. C. 211; but the Romans were not thus to be discouraged; Capua fell. This success gave the Romans a decided superiority, and nearly all the people of Italy declared in their favor. Held in check by the consul, Claudius

Nero, Hannibal could not effect a union with his brother, who, after having passed the Apennines, was attacked and defeated by Nero, in 207. Hasdrubal himself fell, and his bloody head was thrown into the camp of Hannibal. The latter then retired to Bruttium, where, surrounded with difficulties, he yet maintained the contest with inferior forces against victorious armies. But Scipio now carried the war into Africa, and made Carthage tremble; and Hannibal was recalled to defend his country. "Not Rome, but the senate of Carthage has conquered Hannibal," he exclaimed, in the deepest anguish, when he read the orders recalling him from Italy. He embarked his troops, put to death the Italian allies who refused to accompany him, and, in 205, left the country which, for 16 years, he had held in spite of all the efforts of Rome. He landed at Leptis, gained over a part of the Numidians, and encamped at Adrumetum. Scipio took several cities, and reduced the inhabitants to slavery. Pressed by his countrymen to come to a decisive engagement, Hannibal advanced to meet him, and encamped at Zama, five days' journey from Carthage. The two generals had an interview, and Hannibal proposed terms of peace; but in vain. Hannibal was defeated; 20,000 Carthaginians were left upon the field, and as many more taken prisoners. Hannibal fled to Adrumetum, rallied the fugitives, and, in a few days, collected a new army capable of checking the conqueror's progress. He then hastened to Carthage, and declared to the senate that there was no safety but in peace; and persuaded that body to accede to the terms offered. Thus ended the bloody contest of 18 years; doubly fatal to Carthage, which was at once stripped of her former conquests, and of all hope of new ones, by the loss of her fleet. Hannibal, nevertheless, still retained his credit, and was made commander-in-chief of an army in the interior of Africa. But the partisans of Hanno, his bitterest enemy, continued to persecute him, and accused him to the Romans of maintaining a secret correspondence with Antiochus, king of Syria, with the design of lighting anew the flames of war. Ambassadors were accordingly sent to Carthage, to demand that he should be delivered up. He saved himself, however, by fleeing to Cercina, and thence to Tyre, where he was received with the greatest honors. He afterwards went to Ephesus, to the court of Antiochus, engaged him to declare war against the Romans, and persuaded him that Italy must be made the theatre of action. Antiochus approved his plans; but when Hannibal proposed an alliance with that prince to his own country, his enemies prevailed in the senate, and the whole design was frustrated. He was indeed appointed to the command of the Syrian fleet, and attacked the Rhodians, who were allies of Rome; but, owing to the treachery of one of his officers, he was forced to retreat. Antiochus himself was led by a series of misfortunes and errors to conclude a disgraceful peace. Hannibal was again obliged to flee, to escape being delivered up to the Romans, and went to the court of Prusias, king of Bithynia, who was animated by the same spirit of hostility against the Romans. He was the soul of a powerful league formed between Prusias, and several neighboring princes, against Eumenes, king of Pergamus, an ally of Rome, took the command of the military force, and gained several victories by land and sea. Notwithstanding these advantages, Asia trembled at the name of Rome; and Prusias, to whom the senate had sent ambassadors to demand the person of Hannibal, was on the point of complying with the requisition. But the hero prevented the disgrace by swallowing poison, which he always carried about in his ring. He died B. C. 183, aged 64 years. In the work *Hannibal's Heerzug über die Alpen* (Hannibal's March over the Alps), by C. L. E. Zander (Hamb., 1823, 4to.), all the previous investigations concerning Hannibal's route are collected; the author follows Deluc.

Hanno; a Carthaginian general, who made a voyage on the western coast of Africa, of which he has left the description. The purpose of this voyage was to make discoveries for the benefit of commerce, and to settle colonies, of which he established six on the coast of Morocco, whence he continued his voyages of discovery. From his description, he probably proceeded as far as the coast of Guinea; for his accounts of the people he describes, are applicable to the Negroes of that country, and the two large streams containing crocodiles and hippopotamuses correspond to the rivers Senegal and Gambia. Hanno lived, probably, 550 B. C., and deserves a distinguished place amongst the ancient navigators. The *Periplus* of Hanno is the Grecian translation of the relation of his voyage. An English translation of it by Falconer appeared in 1797 (8vo.)—Two Carthaginian generals, of the name of Hanno, commanded in Sicily, successively, during the first Punic war.—

Another Hanno was one of the commanders under Hannibal in Italy, and was distinguished by several fortunate enterprises.

Hanover; a kingdom in the north of Germany, erected in 1814, consisting of the duchy of Bremen, the principality of Luneburg, and of several other countries. It does not form a consolidated whole, several portions of it being detached from the main body. Area, 14,800 square miles. The inhabitants, in 1829, amounted to 1,582,574, of whom 1,253,574 are Lutherans, 200,000 Catholics, and the rest Calvinists, Jews and Menonites. Its figure somewhat resembles an oblong square, having the Elbe along its north-east side, the German ocean on the north-west, Dutch Friesland, with Prussian Westphalia, on the south-west, and Saxony on the south-east. It lies between 6° 51′ and 11° 51′ of E. lon., and 51° 18′ and 53° 54′ of N. lat. In 1815, it was divided into the 11 following provinces: Calenberg, Göttingen, Luneburg, Hoya and Diepholtz, Hildesheim, Osnabrück, Verden, the duchy of Bremen (which is distinct from the town), Bentheim, East Friesland, and Lingen (with part of the lordships of Rheina and Meppen). These provinces are subdivided into 107 bailiwics. With the exception of the Hartz, and other elevated tracts in the south, the territory of Hanover consists of an immense plain, with gentle undulations, but hardly any thing that can be called a mountain. In the south, the valleys are fertile. In the north are many barren heaths and moors. The most productive tracts are those along the banks of the rivers, which have been reclaimed from a marshy state. The mountain tract of the Hartz is covered with vast forests, which are particularly valuable in this quarter, as they afford fuel for the supply of the mines, with which the country abounds, and which are still more valuable than its forests. Those of silver were discovered as early as the year 968, and are supposed to have been the first opened in Europe. Iron, copper and lead are wrought here to a great extent; also zinc and sulphur, with green, blue and white vitriol. The iron mines are the most productive; and their annual tenth yields a revenue of about £115,000 sterling. The rivers of Hanover are the Elbe (joined by the Jeetze), the Ilmenau, the Oste, the Weser (which receives the Leine), the Ocker, the Innerste, the Ruhme, and the Embs (joined by the Stunte and Haze). The chief lakes are those of Steinhude and Dummer. The Hartz, being a mountain tract, is, like other mining districts, deficient in corn. The duchy of Luneburg contains immense heaths, called, on account of their barrenness, the *Arabia of Germany*. These are turned to account as sheep-walks, and, in some degree, as affording nourishment to bees. The corn cultivated is a mixture of wheat, barley and oats, but with a considerable proportion of rye and buck-wheat; peas and beans are very generally raised; but agriculture is, in many parts of the kingdom, in a very backward state. Thread and linen manufactures are carried on in various parts. The other manufactures of the kingdom are coarse woollens, paper, leather and glass, carried on in a number of places, but on a small scale in each. The only town which has a maritime trade of consequence is Embden. Four fairs are held annually at Hanover, and two at Osnabrück. The goods imported from abroad are English manufactures and colonial produce; linen from Friesland and Prussia; broadcloth, silk and jewelry from France. The chief exports are coarse linen, iron and copper from the Hartz, timber cut into planks, with horses and black cattle from various parts of the country. Hanover has one university, 37 gymnasia and Latin schools, 3561 common schools in towns and villages, four seminaries for the education of schoolmasters, six schools for midwives, &c. Public debt, 30,000,000 guilders; revenue of 1829, 3,202,324 guilders; expenditure, 3,127,692; standing army, 12,940; contingent to the army of the Germanic confederacy, 13,054. Dec. 7, 1819, the prince regent of England gave Hanover a constitution, if we may designate by this name the charter, which expressly says, that no untried principles shall be introduced; but that, in the main, the chambers shall exercise the same privileges as the former provincial deputies. The provincial estates were not abolished, and the regent reserved to himself the right to change and modify the charter, which is founded on old aristocratic principles. The Hanoverian nobility is noted as the most arrogant in Germany, and the least advanced in modern liberal ideas. There are two chambers, neither of which is founded on the principle of general representation. (See *European Constitutions*, Leipsic, 1820, 3d vol., p. 345.) Their first session was opened Dec. 28, 1819, and the duke of Cambridge, brother to the regent, in his speech, reminded the two chambers that they were divided only to investigate

the affairs of the country more thoroughly, and not to have different principles of deliberation. Publicity of debate, of course, was not admissible. The privileges of these chambers amount to little more than the liberty of discussing matters which government lays before them. By the edict of Oct. 12, 1822, the government received a new organization, and the kingdom was divided into seven districts. At the head is a ministry at Hanover, which makes reports to the king in England, and receives orders in regard to affairs of importance. In many parts of the country, the feudal jurisdictions still exist, and, in many instances, the judicial and executive authority is still united, as was formerly the case almost every where. At Zell, there is a supreme court of appeal. Ernest Augustus, of the Brunswick-Luneburg line, was made the first elector, in 1692. His son, George Lewis, ascended the throne of England as George I. His successors have been sovereigns, both of Great Britain and Hanover. In the time of the continental wars, Hanover underwent many changes; was once in possession of Prussia; afterwards formed the main part of the kingdom of Westphalia, and, by the treaty of Paris, was raised to the rank of a kingdom. The duke of Cambridge, brother to William IV, is governor-general of Hanover.

Hanover; a city of Germany, the capital of the kingdom of that name, on the Leine, which here becomes navigable. It is in the form of a half moon, and is separated, by the river, into two parts, called the Old and New Town. These were formerly surrounded with walls and ditches; but, in 1780, part of the ramparts were levelled, and laid out into streets, and the rest formed into an esplanade, where a monument has been erected to Leibnitz. Hanover belonged to the Hanseatic league, in the middle ages. The town has an antiquated aspect. This is particularly the case in what is called the Old Town. The New Town, which stands on the right side of the river, is built in a much better style than the Old. The public buildings are the elector's palace, and the public library, founded by Leibnitz. The charitable institutions are an orphan house, two hospitals, and two poor-houses. For the purpose of education, there is a gymnasium, a female school of industry, and several elementary schools. The Georgianum is a school, erected in 1796, for the education of 40 sons of Hanoverian nobles. Herrnhausen and Montbrillant are country mansions of the royal family, at some distance from the town. The inhabitants of Hanover derive their chief support from the presence of the court, and the gentry of landed property. They have, however, some manufactures on a small scale, such as gold and silver lace, the printing of cotton and linen, the preparation of cichory for coffee, brewing, making of vinegar, &c. Population, 27,500; 154 miles W. Berlin; lon. 9° 42′ 51″ E.; lat. 52° 22′ 25″ N.

Hanover; a post-township, in Grafton county, New Hampshire, 53 miles N. W. of Concord, 102 from Portsmouth, and 114 from Boston; lat. 43° 42′ N. The population, in 1820, was 2222. Dartmouth college is situated in the S. W. part of the township, about half a mile E. of the river, on a beautiful plain, where there is a village of about 70 houses. It was founded by doctor Eleazer Wheelock, and chartered by royal grant, in 1769. The funds, which were originally created by charitable individuals, have been increased by grants from the legislatures of New Hampshire and Vermont, and afford, at present, an annual income of about $1600. The college library contains about 4000 volumes; the medical library about 500; and two libraries, belonging to college societies, about 4000 each; making, in all, upwards of 12,000 volumes. The college has a philosophical apparatus, chemical apparatus, an anatomical museum, and a cabinet of minerals. The executive government is intrusted to a president, eight professors, and two tutors. The number of under-graduates, in 1830, was 137, and medical students, 103. There is a grammar-school connected with the college, which has about 50 students.

Hansa, or Hanseatic League. In the middle of the 13th century, the sea and land swarmed with pirates and robbers. The German trade, during this reign of violence, became exposed to various accidents, when the merchants lost the right of travelling with armed attendants, and the convoy afforded by government degenerated into a means of extorting a tax without yielding any protection. Hamburg and Lübeck, which, with Bremen, had become important, since the time of the Othos, found a powerful common enemy in the Danish king Waldemar, whom they opposed with great vigor. This circumstance, the insecurity of the navigation of the Elbe, which was becoming constantly more infested with pirates, and the increasing dangers of the roads,

gave rise to a convention, in 1239, between Hamburg, the free city of Ditmarsh, and Hadeln, and, in 1241, to a confederacy between Hamburg and Lübeck, in which they mutually engaged to defend each other against all violence, and particularly against the attacks of the nobles. The confederacy was joined, in 1247, by Brunswick, which served as a depot to the two first named towns; for while Italy was in possession of the trade to the Levant and India, a commercial route had been formed through Germany, by the way of the Upper Palatinate and Franconia, to the east of the Hartz, and through Brunswick to Hamburg, although, at the same time, some goods were carried down the Rhine. Thus Brunswick was especially interested in the allied towns, which were soon joined by numerous others. This union was called, by way of eminence, the *Hansa*, which, in the old Teutonic dialect, signifies a *league* for mutual defence. In a short time, the members became so numerous that, in 1260, a diet was held at Lübeck, the chief city of the league. Regular meetings of the confederacy now took place there every three years, about Whitsuntide, and the general archives of the league were kept there. The number of the Hanse towns varied. The largest number was 85, as follows: Anclam, Andernach, Aschersleben, Berlin, Bergen in Norway, Bielefeld, Bolswært in Friesland, Brandenburg, Braunsberg, Brunswick, Bremen, Buxtehude in the duchy of Bremen, Campen in Overyssel, Dantzic, Demmin in Pomerania, Deventer, Dorpat, Dortmund, Duisburg, Einbeck in the Hartz, Elbing, Elburg in Guelderland, Emmerich in Cleves, Frankfort on the Oder, Golnow in Pomerania, Goslar, Göttingen, Greifswald, Gröningen, Halle in Saxony, Halberstadt, Hamburg, Hameln, Hamm in Westphalia, Hanover, Harderwyck in Guelderland, Helmstadt, Hervorden in Westphalia, Hildesheim, Kiel, Coësfeld in Münster, Colberg, Cologne on the Rhine, Königsberg in Prussia, Cracow in Poland, Culm in Prussia, Lemgo in Westphalia, Lixheim in Lorraine, on the borders of Alsace, Lübeck, Lüneburg, Magdeburg, Minden in Hanover, Münster, Nimeguen in Guelderland, Nordheim, Osnabrück, Osterburg in the Altmark, Paderborn, Quedlinburg, Revel, Riga, Rostock, Rügenwalde, Rüremond in Guelderland, Salzwedel, Seehausen in the mark of Brandenburg, Soëst in Westphalia, Stade in Bremen, Stargard, Staveren in Friesland, Stendal, Stettin, Stolpe, Stralsund, Thorn, Venloo in Guelderland, Veltzen in Lüneburg, Unna in Westphalia, Warberg in Sweden, Werben in the Altmark, Wesel, Wisby in Gothland, Wismar, Zütphen, Zwoll in Guelderland. These towns were divided into four provinces, each having a chief town. To the first belonged the Wendish or Vandalic towns; chief city, Lübeck: to the second, the towns of Cleves, the Mark and Westphalia, and the four towns in Guelderland, which were not subject to the government of Burgundy; chief city, Cologne: to the third belonged the Saxon and Brandenburg towns; chief city, Brunswick: and to the fourth, the Prussian and Livonian towns; chief city, Dantzic. At another period, the whole was divided into three provinces. At the same time, four great factories or depots were established in foreign countries: at London, in 1250; at Bruges, in 1252; at Novgorod, in 1272; and at Bergen, in 1278. Charters from kings and princes gave firmness to the whole; and, in 1364, an act of confederacy was drawn up at Cologne. In the 14th century, the league every where attained a high political importance, and gave rise to the developement of that commercial policy which has since become intimately connected with all political relations, but of which the sovereigns of that time had little idea. The object of the league was now more fully declared: to protect themselves and their commerce from pillage; to guard and extend the foreign commerce of the allied cities, and, as far as practicable, to monopolize it; to manage the administration of justice within the limits of the confederacy; to prevent injustice by public assemblies, diets, and courts of arbitration; and to maintain the rights and immunities received from princes, and, if possible, to increase and extend them. Among the internal regulations were, the obligations incurred, on being received into the confederacy, to furnish soldiers and vessels, or, in certain cases, money as a substitute, and to pay the duties and amercements. The league exercised a judicial power, and inflicted the greater and lesser ban. Any place which incurred these punishments was said to be *verhansed*. Foreign factories were subjected to an almost monastic discipline, which even required the celibacy of factors, masters and members of the guilds. The laws prescribed to the agents of the English fur companies, in North America, and the North-west and Hudson's bay companies, resemble, in many particulars, those of the Hanseatic factories. By a uniform adherence to their

great object, and by the maintenance of good order, the Hanseatic cities obtained a great importance, although the confederacy was never formally acknowledged by the empire; and kings and princes were, in reality, more dependent on the league than it was on them. The Hanse towns in England were exempted from duties on exports, and in Denmark, Sweden and Russia, from those on imports—privileges which were enjoyed by no subjects of those countries. The extensive carrying trade of the Hanseatic confederacy was a great source of wealth; and, at length, there was no mart in Europe which was not gradually drawn within the circle of its influence; and, by the greatness of its wealth and the might of its arms, it became the mistress of crowns, and lands and seas. It conquered Eric and Hakon, kings of Norway, and Waldemar III of Denmark. It deposed a king of Sweden, and gave his crown to Albert, duke of Mecklenburg. In 1428, it equipped a fleet of 248 ships, with 12,000 soldiers, against Copenhagen. Niederhoff, a burgomaster of Dantzic, ventured to declare war against Christian, king of Denmark. England, Denmark and Flanders concluded treaties with the league, for the extension of their commerce. It undertook to provide for the security of commerce on the Baltic and North seas. In the country under its immediate influence, it constructed canals, and introduced a uniform system of weights and measures. But the prosperity of the Hanse towns was naturally dependent on the continuance of the circumstances which gave rise to it; and when those circumstances changed, the league was destined to fall. When, therefore, the routes by land and sea were no longer insecure; when princes learned the advantages of trade to their own states, and turned their attention to the formation of a naval force of their own, and the encouragement of navigation; when the inland members of the confederation perceived that the great seaport towns had a separate interest of their own, and used them principally to promote their own ends; when the maritime towns ceased to be the masters of the Baltic, and the German princes determined to subject those of the interior to their immediate control, in order to secure the greatest possible advantages from their commerce, to which they were encouraged especially by the emperor Charles V, who thought to improve the commerce of his possessions in the Netherlands, and was, consequently, disaffected to the alliance; and when the discovery of America produced a total revolution in trade,—then the dissolution of the Hanseatic league was evidently approaching. The last diet was held at Lübeck, in 1630, and the confederation was dissolved. But Hamburg, Lübeck and Bremen united anew (and, in certain cases, Dantzic was admitted among them), though not under the name of Hanseatic towns. In 1826, Great Britain concluded treaties with the Hanseatic towns, regulating the trade on principles of reciprocity, the same as with Sweden, Denmark, &c. (See *Bremen*, *Hamburg*, *Lübeck*, and *Free Cities*.) The name of *Hanse towns* no longer exists in the vocabulary of politics. Hamburg, Bremen, Lübeck and Frankfort are styled, in the German confederation, the *four free cities*.

Hans Folz. (See *Folz*.)

Hans Sachs. (See *Sachs*.)

Hanway, Jonas, a merchant and traveller, distinguished for his active benevolence, was born at Portsmouth in 1712. At an early age, he was apprenticed to a merchant at Lisbon, and, in 1743, became a partner in an English house at Petersburg. The concerns of the partnership rendering a journey to Persia desirable, it was gladly undertaken by Mr. Hanway, who went to Astrabad with a cargo of English goods. In 1753, he published a work entitled An Historical Account of the British Trade over the Caspian Sea, &c., with the particular History of the great Usurper Nadir Kouli (4 vols. 4to.). In the same year, he engaged in the controversy concerning the naturalization of the Jews, and published a Review of the proposed Naturalization, by a Merchant; a third edition of which appeared the same year. From this time, Mr. Hanway continued publishing, on a variety of topics, all relating to points of public good, or schemes of charity and utility. His fellow citizens entertained such a sense of his merits, that a deputation of the principal merchants of London waited upon lord Bute, to request that some public mark of favor might be conferred upon a man who had done so much service to the community, at the expense of his private fortune. He was, in consequence, made a commissioner of the navy, which post he held for twenty years, and, on resignation, was allowed to retain the salary for life. He died in 1786, and a monument was erected to him by subscription.

Hapsburg (properly *Habsburg*); a small place in the Swiss canton of Aargau, on

the right bank of the Aar. The castle was built, in the 11th century, by bishop Werner, on a steep, rocky situation; whence the name, which was originally *Habichtsburg* (Hawks-Castle). The proprietors of Hapsburg became, at a later period, counts of Hapsburg, and gradually acquired a more extensive territory. In 1273, Rodolph, count of Hapsburg, was chosen emperor of Germany. He is the founder of the reigning house of Austria, which is of the line of Hapsburg-Lorraine. From Rodolph to Charles VI, the Austrian monarchs were of the Hapsburg male line. Maria Theresa, who succeeded Charles VI, married Francis Stephen of Lorraine, who, in 1745, was chosen emperor of Germany. Their son, the first of the Hapsburg-Lorraine line, Joseph II, died 1790. His successor, Leopold II, died 1792. His successor, Francis (as emperor of Germany, II; as emperor of Austria, I), is the present sovereign. The castle of Hapsburg is still to be seen on the Wülpelsberg.

Hardenberg, Frederic von; known as an author under the name of *Novalis*, born May 2, 1772, died March 25, 1801. His parents paid great attention to his education. In Jena, Von Hardenberg studied philosophy, and at Leipsic and Wittenberg, the law. From thence he went to Tennstädt, where it was intended he should be practically instructed in jurisprudence. In December, 1797, he went to Freyberg, where Julia von Charpentier won his affections. In 1799, he formed a friendship with L. Tieck and the two Schlegels. He had made himself well acquainted with law, natural philosophy, mathematics and philosophy, but was most eminent for his poetical talents. In the works of Novalis, there is a singular mixture of imagination, sensibility, religion and mysticism. He was the gentlest and most amiable of enthusiasts. Some of his hymns are very beautiful. His novel *Heinrich von Ofterdingen* was left unfinished. His Hymns to Night have the greatest merit. His works have been published at Berlin (1814 and 1816, 3d edit.).

Hardenberg, Charles Augustus (baron, afterwards prince of); Prussian chancellor of state. He was born at Hanover, May 31, 1750, and, after having completed his studies in Leipsic and Göttingen, entered into the civil service of his country in 1770. He passed several years in travelling through Germany, France, Holland, and particularly England. In 1778, he was made privy counsellor; but a misunderstanding with one of the English princes induced him to resign his place in 1782, and to enter the service of Brunswick. The duke sent him to Berlin, in 1786, with the will of Frederic II, which had been deposited with him. Here he gave so much satisfaction, that the duke sent him repeatedly to the same place. In 1790, he was made minister of the last margrave of Anspach and Baireuth, on the recommendation of Prussia. When the margravate was incorporated with Prussia, Hardenberg remained in his office, and was made Prussian minister of state, and, soon after, cabinet minister. April 5, 1795, he signed the peace between the French republic and Prussia, on the part of the latter. At the beginning of this century, Berlin became the centre of many negotiations between the northern powers. The minister Haugwitz favored France, but the influence of Hardenberg decided the Prussian cabinet to take part with England. Count Haugwitz therefore gave in his resignation, and Hardenberg succeeded him, in August, 1804. The disasters which Prussia soon after suffered, in the conflict with Napoleon, are well known. In consequence of the treaty of December 15, 1805, which Haugwitz concluded at Vienna, between Prussia and France, Hardenberg again gave up his place to that minister; but, on the breaking out of the war of 1806, he once more resumed the port-folio. After the peace of Tilsit, he asked for his dismission; but, in 1810, the king of Prussia appointed him chancellor of state (prime minister), and endeavored to form a union with France; but the disasters of the French army in Russia changed his policy. Hardenberg signed the peace of Paris, and was created prince. He went to London with the sovereigns, and was one of the most prominent actors at the congress of Vienna. He was subsequently the active agent in all matters in which Prussia took part; he was made president of the council of state; was present, in 1818, at the congress of Aix-la-Chapelle; in 1819, at Carlsbad; in 1820, at Vienna, at Troppau and Verona. While on a journey in the north of Italy, he fell sick at Pavia, and died at Genoa, November 27, 1822. As to his political principles in the latter part of his life, he was an active minister of the holy alliance; but, still, he understood that the time of feudalism was past, and his abolition of feudal services and privileges in Prussia will always be remembered in his favor. He patronized the sciences munificently, and the

foundation of the university of Bonn is honorable to him. He loved power, but, at the same time, his administration had many good features. In the years 1807—1810, prince Hardenberg wrote Memoirs on his Time, from 1801 to the Peace of Tilsit, and, before his death, gave the manuscript to Schöll, a counsellor of state. The king, however, sealed it with his arms, and ordered it not to be opened until 1850. Hardenberg was twice married. His son by the first marriage is a count, and in the Danish service.

Hardicanute, king of England and Denmark, was the son of Canute, by Emma, daughter of Richard, duke of Normandy. He succeeded his father on the Danish throne in 1038, and, at the same time, laid claim to that of England, which had devolved to his elder and half-brother, Harold. A compromise was effected, by which the southern part of the kingdom was, for a while, held in his name by his mother Emma; and, on the death of his brother, he succeeded to the whole. His government was violent and tyrannical; he revived the odious tax of Danegelt, and punished, with great severity, the insurrections which it occasioned. The death of this despicable prince, in consequence of intemperance at the nuptials of a Danish nobleman, brought his reign to an early termination, to the great joy of his subjects, in 1041.

Hardness, in physiology; the resistance opposed by a body to impression, or to the separation of its particles. This property depends on the force of cohesion, or on that which chemists call *affinity*, joined to the arrangement of the particles, to their figure, and other circumstances. A body, says M. Hauy, is considered more hard in proportion as it presents greater resistance to the friction of another hard body, such as a steel file; or as it is more capable of wearing or working into such other body, to which it may be applied by friction. Lapidaries judge of the hardness of fine stones, &c., from the difficulty with which they are worn down, or polished.

Hardouin, John; a learned French Jesuit, no less celebrated for his intimate acquaintance with the classical authors of antiquity, than remarkable for the singularity of his opinions respecting the authenticity of their writings. He was born in 1646, at Quimper in Bretagne, and died at Paris, 1729. The work by which he is principally known, is his *Chronologiæ ex Nummis antiquis restitutæ Prolusio de Nummis Herodiadum*, in which he supports the extraordinary hypothesis, that almost all the writings under the names of the Greek and Roman poets and historians, are the spurious productions of the 13th century. His exceptions to this denunciation are, the works of Cicero and Pliny, as well as of some of those attributed to Horace and Virgil. He contends, at the same time, that the two latter are allegorical writers, who, under the names of Lalage and Æneas, have represented the Christian religion and the life of its founder. This treatise was condemned and proscribed, the author was called upon for a public recantation of his errors, which in fact he made; but he afterwards repeated his offence in other publications. Among his 102 works are, *Nummi antiqui Populorum et Urbium illustrati* (1684); Pliny's Natural History, in usum Delphini (5 vols., 4to., 1685); and another in 12 folio volumes of The Councils (1705). On this latter work he expended a great deal of time and labor, but it was suppressed by the parliament. He considered all the councils, previous to that of Trent, as imaginary. A selection from father Hardouin's works, comprising most of those which had fallen under the censure of the Romish church, appeared, in 1700, at Amsterdam. The following epitaph, which has been erroneously ascribed to Atterbury, and to president de Boze, was written by Jacob Vernet, of Geneva:

Hic jacet hominum paradoxotatos,
Orbis litterati portentum,
Venerandæ antiquitatis cultor et depredator,
Docte febricitans,
Somnia et inaudita commenta vigilans edidit,
Scepticum pie egit,
Credulitate puer,
Audaciâ juvenis,
Deliriis senex.

Hare (*lepus*). The generic characters of this well known animal are, four cutting teeth in the upper jaw, and two in the lower; two of the upper teeth, however, are placed behind the others, and are of a much smaller size; the whole dental formula is, incisors $\frac{4}{2}$, canines $\frac{0}{0}$, molars $\frac{6}{5}\ \frac{6}{5}$ $=28$; the two fore feet with five, and the hinder with four, toes. These animals are found in almost every part of the world, living entirely on vegetable food, and all remarkably timid. They run by a kind of leaping pace, and, in walking, use their hind feet as far as the heel. Their tails are either very short or almost wanting. The female goes with young about a month, generally producing three to six at a litter, and this about four times a year. The eyes of the young are open at birth. The dam suckles them about

20 days, after which they leave her, and procure their own food. The European hare (*L. timidus*) is found throughout Europe, and some parts of Asia. The color of this species is of a tawny red on the back and sides, and white on the belly. The ears, which are very long, are tipped with black; the eyes are very large and prominent. The length of this animal is about two feet, and, when full grown, it weighs six to eight pounds. It is a watchful, timid creature, always lean, and, from the form of its legs, runs swifter up hill than on level ground. Hares feed on vegetables, and are very fond of the bark of young trees; their favorite food, however, is parsley. Their flesh was forbidden to be eaten among the Jews and the ancient Britons, whilst the Romans, on the contrary, held it in great esteem. "*Inter quadrupedes gloria prima lepus*,"—Martial; and Horace, who is good authority as an epicure, says, Every man of taste must prefer the fore shoulder—"*Fecundi leporis sapiens sectabitur armos*." The flesh is now much prized for its peculiar flavor, though it is very black, dry, and devoid of fat. The voice of the hare is never heard but when it is seized or wounded. At such times, it utters a sharp, loud cry, not very unlike that of a child. It has a remarkable instinct in escaping from its enemies; and many instances of the surprising sagacity of these animals are on record, though it appears that all of them do not possess equal experience and cunning. A perpetual war is carried on against them by cats, wolves, and birds of prey; and even man makes use of every artifice to entrap these defenceless and timid creatures. They are easily tamed, but never attain such a degree of attachment as renders them domestic, always availing themselves of the first opportunity to escape. Among the devices of hares to elude their pursuers, the following have been observed: Getting up into a hollow tree, or upon ruined walls; throwing themselves into a river, and floating down some distance; or swimming out into a lake, keeping only their nose above the surface; returning on their own scent, &c. The American hare (*L. Americanus*), so well known under the name of *rabbit*, is found in most parts of North America. The summer hair is dark brown on the upper part of the head, lighter on the sides, and of an ash color below; the ears are wide, edged with white, tipped with brown, and dark colored on their back; tail, dark above, white beneath, having the inferior surface turned up; the fore legs are shorter and the hinder longer in proportion than those of the European. In the Middle and Southern States, the change in the color of the hair is by no means as remarkable as it is farther north, where it becomes white, or nearly so. This species is from 14 to 18 inches long. The American hare generally keeps within its form during the day, feeding early in the morning or at night. The flesh is dark colored, but is much esteemed as an article of food. It is in its prime late in the autumn and in the winter. It is not hunted in this country as in Europe, but is generally roused by a dog, and shot or caught by means of snares or a common box trap: this latter is the most usual mode. In its gait, it is very similar to the European, leaping rather than running. Like that animal, it breeds several times during the year. There are several other species of the hare inhabiting North America, of which the most remarkable is the polar hare (*L. glacialis*). This occurs in vast numbers towards the extreme northern part of the continent. It is larger than the common hare. The fur is exceedingly thick and woolly, of the purest white in the cold months, with the exception of a tuft of long black hair at the tip of the ears. In summer, the hair becomes of a grayish brown. (See *Rabbit*.)

Harelip is a single or double fissure of the upper lip, by which it is divided into two or three parts, and is thus made to resemble the lip of the hare. Children are not unfrequently born with this deformity. The fissure is sometimes confined to the lip, but more commonly extends to the gums and palate, which it divides into two parts. It produces great difficulty in speech, and besides keeping the mouth open, and thus suffering the saliva to escape, it is a dreadful deformity in appearance. It is very common, but, fortunately, is easily curable, so that it seldom goes long unremedied, unless from choice or timidity. The operations for removing this most unfortunate deformity, in its worst forms, are among the merits which have given celebrity to the name of Dessault.

Harem (Arabic, *sacred*, the *sanctuary*) is used, by Mussulmans, to signify the women's apartments, which are forbidden to every man except the husband. It answers, in some measure, to the *gynæceum* of the Greeks. The term *seraglio*, often used by Europeans for *harem*, is a corruption of the word *serai*, i. e., *palace*. The ladies are served by female slaves, and guarded by black eunuchs; the head

of the latter is called *kizlar-aga*. There are two kizlar-agas, one of the old, the other of the new palace, each of which has its harem. The one is occupied by the women of former sultans, and those who have incurred the displeasure of the reigning prince; the other, by such as still enjoy his favor. Doctor Clarke, who visited the summer palace during the absence of the occupants, has given a particular description of it in his Travels (vol. iii, pp. 20—37). The women of the imperial harem are all slaves, generally Circassians or Georgians; for no free born Turkish woman can be introduced into it as an *odah-lic*, or concubine. Their number depends solely on the pleasure of the sultan, but is very considerable. His mother, female relations and grandees, vie with each other in presenting him the handsomest slaves. Out of this great number he chooses seven wives, although but four are allowed by the prophet. These are called *cadins*, and have splendid appointments. The one who first presents him with a male heir is styled the *sultana*, by way of eminence. She must then retire into the *eski serai* (old palace); but if her son ascends the throne, she returns to the new palace, and has the title of *sultana valide*. She is the only woman who is allowed to appear without a veil; none of the others, even when sick, are permitted to lay aside the veil, in the presence of any one except the sultan. When visited by the physician, their bed is covered with a thick counterpane, and the pulse felt through gauze. The life of the ladies of the imperial harem is spent in bathing, dressing, walking in the gardens, witnessing the voluptuous dances performed by their slaves, &c. The women of other Turks enjoy the society of their friends at the baths or each other's houses, appear in public accompanied by slaves and eunuchs, and enjoy a degree of liberty which increases as they descend in rank. But those of the sultan have none of these privileges. When transferred to the summer residences on the Bosphorus, they are removed at break of day, pass from the garden to the boats between two screens, while the eunuchs, for a considerable distance round, warn every one off, on pain of death. Each boat has a cabin covered with cloth, and the eunuchs keep the boatmen or *bostandjis* at a distance. It is, of course, only the richer Moslems who can maintain harems; the poorer classes have generally but one wife.

Hariot, or Heriot, in law; a due belonging to a lord at the death of his tenant, consisting of the best beast, either horse, ox, or cow, which he had at the time of his death; and, in some manors, the best goods, piece of plate, &c., are called *hariots*.

Harleian Library. (See *Harley*.)

Harlem. (See *Haarlem*.)

Harlequin (*arlecchino*, Italian). It is not in our power to determine the etymology of the name of this dramatic personage. Ménage derives it from a comedian, who was so called because he frequented the house of M. de Harlay, in the reign of Henry III of France. Batteux derives it from the satirical drama of the Greeks. Riccobini conjectures (History of the Italian Theatre) that the dress of the harlequins is no other than the *centunculus* of the old Roman *mimi*, who had their heads shaved, and were called *planipedes* (barefooted). To the reasons adduced by Riccobini, we may add the ridiculous sword of the ancient *mimi*, which, with the harlequin, has been converted into a stick. Harlequins and buffoons are also called *zanni*, by the best Tuscan writers, probably from the Latin *sannio*, of which Cicero (*De Oratore*, ii, 61) gives a description applying so strongly to the harlequin, that it places his derivation from the *planipedes* almost beyond a doubt. The character of the ancient harlequin was a mixture of extravagant buffoonery with great corporeal agility, so that his body seemed almost constantly in the air. He was impudent, droll, satirical and low, and often indecent in his expressions. But, in the middle of the 16th century, his character was essentially changed. The modern harlequin laid aside the peculiarities of his predecessor. He became a simple, ignorant servant, who tries very hard to be witty, even at the expense of being malicious. He is a parasite, cowardly, yet faithful and active, but easily induced, by fear or interest, to commit all sorts of tricks and knaveries. He is a chameleon, who assumes all colors, and can be made, in the hands of a skilful actor, the principal character on the stage. He must excel in extempore sallies. The modern harlequin plays many droll tricks, which have been handed down, from generation to generation, for centuries. This account applies more particularly to the Italian harlequin. Italy, in fact, particularly in the *commedia dell'arte*, is his natural scene of action. He can only be properly appreciated when seen in that department of the drama, and distinct from all other similar personages. Whether he

is to be tolerated or not, is a question of importance. He has found an able advocate in Möser (Harlequin, or Defence of the Grotesque-Comic). (See *Mask.*) The gallant, obsequious French harlequin is an entirely national mask. In the Vaudeville theatre, he is silent, with a black half mask, and reminds one, throughout the representation, of the grace and agility of the cat. (See *Carlin.*) In England, he became a lover and a magician; and, in exchange for the gift of language, of which he was there deprived, he was invested with the wonder-working wand, from the possession of which Mr. Douce pronounces him to be the "illegitimate successor of the old Vice" (On Shakspeare, i, 458). (See *Punchinello.*) A standing grotesque character, on the German stage, was called *Hanswurst* (Jack-Pudding), and answered to the Dutch Pickled-Herring, the French Jean-Potage, the Italian (more properly Neapolitan) Maccaroni, and the English Jack-Pudding. This family was a race of gourmands, clowns, coarse and rude in their wit.

Harley, Robert; earl of Oxford, and earl Mortimer, a distinguished minister of state, in the reign of queen Anne. He was born in London, in 1661, and was the son of sir Edward Harley, a Herefordshire gentleman, who had been an active partisan of the parliament during the civil war. The subject of this article, though of a Presbyterian family, adopted tory principles in politics, and joined the high church party. In the reign of William III, he acted with the whigs; but, after the accession of Anne, he, as well as his more celebrated colleague, St. John, afterwards lord Bolingbroke, deserted the party with which they had acted, and became leaders of the tories. Harley was chosen speaker of the house of commons in 1702, and afterwards was secretary of state. He resigned his post in 1708. The cabals of their political opponents having effected the removal of the duke of Marlborough and his friends from office, Harley was nominated a commissioner of the treasury and chancellor of the exchequer, in 1710. In 1711, Harley was raised to the peerage, and constituted lord high treasurer. After the peace of Utrecht, in 1713, the tory statesmen, having no longer any apprehensions of danger from abroad, began to quarrel among themselves; and the two chiefs, Oxford and Bolingbroke, especially, became personal and political foes, actuated by different views and sentiments. The former resigned the treasurership just before the death of the queen in 1714. Whatever projects may have been formed by others of the party, there seems to be no ground for believing that lord Oxford had engaged in any measures to interrupt the Protestant succession. Early in the reign of George I, he was, however, impeached of high treason by the house of commons, and was committed to the Tower. He remained in confinement till June, 1717, when, at his own petition, he was brought before the house of peers, and, after a public trial, acquitted of the crimes laid to his charge. The rest of his life was spent in adding to his literary stores, in the collection of which he expended a considerable portion of the wealth which his public employments had enabled him to accumulate. He died May 21, 1724. His patronage was extended to Swift, Pope, and other literary men. Lord Oxford published a Letter to Swift for correcting and improving the English Tongue; an Essay on public Credit; an Essay upon Loans; and a Vindication of the Rights of the Commons of England. He was succeeded in his titles by his son Edward, who augmented the collection of printed books and manuscripts formed by his father. On the death of the second earl of Oxford, in 1741, the library of printed books was sold to Osborne, a bookseller, who published a catalogue of them, compiled by William Oldys and Samuel Johnson (4 vols., 8vo., 1743). The MSS. are preserved in the British museum, where they form the *Bibliotheca Harleiana.*

Harmattan; a wind which blows periodically from the interior parts of Africa, towards the Atlantic ocean. It prevails in December, January and February, and is generally accompanied with a fog or haze, that conceals the sun for whole days together. Extreme dryness is the characteristic of this wind; no dew falls during its continuance, which is sometimes for a fortnight or more. The whole vegetable creation is withered, and the grass becomes, at once, like hay. The human body is also affected by it, so that the skin peels off; but it checks infection, and cures cutaneous diseases.

Harmodius. (See *Hippias*, and *Aristogiton.*)

Harmonia, or Hermione; a daughter of Mars and Venus, the fruit of an amour, in which they were surprised by Vulcan. Her name was at first used to indicate music in general. She emigrated with her husband, the Phœnician Cadmus, into Greece, where she is said to have introduced music.

HARMONICA, or ARMONICA, is a name which doctor Franklin has given to a musical instrument constructed with drinking glasses. It is well known that a drinking glass yields a sweet tone, by passing a wet finger round its brim. Mr. Pockrich, of Ireland, was the first who thought of playing tunes formed of these tones. He collected a number of glasses of different sizes, fixed them near each other on a table, and tuned them by putting into them water, more or less, as each note required. Mr. Delaval made an instrument in imitation, and from this instrument doctor Franklin took the hint of constructing his *armonica*. The glasses for this musical instrument are blown as nearly as possible in the form of hemispheres, having each an open neck or socket in the middle. The thickness of the glass near the brim is about one tenth of an inch, increasing towards the neck, which, in the largest glasses, is about an inch deep, and an inch and a half wide within; but these dimensions lessen as the size of the glasses diminishes: the neck of the smallest should not be shorter than half an inch. The diameter of the largest glass is nine inches, and that of the smallest three inches. Between these there are 23 different sizes, differing from each other a quarter of an inch in diameter. The largest glass in the instrument is G, a little below the reach of a common voice, and the highest G, including three complete octaves; and they are distinguished by painting the apparent parts of the glasses within side, every semitone white, and the other notes of the octave with the seven prismatic colors; so that glasses of the same color (the white excepted) are always octaves to each other. When the glasses are tuned, they are to be fixed on a round spindle of hard iron, an inch in diameter at the thickest end, and tapering to a quarter of an inch at the smallest. For this purpose, the neck of each glass is fitted with a cork, projecting a little without the neck. These corks are perforated with holes of different diameters, according to the dimension of the spindle in that part of it where they are to be fixed. The glasses are all placed within one another; the largest on the biggest end of the spindle, with the neck outwards; the next in size is put into the other, leaving about an inch of its brim above the brim of the first; and the others are put on in the same order. From these exposed parts of each glass the tone is drawn, by laying a finger upon one of them as the spindle and glasses turn round. The spindle, thus prepared, is fixed horizontally in the middle of a box, and made to turn on brass gudgeons at each end by means of a foot-wheel. This instrument is played upon by sitting before it, as before the keys of a harpsichord, turning the spindle with the foot, and wetting the glasses, now and then, with a sponge and clean water. The fingers should be first soaked in water, and rubbed occasionally with fine chalk, to make them catch the glass, and bring out the tone more readily. Different parts may be played together by using both hands; and the tones are best drawn out when the glasses turn from the ends of the fingers, not when they turn to them. The advantages of this instrument, says doctor Franklin, are, that its tones are incomparably sweet, beyond those of any other, and that they may be swelled or softened at pleasure, by stronger or weaker pressures of the finger, and continued to any length; and when it is once tuned, it never wants tuning again. From the effect which it is supposed to have upon the nervous system, it has been suggested that the fingers should not be allowed to come in immediate contact with the glasses, but that the tones should be produced by means of a key, as upon the harpsichord. Such a key has been invented in Berlin or Dresden, and an instrument constructed on this plan. It is called the *harpsichord-harmonica*. But these experiments have not produced any thing of much value; and it is impossible that the delicacy, the swell and the continuation of the tone should be carried to such perfection as in the first mentioned method. The harmonica, however much it excels all other instruments in the delicacy and duration of its tones, yet is confined to those of a soft and melancholy character, and to slow, solemn movements, and can hardly be combined to advantage with other instruments. In accompanying the human voice, it throws it in the shade; and in concerts, the accompanying instruments lose in effect, because so far inferior to it in tone. It is therefore best enjoyed by itself, and may produce a charming effect, in certain romantic situations. Besides the proper harmonica, there is a pegged or nailed harmonica, the pegs of which are of steel, and, being placed in a semicircle, are played with a strung bow. This has no resemblance to the proper harmonica, except some similarity in tone.

HARMONY; 1. a town in the western part of Pennsylvania, where Rapp first settled with his Harmonists from Würtemberg, in 1803. He afterwards removed to Indiana, but has since returned again to Pennsylvania. with his 700 followers,

where he founded the village of Economy. The Harmonists are frugal and industrious, and hold their property in common. (See *Rapp.*)—2. A village in Indiana, on the Wabash, about 25 miles from its mouth, founded by Rapp. Mr. Owen's society afterwards attempted to carry the new social system into execution here, but it is now broken up. (See *Owen.*)

Harmony (from the Greek); the agreement or consonance of two or more united sounds. *Harmony* is either natural or artificial. *Natural harmony*, properly so called, consists of the harmonic triad, or common chord. *Artificial harmony* is a mixture of concords and discords, bearing relation to the harmonic triad of the fundamental note. The word *harmony* being originally a proper name, it is not easy to determine the exact sense in which it was used by the Greeks; but from the treatises they have left us on the subject, we have great reason to conclude that they limited its signification to that agreeable succession of sounds which we call *air*, or *melody*. The moderns, however, do not dignify a mere succession of single sounds with the appellation of *harmony*: for the formation of *harmony*, they require a union of melodies, a succession of combined sounds, composed of consonant intervals, and moving according to the stated laws of modulation.

Harmony, or Evangelical Harmony, is the title of various books, composed to show the uniformity and agreement of the accounts given by the four evangelists, by reducing the events recorded in the different evangelists to the order of time in which they happened.

Harmony, Figured. *Figured harmony* is that in which, for the purpose of melody, one or more of the parts of a composition move, during the continuance of a chord, through certain notes which do not form any of the constituent parts of that chord. These intermediate notes not being reckoned in the harmony, considerable judgment and skill are necessary so to dispose them that, while the ear is gratified with their succession, it may not be offended at their dissonance with respect to the harmonic notes.

Harmony of the Spheres; a hypothesis of Pythagoras and his school, according to which the motions of the heavenly bodies produced a music imperceptible by the ears of mortals. He supposed these motions to conform to certain fixed laws, which could be expressed in numbers, corresponding to the numbers which give the harmony of sounds. The immortal Kepler, in his *Harmonices Mundi*, endeavors to apply the Pythagorean ideas on numbers and musical intervals to astronomy, and in this work, as also in his *Prodromus*, sets forth eternal laws respecting the distances of the planets, which were not fully appreciated, until Newton, a long time after, showed their importance and connexion. It is in the *Harmonices Mundi, proëmium* to the 5th book, *De Motibus Planetarum*, that Kepler, in his enthusiasm, pronounces these bold words concerning his discovery: "Eighteen months ago, I saw the first ray of light; three months since, I saw the day; a few days ago, I saw the sun himself, of most admirable beauty. Nothing can restrain me; I yield to the sacred frenzy. I dare ingenuously to confess, that I have stolen the golden vessels of the Egyptians (alluding to the ideas of Ptolemy on the same subject), and will build of them a tabernacle to my God. If you pardon me, I rejoice; if you reproach me, I can endure it; the die is thrown. I write a book to be read; whether by the present or future ages, it matters not. It can wait for a reader a century, if God himself waited six thousand years for an observer of his works."* To understand this enthusiasm fully, we must recollect the erroneous ideas with which the world had teemed from the time of Ptolemy.

Harmony, Preëstablished. (See *Leibnitz.*)

Harmotome, or Cross-stone; the name of a substance curious in mineralogy, on account of the cruciform figure of its crystals, and the peculiarity of its composition. It sometimes occurs in right rectangular prisms terminated by four rhombic planes, corresponding to the solid angles of the prisms; but more frequently in twin-crystals formed by the intersection of two flattened prisms at right angles to each other, and in such a manner that a common axis and acumination is formed. The crystals yield to cleavage parallel to the planes and both diagonals of a right rectangular prism, which is their primary form. Its prevailing color is white; it is translucent or semi-transparent, with a somewhat pearly lustre, and hard enough to scratch glass. Specific gravity 2.392. It consists of silex 49.00, alumine 16.00,

* *Si ignoscitis, gaudebo; si succensetis, feram; jacio en aleam, librumque scribo, seu presentibus seu posteris legendum, nihil interest; expectet ille suum lectorem per annos centum; si Deus ipse per annorum sena millia contemplatorem præstolatus est.* Joannis Kepleri Harmonices Mundi, *Libri* v. *Lincii, Austriæ,* MDCXIX.

barytes 18.00, and water 15.00. It chiefly occurs in metalliferous veins, as at Andreasberg, in the Hartz, and at Strontian in Scotland. It has also been found in amygdaloid at Oberstein.

Harms, Klaus, archdeacon of Kiel, celebrated as a preacher and author, born May 25, 1778, at Fahrstedt, a village in Holstein, was the son of a miller. Till his twelfth year, he studied in the village school, after which he learned the rudiments of the Latin and Greek languages, from the preacher of the village. He was then obliged to attend to the mill and to the farm. From his seventeenth year, when his father died, he assumed the duties of the head of the family. In his nineteenth year, his mother having sold the mill, he entered the school at Meldorf, in Ditmarsh, studied, 1799, at Kiel, and became a tutor. In 1806, he was chosen by the society at Lunden, in North Ditmarsh, deacon, and, in 1816, was elected archdeacon at Kiel. As a pulpit orator, he is eminent; his words flow with ease and facility, often rushing, powerful and energetic, as a torrent, and his style is simple, original and perspicuous. All classes of hearers, the learned as well as the rustic, listen with edification to his preaching. He has published Summer and Winter Sermons, and The 95 Theses of Doctor Martin Luther, with 95 other Positions accompanying them, by Kl. Harms (Kiel, 1817), in which he exposes many defects of the Protestant church. He is also the author of many other works.

Harness. (See *Mail.*)

Harold I, Harfagar (fair-haired); king of Norway, son of Hafdan the Black; one of the greatest monarchs of that country. At the time of his father's death (863), he was in the Dofrefield mountains, and had already evinced great talent and personal prowess in several battles. Love made him a conqueror. He had offered his hand to Gida, the daughter of a neighboring king; but the proud beauty replied to Harold's ambassadors, that she would only consent to become his wife when he had subjected all Norway. Harold swore he would not cut his hair till he had accomplished Gida's desire, and, in ten years, succeeded in obtaining sole possession of Norway. In the mean time, his hair had grown long and beautiful, from which circumstance he derived his surname. While he reduced the lesser kings, he left them, with the title *jarl*, the administration of their territories, and the third part of their income; but many of them emigrated and founded Norwegian colonies. Hrolf, or Rollo, emigrated to Neustria (France). Others, with their followers, established themselves in Iceland, the Shetland Isles, Faroe and the Orcades, all which were then uninhabited. When Harold found that the emigrants often extended their incursions into his dominions, he embarked, with a naval force, to subdue them. After a bloody war, he conquered Scotland, the Orcades, &c., and returned home. He fixed his residence at Drontheim, and died there in 930, after having raised his country to a prosperous state, by wise laws and the encouragement of commerce.

Harold I, surnamed *Harefoot*, king of England, succeeded his father, Canute, in 1035, notwithstanding a previous agreement, that the sovereignty of England should descend to the issue of Canute by his second wife, the Norman princess Emma. His countrymen, the Danes, maintained him upon the throne against the efforts of earl Godwin, in favor of Hardicanute; but, Harold gaining over that leader by the promise of marrying his daughter, a compromise was effected, and they united to effect the murder of prince Alfred, son to Etheldred II. After a reign of four years, in which nothing memorable occurred, Harold died, in 1039.

Harold II, king of England, was the second son of Godwin, earl of Kent. He succeeded his father in his government and great offices, and, upon the death of Edward the Confessor, in 1066, stepped without opposition into the vacant throne, without attending to the more legal claim of Edgar Atheling, or the asserted bequest of Edward in favor of the duke of Normandy. The latter immediately called upon him to resign the crown, and, upon his refusal, prepared for invasion. He also instigated Harold's brother, Tosti, who had retired in disgust to Flanders, to infest the northern coasts of England, in conjunction with the king of Norway. The united fleet of these chiefs sailed up the Humber, and landed a numerous body of men, who defeated the opposing forces of the earls of Northumberland and Mercia, but were totally routed by Harold, whose brother, Tosti, fell in the battle. He had scarcely time to breathe after this victory, before he heard of the landing of the duke of Normandy at Pevensey, in Sussex. Hastening thither, with all the troops he could muster, a general engagement ensued at Hastings, Oct. 14, 1066, in which this spirited prince, after exerting every effort of

valor and military skill, was slain with an arrow; and the crown of England was the immediate fruit of William's victory.

Haroun, or Aaron al Rashid, a celebrated caliph of the Saracens, was the second son of the caliph Mahadi. He succeeded his elder brother, Hadi, in the caliphate A. D. 786, and was the most potent prince of his race, ruling over territories extending from Egypt to Korasan. He obtained the name of Al Rashid, or the Just, but his claim to the title must be regarded with considerable allowance for Eastern notions of despotic justice. One of his noblest qualities was his love of learning and science. He caused many Greek and Latin authors to be translated and dispersed throughout his empire, and made his subjects acquainted with the Iliad and the Odyssey. He eight times invaded the Greek empire, and, on the refusal of the emperor Nicephorus, in 802, to pay tribute, addressed to him a singularly arrogant epistle, and followed it up by an irruption into Greece, which terminated in the defeat of Nicephorus, who was obliged to pay an augmented tribute, and agree not to rebuild Heraclea and the other pillaged and dilapidated frontier towns. During these transactions, the ruin of the family of the Barmecides exemplified the despotic rigor of Haroun's character. Yahia, the head of it, had superintended his education; and of his four sons, the eldest was a successful general; the second, the caliph's prime vizier, Giaffer; and the third and fourth in dignified stations. The generosity, munificence and affability of the Barmecides, rendered them the delight of all ranks of people; and Giaffer was so much in his master's graces, that the caliph, in order to enjoy his company in the presence of his sister Abassa, to whom he was equally attached, formed a marriage between the princess and vizier, but with the capricious restriction of their forbearing the privileges of such an union. Passion broke through this unjust prohibition, and the caliph, in his revenge, publicly executed Giaffer, and confiscated the property of the whole family. Haroun attained the summit of worldly power and prosperity, and the French historians mention a splendid embassy which he sent to Charlemagne, which, among other presents, brought a magnificent tent, a water-clock, an elephant, and the keys of the holy sepulchre at Jerusalem, implying a permission for European pilgrims to visit it. Haroun was seized with a mortal distemper, while on the point of marching to put down a rebellion in the provinces beyond the Oxus; and, retiring to Tous, in Korasan, expired in the 47th year of his age, and 23d of his reign. The popular fame of this caliph is evinced by the Arabian Nights' Entertainments, in which Haroun, his wife Zobeide, his vizier Giaffer, and his chief eunuch Mesrour, are frequent and conspicuous characters.

Harp; a stringed instrument, consisting of a triangular frame, and the chords of which are distended in parallel directions from the upper part to one of its sides. Its scale extends through the common compass, and the strings are tuned by semitonic intervals. It stands erect, and, when used, is placed at the feet of the performer, who produces its tones by the action of the thumb and fingers of both hands on the strings. The ancients had a triangular instrument, called *trigonum*, corresponding somewhat to our harp. Some authors say that it came originally from the Syrians, from whom the Greeks borrowed it. The ancient *sambuca* is believed by some to correspond to the harp. Some writers say that the harp came to us from the nations of the north of Europe, in whose languages they trace its etymology. Papias and Du Cange assert that the harp derives its name from the *Arpi*, a people of Italy, who invented it; but Galileo maintains that the Italians received it from the Irish. Whatever may have been its origin, its invention is very ancient. It was known to the Egyptians, as appears from the travels of Bruce and Denon. The four harps, of which the latter traveller has given drawings, are almost the same in shape as ours. The two first have 21 strings, the third 18, and the fourth only 4. The designs are from the paintings found in the tombs of the kings, in the mountain west of Thebes. The Hebrews, the Greeks and the Romans appear to have made particular use of this instrument. The ivory harp, with seven strings, belonged to the Greeks, who, however, neglected it. The Romans preserved the use of it a long time in sacrifices. The harp was much played in France in the time of chivalry. The Anglo-Saxons excelled in playing on the harp, which they generally accompanied with the violin and the cornicinus. The ancient Irish, Scotch and Welsh also made much use of this instrument, and the harp figures conspicuously in the arms of Ireland. The Anglo-Normans also were skilful performers on this instrument. Strutt, in his England, Ancient

and Modern, has given drawings of the harps used by the people of the North about the 9th century. They are triangular, like ours, but have only 10 or 12 strings. In the 13th century, the harp had only 17 strings, as appears from a manuscript of the time, cited and analysed by Lebeuf (*Mem. de l'Academie des Inscript*, tom. xx, page 377). No instrument has received greater improvement from modern artists than this. In its present state, while it forms one of the most elegant objects to the eye, it produces some of the most agreeable effects to the ear, of any instrument in practice.

Harp, Æolian. (See *Æolian Harp.*)

Harpagus; a Mede, minister of king Astyages, who ordered him to put Cyrus to death. As he did not obey this command, Astyages invited him to a banquet, at which the body of his own son was served up before him; at least, so Herodotus tells us. (See *Cyrus*, and *Astyages.*)

Harpe, Jean François de la. (See *Laharpe, J. Fr. de.*)

Harpe, Frederic Cæsar la. (See *Laharpe, Fr. Cæsar.*)

Harper, Robert Goodloe, was born near Fredericksburg, Virginia, of poor, but respectable parents, who, while he was very young, emigrated to Granville, in North Carolina. He displayed, in his boyhood, vivacity of spirit and versatility of talent, and, before the age of 15, possessed the rudiments of a liberal education, a various fund of profitable ideas, and an expertness in the use of tools, which would have made him a successful mechanic. The ardor and gallantry of his character prompted him, at that age, to join a troop of horse, composed of the young men of the neighborhood, to which he acted as quarter-master, and with them he participated in Greene's campaign; but his thirst for learning and intellectual culture soon induced him to withdraw from the military career, and seek some situation in which he could complete his studies. He procured admission into Princeton college, where he taught one or two of the inferior classes, while he gained instruction and distinction in the upper. About the age of 19 or 20, he accompanied a fellow student to Philadelphia, on a visit, and here formed the resolution to embark, at once, for England, and make the tour of Europe on foot. He intended to begin with giving lessons in London, and to work simultaneously at the trade of a joiner, for which he was qualified by his early practice. This romantic project was frustrated by ice in the Delaware, that prevented the departure of any vessel during many weeks, in the course of which the youthful adventurer nearly exhausted his purse, and had leisure to reflect upon the difficulties of the enterprise. As soon as the river became navigable, he resolved to sail for Charleston, and try his fortune there, his new scheme being to study the law. He arrived, after a short passage, at that city, and found himself on the wharf, a stranger to every one, with but a dollar or two in his pockets. As he stood ruminating on his condition, he was accosted by a man of respectable appearance, who asked him whether he had not taught a class at Princeton college, in which there was a youth of a certain name; and, being answered affirmatively, he proceeded to say that the youth was his son, who had rendered him familiar with the name of his tutor by the affectionate testimony often repeated in his letters. He professed a strong desire to serve his new acquaintance, mentioned that he kept a tavern, and offered him any assistance which he might require. The welcome kindness was accepted: the generous friend introduced him to a lawyer, under whom he prepared himself for the same profession; and, in less than a twelvemonth, he undertook causes on his own account. The hope of speedier success in his profession induced him to retire from Charleston to an interior district; and in this residence he first acquired some political consideration by a series of essays, in a newspaper, on a proposed change of the constitution of the state; and he was soon elected into the legislature. The reputation which he gained, as a speaker and man of business, soon placed him in congress. It is unnecessary to follow him, in his legislative course of eight or nine years, from the commencement of the French revolution to the year 1802, when the democratic party had succeeded to the national government. In the importance of events and discussions, the excitement of parties, the talents of leaders, the difficulties of action, the period just mentioned may be termed the most remarkable in our independent annals. Such men as Marshal, Madison, Giles, Nicholas, Tracy, Ames, Griswold, Bayard, Gallatin, exerted their various powers to the utmost, in congress; and among them Mr. Harper was constantly seen the equal adversary or coadjutor of the ablest. He sided with the federalists, and zealously supported the policy and measures of Washington, of whom he was the per-

sonal friend, as he was also of Hamilton, and others of the principal federal statesmen. Many years afterwards, he collected into an octavo volume a portion of his circulars and addresses to his constituents, and a few of his speeches, as they were printed while he was a representative. These attest the vigor of his faculties, the depth of his views, and the extent of his knowledge. No member of the national councils was better acquainted with the foreign relations of his country, and the affairs of Europe, or could discuss them in a more instructive, argumentative and fluent strain. His pamphlet, published in 1797, and entitled Observations on the Dispute between the United States and France, acquired great celebrity at home, passed rapidly through several editions in England, and was esteemed, over Europe, one of the ablest productions of the crisis. The speeches which he delivered in his capacity of manager of the impeachment against Blount, on the question whether a senator of the U. States be liable to impeachment, and his argument on the constitutional powers of the president and senate relative to the appointment of foreign ministers, are specimens of his capacity in the examination of constitutional points. Soon after the downfall of the federal party, he retired from congress, and, having married the daughter of the distinguished patriot Charles Carroll of Carollton, resumed the practice of the law in Baltimore, where he soon became eminent in his profession. Judge Chase, when impeached by the house of representatives, engaged Mr. Harper for his defence, and committed to him the duty of preparing his full answer to the articles of impeachment. The victorious answer, a masterpiece in all respects, was thought to be the work of the judge himself, and excited a lively admiration of the supposed author's powers; but he furnished towards it only a few manuscript pages of loose heads, leading topics, most of which were either omitted, or essentially modified. It was mainly supplied and wholly composed by his friend and counsellor, who, in concurrence with two distinguished colleagues, Luther Martin and Joseph Hopkinson, defended him before the senate. Mr. Harper attended almost every session of the supreme court, from the time of its removal to Washington to that of his death, and was always listened to with respect by the court. His style of speaking was animated, neat, sufficiently fluent, and uncommonly perspicuous. Juries especially felt the combined influence of his clear, natural tones, simple, easy gesture, lucid arrangement and impressive exposition of facts, and his facility in applying general principles, and deducing motives or consequences at the exact point of time. Mr. Harper did not suffer his taste for literature to languish. He was a diligent reader of belles-lettres, of history, geography, travels and statistics. He was versed in the sciences of morals and government, and was particularly well acquainted with political economy, and well knew how to use, in his public addresses, the stores with which his excellent memory readily supplied him. The federal party happening to acquire the ascendant in Maryland, Mr. Harper was immediately elected, by the legislature, a senator in congress; but this position the demands of his profession obliged him soon to relinquish. The same councils bestowed upon him the rank of major-general in the militia. About the years 1819—20, he set out for Europe with a part of his family, and visited, in succession, England, France and Italy. He was absent from home nearly two years. Favorable circumstances, and his own reputation and merit, procured for him access to many of the most renowned personages and brilliant circles, both of Great Britain and the continent. During the few years between his return and death, he employed himself chiefly in plans of a public character, such as the promotion of internal improvement and the colonization of the blacks. He delighted in topographical and geographical studies; and the particular notice which he had bestowed upon African geography served, besides his philanthropic zeal, to draw him into the scheme of African colonization. In private life, general Harper had signal virtues and attractions. His relatives and friends knew well the warmth and tenderness of his heart, and the generosity of his disposition. He administered aid, praise and sympathy wherever they were due. He lived with elegant hospitality, and enjoyed the company of the young and gay. In conversation, he excelled, perhaps, even more than he did in public speaking. He made a liberal estimate of the motives and qualities of his political antagonists. He never avoided social intercourse with any as such, but mixed with them in the kindest temper. For the leaders and principles of the federal party he retained a profound esteem. Immediately after the inauguration of Mr. Jefferson, he vindicated their measures, and predicted the final adoption of

their whole policy, in an elaborate historical survey, addressed to his constituents. His sworn narrative and explanations of the conduct of those who voted for colonel Burr, in congress, in 1801, and his printed Letters, in refutation of Mr. Monroe's charges, evince further the deep concern which he took in the reputation of the federalists and the cause of truth. General Harper was above the middle size, well shaped, muscular and robust; of erect, firm gait; of regular features and expressive countenance, and of active habits. His constitution was strong and equal to fatigue, bodily or mental, until the last two years, after he had undergone a severe attack of the bilious fever. This enfeebled and extenuated his frame, and entailed upon him, or was followed by, a dangerous affection, called *angina pectoris*, which kills suddenly, and when the patient may appear, and suppose himself to be, in good health. Against this formidable enemy, he employed a strict diet and regimen, and much exercise in the open air, and at length believed it to be subdued. Being engaged in a very important cause, in the second week in January, 1825, in one of the Baltimore courts, he finished his argument in the morning of the 14th. The next morning, he breakfasted in good appetite and spirits, and, on rising from the table, stood near the fire, with a newspaper in his hand. In a few minutes, he was perceived to be falling, by his son, who caught him in his arms, but, ere medical aid could be procured, he was dead. He was 60 years of age.

Harper's Ferry; a post-village in Jefferson county, Virginia, at the junction of the Shenandoah with the Potomac; it is eight miles E. N. E. of Charleston, and 65 W. N. W. of Washington. The celebrated passage of the Potomac, at this place, is an object truly grand and magnificent. The eye takes in, at a glance, on the north side of the Potomac and Shenandoah, at their junction, an impetuous torrent, foaming and dashing over numerous rocks, which have tumbled from precipices that overhang them; the picturesque tops and sides of the mountains, the gentle and winding current of the river below the ridge, presenting, altogether, a landscape capable of awakening the most delightful and sublime emotions. "This scene," says Mr. Jefferson, "is worth a voyage across the Atlantic." There is at this place, belonging to the U. States, a very extensive establishment for the manufacture of arms. It was founded in 1798, and now employs about 260 workmen. There are eight large brick buildings, six on the Potomac, and two on the Shenandoah, two miles distant, occupied by the works; also two large brick buildings, occupied as an arsenal. The village contains about 1000 inhabitants.

Harpies (Ἅρπυιαι, Greek); the rapacious goddesses of storms. Their ages, appearance, names and number, are so differently given by the poets, that it is difficult to say any thing definite concerning them. They are represented, by Homer, as residing near the Erinnyes, on the ocean, before the jaws of hell, and as goddesses of storms. If any one was absent so long from home, that it was not known what had become of him, and he was supposed to be dead, it was commonly said, "The harpies have carried him off." Hesiod represents them as young virgins, of great beauty. The later poets and artists vied with each other in depicting them under the most hideous forms. One has given them the head of a hen, with wings, and a body covered with feathers, human arms, with claws, a white breast and human legs, which terminate in the feet of a hen. Others have given them the face of a young woman, with the ears of a bear. Spanheim's work contains three representations of the harpies, from coins and works of art, with the claws and bodies of birds. The first has a coarse female face; the second a completely feminine head, and two breasts; the third a visage ornamented with wreaths and a head-dress. There are also other representations of them. Leclerc supposes that they are an allegorical description of the noisy flight, the destruction, the stench and the contamination of locusts.

Harpocrates; the god of silence among the Egyptians; a son of Isis and Osiris. His statues represent him as holding one of his fingers on his mouth. They appear at the entrance of most of the Roman and Egyptian temples.

Harpoon. The harpoon is an instrument of iron, of about three feet in length. It consists of three conjoined parts, called the *socket*, *shank* and *mouth*, the latter of which includes the *barbs*, or *withers*. This instrument, if we except a small addition to the barbs, and some enlargement of dimensions, maintains the same form in which it was originally used in the fishery two centuries ago. At that time, the mouth, or barbed extremity, was of a triangular shape, united to the shank in the middle of one of the sides, and this, being scooped out on each side of the shank, formed two simple flat barbs. In the

course of the last century, an improvement was made, by adding another small barb, resembling the beard of a fish-hook, within each of the former withers, in a reverse position. The two principal withers, in the present improved harpoon, measure about eight inches in length and six in breadth; the shank is eighteen inches to two feet in length, and four tenths of an inch in diameter; and the socket, which is hollow, swells from the size of the shank to near two inches in diameter, and is about six inches in length. To this weapon is fastened a long cord, called the *whale-line*, which lies carefully coiled in the boat, in such a manner as to run out without being interrupted or entangled. As soon as the boat has been rowed within a competent distance of the whale, the harpooner launches his instrument; and the fish, being wounded, immediately descends under the ice with amazing rapidity, carrying the harpoon along with him, and a considerable length of the line, which is purposely let down, to give him room to dive. Being soon exhausted with the fatigue and loss of blood, he reascends, in order to breathe, where he presently expires, and floats upon the surface of the water; when the whalers approach the carcass by drawing in the whale-line. The line is 60 to 70 fathoms long, and made of the finest and softest hemp, that it may slip the easier; if not well watered, by its friction against the boat it would soon be set on fire; and if not sufficiently long, the boat would be soon overset, as it frequently is. With the harpoon, other large fish, as sturgeons, &c., are also caught. When the harpoon is forced, by a blow, into the fat of the whale, and the line is held tight, the principal withers seize the strong ligamentous fibres of the blubber, and prevent it from being withdrawn; and, in the event of its being pulled out so far as to remain entangled by one wither only, which is frequently the case, then the little reverse barb, or *stop wither*, as it is called, collecting a number of the same reticulated sinewy fibres, which are very numerous near the skin, prevents the harpoon from being shaken out by the ordinary motions of the whale. The point and exterior edges of the barbs of the harpoon are sharpened to a rough edge, by means of a file. This part of the harpoon is not formed of steel, as it is frequently represented, but of common, soft iron, so that, when blunted, it can be readily sharpened by a file, or even by scraping it with a knife. The most important part in the construction of this instrument, is the shank. As this part is liable to be forcibly and suddenly extended, twisted and bent, it requires to be made of the softest and most pliable iron.

Harpoon-Gun. The harpoon-gun is well calculated to facilitate the capture of whales, under particular circumstances, especially in calm weather, when the fish are apt to take the alarm at the approach of boats within 15 or 20 yards of them. The harpoon gun was invented in the year 1731, and used by some individuals with success. Being, however, somewhat difficult and dangerous in its application, it was laid aside for many years. It has, however, subsequently been highly improved, and rendered capable of throwing a harpoon nearly 40 yards, with effect; yet, on account of the address which is requisite for the proper management of it, and the loss of fish which, in unskilful hands, it has been the means of occasioning, together with some accidents which have resulted from its use, it has not been so generally adopted as might have been expected. In its present improved form, the harpoon-gun consists of a kind of swivel, having a barrel of wrought iron, 24 to 26 inches in length, of 3 inches exterior diameter, and 1⅛ inches bore. It is furnished with two locks, which act simultaneously, for the purpose of diminishing the liability of the gun missing fire. The shank of the harpoon fired from it is double, terminating in a cylindrical knob, fitting the bore of the gun. Between the two parts of the shank a wire ring slides freely, to which is attached the line. When the harpoon is introduced into the barrel of the gun, the ring with the attached line slides up, and remains on the outside, near the mouth of the harpoon; but, the instant that it is fired, the ring, of course, flies back against the cylindrical knob. Some harpoons have been lately made with a single shank, similar to the common hand harpoon, but swell at the end to the thickness of the bore of the gun. The line, closely spliced round the shank, is slipped towards the mouth of the harpoon, when it is placed in the gun, and, when fired, is prevented from disengaging itself by the size of the knob at the end. (For further information, see *Whale-Fishery*.)

HARPSICHORD; a stringed instrument, consisting of a case framed of mahogany, or walnut-tree wood, and containing the belly, or sounding-board, over which the wires are distended, supported by bridges. In the front the keys are disposed, the long ones of which are the naturals, and the

short ones the sharps and flats. These keys being pressed by the fingers, their enclosed extremities raise little upright oblong slips of wood, called *jacks*, furnished with crow-quill plectrums, which strike the wires. The great advantage of the harpsichord beyond most other stringed instruments, consists in its capacity of sounding many notes at once, and forming those combinations, and performing those evolutions of harmony, which a single instrument cannot command. This instrument, called by the Italians *clavicembalo*, by the French *clavecin*, and in Latin *grave cymbalum*, is an improvement upon the clarichord, which was borrowed from the harp, and has, for more than a century, been in the highest esteem, and in the most general use, both public and private, throughout Europe; but, since the invention of that fine instrument, the grand piano-forte, the use of it has considerably diminished.

Harquebuss (in the ancient statutes called also *arquebus*, *haquebut*, or *hagbut*) is a hand-gun, or fire-arm, of a proper length, &c., to be borne on the arm. The word is formed of the French *arquebuse*, and that from the Italian *archibuso*, or *arco a buso* (of *arco*, a bow, and *buio*, a hole), on account of the touch-hole, at which powder is put to prime it, and the circumstance of its having succeeded to the bows of the ancients. The harquebuss is, properly, a fire-arm, of the ordinary length of a musket or fowling-piece, cocked, usually, with a wheel. Hanzelet describes its legitimate length to be 40 calibres, and the weight of its ball one ounce seven-eighths; its charge of powder as much. There is also a larger kind, called *arquebuse à croc*, much of the nature of our blunderbusses. This was used, in time of war, to defend places, being usually rested on something when discharged. The first time these instruments were seen was in the imperial army of Bourbon, who drove Bonnivet out of the state of Milan. They were so heavy, that two men were employed to carry them.

Harrington, James, a celebrated political writer, was born at Upton, in Northamptonshire, in 1611, and was educated at Trinity college, Oxford, under the care of the celebrated Chillingworth. On the death of his father, he visited the Netherlands, where he entered lord Craven's regiment, and, being quartered at the Hague, frequented the courts of the prince of Orange and the queen of Bohemia, and accompanied the elector palatine to Denmark. He subsequently visited Germany, France and Italy; and, on his return to England, siding with the parliamentary party, in 1646, he accompanied their commissioners to Charles I at Newcastle, and, on their recommendation, was appointed groom of the stole to the king. In this capacity, he never disguised his republican sentiments; yet he was desirous of producing an accommodation between Charles and the parliament; which is supposed to have produced his removal from the king's person. During the protectorate, he passed his time in retirement, and occupied his leisure in writing his famous work, *Oceana;* which, after some opposition on the part of Cromwell, was published in 1656. In order to propagate his opinions, he established a sort of club, or debating society, called the *rota*, which was terminated by the restoration. Being arrested for a supposed plot against the government, of which he was entirely innocent, he was treated with great severity, and his release by habeas corpus evaded, by an arbitrary removal to St. Nicholas island, near Plymouth. Here, either from distress of mind, or improper medical treatment, his faculties became impaired; which, being represented to the king by his relations, led to his release. He partly recovered, and married a lady to whom he had been early attached. He died, of paralysis, in 1677, and was buried at St. Margaret's, Westminster. Harrington was a profound thinker. His *Oceana*, which is a political romance, and the Utopian image of a republic, is a work of genius, thought and invention, and is characterized by an enthusiastic love of liberty. The writings of Harrington were published (in one volume, folio) by Tindal, in 1700, and again, more completely, by doctor Birch, in 1737.

Harris, James, a learned writer on philology and the philosophy of language, was born at Salisbury, in 1709. Having passed through his preliminary studies, he entered as a gentleman commoner of Wadham college, Oxford, at the age of 16; after which he became a probationer at Lincoln's Inn. The death of his father put him in possession of an independent fortune at the age of 23; on which he retired to his native place, to dedicate his time to classical literature. In 1744, he published a volume, containing three treatises,—On Art; on Music and Painting; and On Happiness. This was a prelude to the most celebrated of his productions, Hermes, or a Philosophical Enquiry concerning Universal Grammar. This work displays much ingenuity, and an extensive

acquaintance with the writings of the Greek poets and philosophers; but the author's ignorance of the ancient dialects of the northern nations has caused him to take an imperfect survey of his subject. In 1761, he was chosen member of parliament, and held several public places. In 1775, he published Philosophical Arrangements, part of a systematic work, which he had projected, as an illustration of the Logic of Aristotle. His concluding work, Philological Inquiries, was completed in 1780, but was not published till after his death (December 22, 1780). A collective edition of his works was published by his son, the earl of Malmesbury (2 vols. 4to., 1801).

Harrisburg; a borough in Dauphin county, and the seat of government of the state of Pennsylvania, on the east bank of the Susquehannah, over which there is here erected a covered bridge, of 12 arches, which cost 193,000 dollars. The Pennsylvania canal passes along the eastern side of the town, and forms a large basin for a harbor; 35 miles W. N. W. Lancaster, 96 W. by N. Philadelphia. Population, in 1820, 2990; in 1830, 4307; and, including the adjoining village of McClaysburg, 4526. The whole number of houses in 1830 was 636; 431 of them frame houses, 201 of brick, and 4 of stone. Harrisburg is pleasantly situated, regularly laid out, and, in general, well built. The capitol is a spacious and elegant brick edifice, situated on a considerable elevation, on the outside of the town. From its cupola is presented a fine landscape, embracing a wide extent of cultivated country, the meanders of the river, swelling hills, and the neighboring mountains. The town contains a county court-house, a jail, two banks, a large Lancasterian school-house, capable of accommodating 1000 children; 10 places of public worship, for Presbyterians, Lutherans, German Reformed, Episcopalians, Roman Catholics, Methodists, Baptists, Unitarians, United Brethren, and Africans, one each; and eight printing-offices, from six of which newspapers are issued, two of them in the German language. It has also a steam-mill, a variety of manufacturing establishments, and is a place of considerable trade. Fifty years since, Harrisburg was a wilderness, inhabited by Indians.

Harrison, Benjamin, a signer of the declaration of independence, was of a highly respectable family in Virginia. The date of his birth is not precisely known. He was a student in the college of William and Mary, when his father and two sisters were simultaneously killed by a stroke of lightning. He went early into public life (in which his ancestors had long been distinguished), commencing his political career, in 1764, as a member of the legislature of his native province. The eminence which he acquired in that capacity, combined with the influence naturally accruing from fortune and distinguished family connexions, rendered it an object for the royal government to enlist him in their favor; and he was accordingly offered a seat in the executive council of Virginia,—a station analogous to that of a privy-counsellor in England. This was a tempting bait to an ambitious young man; but as, even at that time, the measures of the British ministry indicated an oppressive spirit, he refused the proffered dignity, and always exerted his influence for the benefit of the people. When the time came for active resistance to the arbitrary acts of the government, he was not found backward. In the first general congress of 1774, he was a delegate, and consecrated his name, by affixing it to that declaration which can never be forgotten as long as liberty is worshipped. It is related concerning him, that, whilst signing the instrument, he happened to stand near Mr. Gerry, of Massachusetts, who was of a slender and spare form, while he was very corpulent; and, turning to him, after laying down the pen, he said, in a facetious way, "When the time of hanging comes, I shall have the advantage over you. It will be over with me in a minute, but you will be kicking in the air half an hour after I am gone." Mr. Harrison was particularly useful as chairman of the board of war. After his resignation of his seat, in 1777, he was elected to the house of burgesses of Virginia, of which he was immediately chosen speaker. This situation he occupied until the year 1782, when he was made chief magistrate of the state, and was twice reëlected. In 1785, he retired into private life, but, in 1788, became a member of the convention of Virginia that ratified the present constitution of the United States. Of the first committee appointed by this body, that of privileges and elections, he was chosen chairman; but his age and infirmities prevented him from taking an active part in the debates. He, however, advocated the adoption of the constitution, with certain amendments. He died, of the gout, in 1791.

Harrison, John; a skilful mechanic, celebrated as the inventor of the time-

keeper for ascertaining the longitude at sea, and also of the gridiron-pendulum. He was born at Foulby, near Pontefract, in Yorkshire, in 1693, and was the son of a carpenter or builder, who brought him up to the same occupation. Before he had attained the age of 21, he found out, without instruction, how to clean clocks and watches, and made two clocks, chiefly of wood-work. In 1735, he executed his first machine for determining the longitude at sea, the merit of which he proved in a voyage to Lisbon. In 1739, he completed a second, and, in 1749, a third machine, which erred only three or four seconds in a week. He then turned his attention to the improvement of pocket watches, in which he succeeded so well, that he was induced to make a fourth machine, or time-keeper, in that form, which he finished in 1759. This chronometer, in two voyages, having been found to correct the longitude within the limits required by the act of parliament of the 12th of queen Anne, Harrison applied for the proposed reward of £20,000, which he received. This ingenious artist employed the latter part of his life in constructing a fifth improved time-keeper, on the same principle. This, after a ten weeks' trial, was found to have erred only four and a half seconds. He died in 1776. He was the author of a tract, entitled a Description concerning such Mechanism as will afford a nice or true Mensuration of Time (1775, 8vo.).

Harrowby, Dudley Ryder, earl of, was born in 1762, and educated at St. John's, Cambridge. He was elected member of parliament for Tiverton, and became connected with Mr. Pitt and his party. In 1801, he was made treasurer of the navy, in the Addington administration, and, on Mr. Pitt's restoration to the head of the ministry, in 1804, received the seals of the foreign department. In 1812, he was made president of the council—a place which he held till the appointment of the duke of Wellington to the premiership, when he retired from public life. He was always an advocate of Catholic concessions, and an active patron of the British and Foreign Bible Society. He was created viscount Sandon and earl of Harrowby in 1809.

Harrow-on-the-Hill; a village of England, in Middlesex, situated on the highest hill in the county, and commanding one of the finest prospects of the metropolis on the east. It is famous for its free school, founded in the reign of Elizabeth, by John Lyon, and still considered one of the first in the kingdom. Population of the parish, 3017; 10 miles N. W. London. Doctor Parr, sir William Jones, Sheridan, Byron, earl Spenser, sir Robert Peel, &c., were educated there.

Harsdörfer, George Philip, a distinguished scholar and poet of the 17th century, lived from 1607 till 1658. He was descended from a patrician family in Nüremberg, travelled through Holland, England, France and Italy, and acquired so much knowledge of languages, that he was called the *learned*. He was also a member of the high council at Nüremberg. His German and Latin works, historical and literary, fill 47 volumes. Yet he was neither a profound scholar nor a poetical genius. His best songs are to be found in his *Frauenzimmergesprächen* (Nüremberg, 1642, 8 vols.). With his friend and poetical companion, John Klai (Clajus), who was born at Meissen, 1616, and died (1656) at Kitzingen in Franconia, where he was a preacher, he instituted at Nüremberg, in 1644, the Order of Flowers, or Society of Shepherds of the Pegnitz, which is yet in existence. The purity of the German language was the object of this society, which numbered princes and distinguished scholars among its members. Klai's poems are partly in the collection published by the Shepherds of the Pegnitz, and have been partly published by themselves.

Hart, John, a signer of the declaration of independence, was born in New Jersey, and was the son of a farmer, who left him a considerable estate, and whose occupation he followed. He was distinguished for sound sense and integrity, and was frequently chosen to the colonial legislature, in which he always evinced attachment to liberal principles. In 1774, "honest John Hart" as he was called, was one of the first deputed from New Jersey to the general congress at Philadelphia. His moderation and cool judgment enabled him to render valuable services; and these, combined with his zeal and inflexible rectitude and firmness, caused him to be frequently reëlected. He gave his vote for, and signed the declaration of independence with peculiar ardor. Near the end of the year 1776, New Jersey became the theatre of war; and, in the destruction of property which was made by the enemy, that of Mr. Hart, as of a rebel especially obnoxious, suffered to a great extent. Active exertions were also made to take him prisoner, and he was hunted about for some time, without intermission, after being obliged to fly from his house,

when his wife was afflicted by a distressing malady, which ultimately caused her death. He was often in great want of food, and, on one occasion, was forced to conceal himself, during the night, in a dog-kennel. After the evacuation of New Jersey by the English, he returned to his farm, and began to repair the injuries it had received; but his constitution was so much shattered by the hardships he had encountered in his efforts to elude the pursuits of his foes, that it gradually failed him; and, in the year 1780, he breathed his last, universally esteemed and respected.

Hartford; a city in Hartford county, and the semi-capital of Connecticut, on the west bank of Connecticut river, 50 miles above its mouth, 34 from New Haven, and 100 W. S. W. of Boston; lon. 72° 50′ W.; lat. 41° 46′ N.: population in 1820, including the township, 9617; in 1830, 9789, of which the city had 7074. It has a pleasant and advantageous situation at the head of sloop navigation, and is surrounded by a fertile and beautiful country. It contains a handsome state-house of stone and brick, three banks, including a branch of the U. States bank, an arsenal, an academy, a museum, a college, an asylum for the deaf and dumb, and eight houses of public worship, six of them within the city, viz., three for Congregationalists, one for Episcopalians, one for Baptists, and one for Universalists. The city is generally well built, particularly the main street. A bridge with six arches, 974 feet long, is erected over the Connecticut, connecting the city with East Hartford. Hartford has a flourishing commerce. It has an extensive inland trade, and a variety of manufactures, as leather, shoes, coaches, cotton and woollen goods, saddlery, brass work, &c. The general assembly has one session annually, and meets alternately at Hartford and New Haven. Hartford was first settled by the English in 1635. Washington college, an institution under the direction of the Episcopalians, was established here in 1826. It is very pleasantly situated, and has a president, eight professors, about 80 students, and a library of 5000 volumes. The American Asylum for the education and instruction of the deaf and dumb, at Hartford, owes its origin to the success which attended the efforts of the reverend Thomas H. Gallaudet, to give instruction to the deaf and dumb daughter of a gentleman of that city. The attention of people being excited, it was computed that there were more than a hundred deaf mutes in Connecticut; and Mr. Gallaudet was induced to undertake the establishment of an institution at Hartford for their relief, having previously stipulated for means of personally examining the European institutions for the relief of persons thus afflicted. Mr. Gallaudet embarked for Europe in May, 1815. He returned in August, 1816, accompanied by Mr. Laurent Clerc, a distinguished pupil of the abbé Sicard. The course of instruction commenced, with seven pupils, in April, 1817, and, in 1829, there were 143 pupils in the institution, under the care of Mr. Gallaudet and nine assistant instructers. 54 of the pupils were supported wholly by the legislature of Massachusetts; 15, in whole or in part, by that of New Hampshire; 13 by that of Maine; 21 by that of Vermont; and 13 by that of Connecticut. The institution, from its establishment to 1830, had imparted its benefits to 318 persons. The funds of the asylum have been derived from private donations, and from a grant of land in Alabama, made by the congress of the U. States, in 1819. These have furnished the institution with a large and commodious brick building, in which the pupils reside and receive instruction; a dwelling-house for the principal, and convenient out-houses, including two brick work-shops, in which the male pupils work four or five hours daily, in order to acquire a mechanical trade; and have enabled the directors to form a permanent fund of considerable amount. The grounds (between seven and eight acres in extent) are on a very delightful and commanding eminence, half a mile west of the city. When the asylum commenced, the charge to each pupil was $200 a year for board, lodging and washing, fuel, candles, stationery, and other incidental expenses of the school-room; besides a continual superintendence of their health, conduct, manners and morals, and tuition. In consequence of the sales of a portion of the lands in Alabama, the charge is now reduced to $115 a year—a sum, however, which falls considerably short of the actual expense incurred for each pupil. By this mode of distributing the annual income derived from the funds of the institution, every state in the Union, and every parent of a deaf and dumb child, may receive an equal share of the public bounty. To employ their funds in educating pupils gratuitously, would soon entirely exhaust them. One great object, that the asylum has aimed to accomplish, is, the diffusion of a uniform system of instruction throughout the Union, and to

satisfy candid and intelligent minds, that experience in teaching the deaf and dumb, as in all other pursuits, mechanical or intellectual, is of primary importance. Its efforts, in this respect, have met with great success. It has furnished the Pennsylvania institution, at Philadelphia, with its present principal and two assistant teachers; it afforded instruction to the principals of the two institutions in Kentucky and Ohio; and the principal of the one at Canajoharie, in the state of New York, himself deaf and dumb, was one of its earliest pupils. In addition to these institutions, all of which have derived their system of instruction from the American asylum, there is but one other in the U. States,—that in the city of New York. Among the 318 pupils, who have been members of the asylum, only 75 have been supported by their parents or friends, most of whom were in quite moderate circumstances. Out of the same number, consisting of 178 males and 140 females, 134 were born deaf; 154 lost their hearing in infancy and childhood; and of 30 no certain information could be procured. Among the causes of this calamity, were the following: fevers, more particularly the spotted fever; canker rash; measles; inflammation of the brain; dropsy in the head; small pox; hooping cough; palsy; in one instance, discharge of cannon; and sudden falls. In only two cases has either of the parents of the pupils been deaf and dumb; and, in each of these, it was the father; while, among several instances of marriage that have come to the knowledge of those connected with the asylum, where either one or both of the parties were deaf and dumb, their children were in possession of all their faculties. The physiology of the deaf and dumb is a subject of the most curious kind, and, if thoroughly investigated, might shed much additional light upon that of our species in general. It would serve very much to promote this object, if the clergy and the physicians, in their respective towns, would institute inquiries on this subject. The result of such inquiries could be communicated to some of the public ecclesiastical or medical associations, and thence transmitted, free of expense, to the officers of the asylum. If a single association would commence inquiries of this kind, on some well digested, regular plan, it would soon be more generally, and, it is to be hoped, at length universally, adopted. Among these inquiries, the following are the most important: the sex, age, place of nativity and residence of the individual; whether the deafness is owing to some original defect, or was produced by disease or accident, and, if so, in what way, and at what time; whether there are other cases of deafness in the same family, or among any of the ancestors or collateral branches of kindred, and how and when produced; if a part of the children hear and speak, and a part are deaf and dumb, what is the order of their ages; whether the deafness is total or partial, and, if partial, what kind of sounds can be heard, and to what extent; whether any medical means have been employed to remove it, and the result; whether the individual can utter any articulate sounds, and to what extent; whether any instruction has been given, and with what success; whether the individual has been taught any mechanical art or trade, or is engaged in any regular occupation; if married, to whom, to a deaf and dumb person, or to one who can hear and speak, and, if there are children, whether they are in possession of their faculties; what are the circumstances of the individual, or of the parents or friends, and, more particularly, whether they are able to furnish the means of education at some institution for the deaf and dumb. With regard to the course of instruction pursued in the American asylum, we will only add to what has been already said in the article *Dumb and Deaf*, that the period, for which pupils are sent to the asylum, does not usually exceed four years; and, in this time, it is expected that they will receive sufficient instruction for all the useful purposes of life, and also that amount of religious knowledge, with which, as immortal beings, it is of essential importance that they should be made acquainted. A moment's reflection will show the difficulty of the task imposed on the instructer. Other children have to pass through a much longer course of instruction, counting from the time when they first begin to learn their letters, before they acquire what is termed a common education. In the four years, however, besides being taught the prominent facts and leading truths of the Bible, the pupils generally acquire the ability to read books in an easy and familiar style, and to express their thoughts intelligibly in writing; and they make some progress in arithmetic, geography, the outlines of history, orthography, and the practical part of grammar. The male pupils also acquire some mechanical art.

HARTFORD CONVENTION. (See *U. States.*)

HARTLEY, David, an English physician, principally celebrated as a writer on meta-

physics and morals, was born in 1705. At the age of 15, he was sent to Jesus college, Cambridge, of which he became a fellow. He engaged in the study of medicine, and practised as a physician in Nottinghamshire, and, subsequently, in London. When Mrs. Stephens, a female empiric, professed to have found out a specific for the stone, doctor Hartley contributed towards her obtaining the grant of £5000 from parliament for her discovery. He spent the latter part of his life at Bath, and died there, Aug. 28, 1757. His fame as a philosopher and a man of letters depends on his work entitled Observations on Man (1749, 2 vols., 8vo.). This treatise exhibits the outlines of connected systems of physiology, mental philosophy, and theology. His physiology is founded on the hypothesis of nervous vibrations. The doctrine of association, which he adopted and illustrated, explains many phenomena of intellectual philosophy; and this part of Hartley's work was published by doctor Priestley, in a detached form, under the title of the Theory of the Human Mind (8vo.).

Hartley, David; distinguished as a politician and an ingenious projector. He was for some time member of parliament, and uniformly displayed liberal views. His steady opposition to the war with the American colonies, led to his being appointed one of the plenipotentiaries to treat with doctor Franklin, at Paris; and some of his letters on that occasion were published in the correspondence of that statesman, in 1817, and are contained in the Diplomatic Correspondence of the American Revolution (Boston, 1831). In the house of commons, Hartley was one of the first promoters of the abolition of the slave-trade. This benevolent philosopher died at Bath, Dec. 19, 1813, aged 84.

Hartshorn; the horns of the common male deer, to which many very extraordinary medicinal virtues were attributed; but the experience of late years gives no countenance to them. The horns are of nearly the same nature as bones, and the preparations from them by heat are similar to those from solid animal substances in general; so that the articles denominated *spirit of hartshorn* and *salt of hartshorn*, though formerly obtained only from the horns of different species of deer, are now chiefly prepared from bones. The former of these, which is a volatile alkali of a very penetrating nature, is an efficacious remedy in nervous complaints and fainting-fits; and salt of hartshorn has been successfully prescribed in fevers. The scrapings or raspings of the horns, under the name of *hartshorn shavings*, are variously employed in medicine. Boiled in water, the horns of deer give out an emollient jelly, which is said to be remarkably nutritive. Burned hartshorn is employed in medicine. The horns of the stag are used, by cutlers and other mechanics, for the handles of knives and cutting instruments of different kinds.

Hartz; the most northerly mountain chain of Germany, from which an extensive plain, interrupted only by some inconsiderable hills, stretches to the North sea and the Baltic. The Hartz, though surrounded by a low range of hills, forms a separate mountainous chain, 70 miles in length and 20 to 28 miles in breadth. The Hartz, properly speaking, commences in the east, in Mansfeld, passes through Anhalt-Bernburg, the counties of Stolberg, Hohenstein and Wernigerode, a part of Halberstadt and Blankenburg, Brunswick-Wolfenbuttel and Grubenhagen, and terminates on the west, at the town of Seesen, comprising an extent of 1350 square miles, and embracing 40 towns and numerous villages, with 56,000 inhabitants, belonging principally to Hanover. The Hartz is divided into the Upper and Lower, in a double sense. In the wider sense, the Brocken, the loftiest summit of the chain, forms the line of separation. The Upper Hartz lies west of the Brocken, and is the most elevated, extensive, and rich in minerals; the Lower Hartz lies on the east of the Brocken, and is superior in the beauty of its scenery. The same summit is also the dividing point of the rivers; those on the east empty into the Elbe; those on the west, into the Weser. There are several ranges of mountains in Germany, that are much higher than the Hartz; as, for instance, the German Alps, the Riesengebirge and the Schwartzwald (Black Forest). The Brocken, the highest summit of the Hartz, is 3489, or, according to some accounts, 3435 feet high; next to this are the Bruchberg (2755 feet), the Wormberg (2667 feet), and the Ackermannshöhe (2605 feet). That part of the Hartz which includes the Brocken, with the neighboring high summits, consists entirely of granite; then come the hills of the second rank, formed of greywacke, in which the ores are chiefly found; at their foot lie the Flœtz hills, known under the name of the *Vorhartz*. The climate, particularly of the Upper Hartz, is cold. The frost continues till the end of May, and appears early in September, accompanied by snow; and even in June, night frosts are not uncom-

mon. The warm weather lasts only about six weeks, and the snow upon the highest peaks seldom disappears before June; fires are kept up, even in mid-summer. The Hartz is wooded throughout, even to the top of the Brocken (the Hanoverian part alone contains 286,363 acres of forest). On the Brocken itself stand firs dwindled into dwarf trees. Upon the less lofty hills, several sorts of deciduous trees are found intermingled with the evergreens, and the Flœtz hills are covered with the finest oaks, beech and birch. The hills also abound in wild berries, in truffles and mushrooms, in medicinal plants, Iceland moss, and fine pastures; and in summer, immense herds of neat cattle, sheep, goats and horses graze here. In the Upper Hartz, little grain is raised, except oats; in the Lower Hartz, the productions are more various. The woods furnish a great quantity of game, such as stags, roe-bucks, foxes, wild boars, wild cats, &c. But the wealth of the Hartz consists in its forests and valuable mines. The latter furnish some gold (on account of its rarity, ducats were formerly coined, with the inscription *Ex auro Hercyniæ*); in the Rammels-berge, great quantities of silver, iron, lead, copper, zinc, arsenic, manganese, vitriol, granite, porphyry, slate, marble, alabaster, &c. The gross produce of the Hanoverian mines is but little over the expenses; but they support the greatest part of the inhabitants of the Hartz. The towns of the Upper Hartz are entirely open. In addition to the establishments for carrying on the mines, the objects of curiosity in the Hartz are the Brocken, with its prospect; the horse-track (*Rosstrappe*), the wildest and most beautiful part of the Hartz, near the village of Thale; the different caves, as those of Baumann, Biel, Schwartzfeld, the romantic Selkenthal, with the Maiden's Leap, and the Bath of Alexis; the wild Ockerthal, &c. A wide plain on the summit of the Brocken, is the place of the annual rendezvous of all the witches and spirits of Germany, of which Göthe has made such a noble use in his *Faust*. It is on the Brocken, also, that the wild huntsman of the Hartz is supposed to dwell. The spectre of the Brocken is an image of the spectator, of a magnified and distorted shape, reflected from an opposite cloud under particular circumstances. (See the *Taschenbuch für Reisende in den Hartz*, by Gottschalk (2d edit., Magdeburg, 1817).

HARUSPEX. (See *Aruspices.*)

HARVARD COLLEGE. (See *Cambridge.*)

HARVEY, William, an English physician, celebrated as the discoverer of the circulation of the blood, was born at Folkstone, in Kent, April 2, 1578, and, in 1593, removed to Caius college, Cambridge. At the age of 19, he went abroad for improvement, and, after visiting France and Germany, he staid some time at the university at Padua, where Fabricius ab Acquapendente, and other eminent men, were professors of the medical sciences. He took the degree of M. D. in 1602, and, returning to England, obtained a similar distinction at Cambridge. Having settled in London, in 1604 he was admitted a licentiate of the college of physicians, and, three years after, a fellow. In 1615, he was appointed to read lectures at the college, on anatomy and surgery; and, in the course of this undertaking, he developed the discovery which has immortalized his name. It was not till 1620, that he gave publicity to his new doctrine of the circulation of blood, by his treatise entitled *Exercitatio anatomica de Motu Cordis et Sanguinis in Animalibus*. In a prefixed address to the college of physicians, he observes, that he had frequently, in his anatomical lectures, declared his opinion concerning the motion of the heart and the circulation of the blood, and had, for more than nine years, confirmed and illustrated it by reasons and arguments grounded on ocular demonstration. It speedily excited the attention of anatomists in every European school of medicine; and the theory of Harvey having been triumphantly defended against all objections, attempts were made to invalidate his claim to the discovery; but it is now admitted, that whatever hints may be found in the writings of his predecessors, Harvey first clearly demonstrated the system of sanguineous circulation, and thus produced one of the greatest revolutions in medical science. Harvey was appointed physician extraordinary to James I, and, in 1632, physician in ordinary to king Charles, by whom he was much esteemed. Adhering to the court party, on the occurrence of hostilities, he attended his majesty on his removal from London. He was with him at the battle of Edgehill, and afterwards at Oxford, where, in 1642, he was incorporated M. D. In 1651, he published his *Exercitationes de Generatione Animalium* (4to.). This curious work would have been still more interesting, had not the plunder of the author's museum, while he was in the king's service, deprived him of the fruits of some of his anatomical researches, especially those relative to the generation of insects. He presented to the col-

lege of physicians his paternal estate of £56 a year, for the institution of an annual festival and other purposes. In his old age, he was subject to distressing attacks of the gout, which imbittered his existence so much, that he is said to have shortened his life with a dose of opium. He died June 3, 1658. A splendid edition of his works was published in one volume, 4to., with an account of his life, by doctor Lawrence.

Harwich; a seaport of England, on a peninsular point of land on the Essex coast. It is the port from which the packets sail regularly, in time of peace, for Holland and Germany; the seat of a navy-yard, and also a considerable bathing place. Two light-houses have lately been erected on the Harwich side, to facilitate the entrance by night. The harbor is of great extent, and forms, united to the bay, a roadstead for the largest ships of war, and for an immense number of vessels at a time, upwards of 300 sail having anchored here with ease. Harwich sends two members to parliament. Population, 4010; 71 miles N. E. London; lon. 1° 17′ E.; lat. 51° 57′ N.

Hasdrubal; the name of several distinguished Carthaginians; among others, of the brother of Hannibal. (q. v.)

Hase, Charles Benedict, professor of the Oriental languages at Paris, and, since 1824, member of the academy of inscriptions, born May 11, 1780, at Sulza, near Naumburg, studied at Weimar, under Böttiger. The eloquence and learning of that distinguished scholar attracted him to philological studies, to which he applied himself during his residence in Jena and Helmstädt. In 1801, he went to Paris, where Millin and Villoison introduced the young German Hellenist into their literary circle. By Villoison, Hase was introduced to the acquaintance of Choiseul Gouffier, who, on the death of Villoison (1805), intrusted to him the publication of John Laur. Lydus's treatise *De Magistratibus Romanorum*. For this publication Hase only wrote the introduction, the translation being by Fuss. At the same time, he began a catalogue of the classical manuscripts, which the successes of the French arms at that time brought from all quarters to Paris; but subsequent circumstances prevented its appearance. These researches carried him into the Byzantine literature, as appears by his *Notices du Traité de Dracon de Stratonicée sur la Métrique des Anciens*; also, *De l'Histoire de Leon-le-Diacre*; and the *Entretiens de l'Empereur Manuel Paléologue avec un Professeur Mahométan*, in the eighth volume of the *Notices et Extraits de la Bibl. I. R.* By his intercourse with Greeks in Paris, he acquired so thorough a knowledge of the modern Greek, that, in 1816, he was appointed professor of that language in the school for the living Oriental languages. This study led him, imperceptibly, to the times where its first traces are discernible—times not very remote from the classical. The style of the church fathers, and the Byzantine writers, gave him a further insight into the nature of an idiom which had been neglected by most scholars, while, at the same time, the idiom itself furnished him illustrations of the Byzantine writers. The continuation of the *Corpus Hist. Byz.* was the chief object of his researches. Through the patronage of the Russian imperial chancellor, count Romanzoff, Hase was enabled to publish his *Leo Diaconus*, and some authors of the same period, forming a continuation of the Paris edition of the Byzantines (Paris, 1819). The explanatory and critical commentary, accompanying the text, is very valuable. He has since prepared for the press a similar volume, containing Psellus, and some chronographers, in the preparation of which he examined, with great care, the French and Italian libraries. Besides these, he has collected all the fragments which have any relation to the religious opinions of the Romans. In two journeys to Italy, under the patronage of the French government, in 1820 and 1821, he became acquainted with the treasures of Italian libraries. His *Laur. Lydus de Ostentis, quæ supersunt*, appeared at Paris in 1823, with an introduction, commentary and a Latin version. He is at present editing an edition of Stephens's *Thesaurus Lin. Græc.*

Hasenclever, Peter, a distinguished merchant, was born at Remscheid, in the duchy of Berg, in 1716. In 1748, he established himself at Lisbon, and afterwards at Cadiz, whence he returned to Germany, and had a great influence in promoting the manufacture of linen in Silesia. Frederic the Great used to ask his advice in important commercial affairs. In 1761, he returned to Cadiz, and, though a Protestant, was the intimate friend of Velasquez, the grand inquisitor. He afterwards established a company in London, for exporting hemp, potash and iron to North America, which was connected, in 1765, with a house at New York, where he built a great many vessels. The speculations of his partner having caused the bankruptcy of the firm, he went to Eu-

rope, but soon after returned to America. He then settled in Landshut in Silesia, where he carried on an important linen trade. He died there in 1793.

Haser, Charlotte Henrietta, a celebrated singer, born at Leipsic, in 1789, daughter of the director of music in the university of Leipsic. In 1804, she was engaged at the Italian opera at Dresden. In 1807, she went through Prague and Vienna to Italy. Her fine voice, her execution, and her persevering efforts to combine the advantages of the Italian and German methods, gave her a brilliant success. In private life, she was distinguished for the correctness of her morals, and her uncommon modesty. The most celebrated theatres in Italy contended for her. She was repeatedly called to Rome, where she obtained great applause. She was the first female singer in Italy who appeared in male characters, and ventured to cope with the celebrated artists Crescentini, Veluti, &c. In Naples, she was engaged at the theatre of San Carlo for a year, and was commonly known by the name of *La Divina Tedesca*. She afterwards married Vera, a respectable advocate in Rome, and now displays her splendid talents only among a select circle of friends.

Hasse, John Adolphus, chapel-master of Augustus, king of Poland and elector of Saxony, one of the most eminent musical composers of the 18th century, was born at Bergedorf, near Hamburg (1699). His extraordinary talents were soon observed by König, afterwards poet laureate to the king of Poland, who recommended him as tenor singer for the Hamburg opera, where the celebrated Kaiser was then composer. His masterpieces served as models for Hasse, who, in the course of four years, became distinguished as a musician and singer. He brought out his first opera, *Antigonus*, which was received with great applause, in 1723. To perfect himself in counterpoint, he determined to study in one of the celebrated Italian schools. In 1724, he went to Italy, and studied at Naples under Porpora. Scarlatti was so pleased with his talents and modesty, that he voluntarily offered him his instruction, and called him his son. An opera which he set to music for the theatre royal, was the foundation of his reputation, and procured him from the Italians the title of *il caro Sassone*. All the theatres of Italy contended for the honor of having him as leader of the orchestra. He went to Venice, in 1727, where his future wife, Faustina Bordoni, was at that time in the bloom of her beauty, and the object of universal admiration. Having once heard Hasse play upon the harpsichord, she immediately fell in love with him. He was here appointed chapel-master in the *conservatorio degli incurabili*. His reputation now procured him the situation of chapel-master at Dresden, with a yearly salary of $9000 for himself and wife; but as he was pressed to remain in Italy, he divided his time, until 1740, between the two countries. After repeated invitations, he went to England, in 1733, where he was received with great distinction, and his opera *Artaxerxes* met with the highest applause. He soon, however, returned to Dresden. He went, in 1763, to Vienna, where he composed his last opera, *Ruggiero*, and finally removed to Venice (1770), in which city he died, in 1783. Hasse is deservedly celebrated as the most natural, elegant and judicious composer of his time. He always regarded the voice as the chief object of attention, and, without being ignorant of harmony, he made the instrumental accompaniment as simple as possible. A pupil of Leo, Vinci, Pergolese and Porpora, he was contented with being simple and natural. His compositions are so numerous, that he himself said, there were many which he should not recognise. He set all the operas of Metastasio, except Themistocles, and most of them twice or oftener. His sacred compositions (masses, Te Deums, &c.), are still favorites at Dresden, where the greatest collection of them is to be found. His wife, Faustina Bordoni, born at Venice (1700), was one of the most celebrated and beautiful singers of the 18th century. She made her *début* on the stage of her native city, in her 16th year; and, wherever she was heard, she was called the *modern Siren*. Medals were struck in honor of her at Florence. The effect of her musical talents was increased by her beauty. In 1726, she received an appointment of 15,000 florins at Vienna. In Dresden, where she was married to Hasse, she sang for the first time in 1731, and was ever after the faithful companion of her husband.

Hassel, John George Henry, a distinguished German geographer and statistical writer, was born in 1770, at Wolfenbüttel, in Brunswick, and died Jan. 18, 1829, at Weimar. He was, from 1809 to 1813, director of the statistical bureau, &c., in Cassel, then the capital of the kingdom of Westphalia. After 1816, he lived a private life at Weimar. He wrote many works of much reputation; among others,

General Geographico-Statistical Lexicon (2 vols., Weimar, 1817 and 1818); Statistical Sketch of all the European States, and the most important of the other Parts of the World (3 numbers, Weimar, 1823 and 1824); Genealogical-Statistical-Historical Almanac (annually, from 1824 to 1829, Weimar)—a work which contains very extensive statistical information. It will be continued by doctor Dede, who edited the number for 1830. Hassel was coeditor of the Complete Manual of the latest Geography (Weimar, 1819 to 1829), and, in connexion with W. Müller, edited the second chief division of the Encyclopædia of Ersch and Gruber, from H to O, and contributed largely to Pierer's Encyclopædic Dictionary (Altenburg, 1824 to 1828), from A to K.

Hasselquist, Frederic, a Swedish naturalist, was one of the most eminent among the disciples of Linnæus. He was born in the province of Ostrogothia, in 1722. The death of his father, who was vicar of a parish, leaving him without the means of support, he exerted his faculties, and obtained friends, by whose assistance he was supplied with the means of instruction. In 1741, he went to the university of Upsal, where his talents and industry drew the attention of Linnæus. In 1747, he published a dissertation *De Viribus Plantarum*. Soon after, he formed the scheme of making researches, on the spot, into the natural history of Palestine; and the university having furnished him with pecuniary resources, he embarked for Smyrna in August, 1749, and arrived there about the end of November. After exploring the environs of that city, he went to Egypt, whence, in March, 1751, he took the route to Palestine, by Damietta and Jaffa. He staid some time at Jerusalem, and afterwards visited other parts of the country. Returning to Smyrna, he brought with him a most noble collection of plants, minerals, fishes, reptiles, insects, and other natural curiosities. He died there, Feb. 9, 1752. The Swedish queen, Louisa Ulrica, purchased the whole of Hasselquist's acquisitions, which were deposited in the castle of Drottningholm. Linnæus, from the papers and specimens of natural history collected by his pupil, prepared for the press the *Iter Palæstinum*, or Travels in Palestine, with Remarks on its Natural History (Stockholm, 1757, 8vo.), which has been translated into English and other European languages.

Hastings; an ancient borough and market-town of England, on the eastern extremity of Sussex, famous for being the place near which William the Conqueror landed in England, and for the battle of Hastings, fought in the neighborhood. It is now in great repute for sea-bathing. It is one of the Cinque Ports. Its situation is beautiful; and the environs also abound with picturesque scenery and delightful walks and rides. A walk, called the *marine parade*, has been formed on the west of the town. The public buildings are, two very ancient churches; the town hall, built in 1823, with the market-place under it; the custom-house, and two excellent free schools. The remains of an ancient castle are still to be seen. Two miles from the town is the stone on which William is said to have dined when he landed here; it is called the *conqueror's stone*. Hastings sends two members to parliament. Population, 8000; 36 miles S. E. Tunbridge.

Hastings, Warren, was born in 1732 or 1733, at the village of Churchill, in Oxfordshire, where his father was clergyman of the parish. He was educated at Westminster school, and, in 1750, went out to Bengal as a writer in the East India company's service. After having filled some of the principal offices under the British government, and made himself acquainted with Oriental literature and public affairs, he returned to England in 1765, with a moderate fortune. In 1768, he received the appointment of second in council at Madras; and, in 1771, he was removed to Bengal, to the presidency of which he was raised the following year. In 1773, he was appointed governor-general of India. He held this situation for 13 years, during which he had to encounter many serious difficulties, increased and strengthened the power of the company at the expense of the native princes, and, undoubtedly, was guilty of much oppression and injustice to attain this end. He raised the revenue of the company from 3,000,000 to £5,000,000 sterling. On the removal of lord North from office, in 1782, his opponents exerted themselves to displace those on whom he had conferred appointments. Upon the motion of Dundas, Hastings was recalled in 1785, and immediately loaded with accusations. The most prominent orators of the opposition, Fox, Burke, Sheridan and others, were arrayed against him. He was accused of having governed, in the East Indies, arbitrarily and tyrannically; of having extorted immense sums of money; of having accomplished the ruin of many princes; in short, of having exercised oppression of every description. Feb. 17, 1786, Burke laid the

charges against him before the lower house, which were carried, in May, 1787, into the upper; and the trial commenced Feb. 13, 1788. The solemnity of the proceedings in a case of this nature, and the consequent slowness with which they were carried on, together with numerous interruptions, retarded the final decision. Many of the points of accusation required an accurate examination of the state of affairs in the East Indies, and witnesses had to be summoned thence to London. The speeches of the accusers often occupied several days; and, April 15, 1794, the upper house held its one hundred and twentieth session, for the purpose of coming to a final decision. The public opinion, which had, in the beginning, preponderated in favor of the accusers, now declared itself unanimously for the defendant; and the return of lord Cornwallis from India was decisive in his favor. April 13, 1795, Hastings was acquitted, and sentenced to pay only the costs of prosecution (£71,080 sterling); the crown itself had, besides this, incurred an expense of £100,000 sterling. The East India company indemnified him by a pension of £4000 for 28 years, paid him £42,000 of the amount in advance, and made him a loan of £50,000. The salary or pension was afterwards settled on him for life. He was made a member of the privy council; but he interested himself little in public affairs; and died Aug. 22, 1818. He published some pieces relating to India, and speeches and papers in defence of his conduct.

Hastings, Francis, marquis of Hastings, earl of Rawdon, &c., was the son of John, baron Rawdon and earl of Moira, of the kingdom of Ireland, and was born Dec. 7, 1754. He was educated at Oxford; and, after a short tour on the continent, he entered the army in 1771, as an ensign in the 15th regiment of foot. Having obtained a lieutenancy, he embarked for America, in 1773, and was present at the battle of Bunker's hill. After having served in other engagements, he was nominated, in 1778, adjutant-general of the British army in America, with the rank of lieutenant-colonel. He next commanded a distinct corps in South Carolina, where he successfully opposed general Gates; and, at the battle of Camden, on the 16th of August, 1780, lord Rawdon commanded one wing of the army under lord Cornwallis. He subsequently defeated general Greene; but the surrender of lord Cornwallis's army put a period to his exertions. A severe and dangerous illness, however, obliged him to quit the army before the conclusion of hostilities. He embarked for England, and the vessel which carried him was captured and taken to Brest; but he was immediately released, and, returning home, was made aid-de-camp to the king, and created an English peer, by the title of baron Rawdon. He distinguished himself both in the English and Irish parliaments, particularly in the former, in the debates relative to the bill for the relief of persons imprisoned for small debts. In June, 1793, he succeeded his father as earl of Moira, and the same year he was advanced to the rank of a major-general. In the summer of 1794, he was sent, with a reinforcement of 10,000 men, to join the duke of York, opposed to the French in Holland. In 1797, an attempt was made to place him at the head of the ministry; but the scheme did not succeed. When the whigs, with whom he had acted, came into power, in 1806, he was appointed master-general of the ordnance, which post he resigned on the fall of his party. He was engaged, subsequently, in political negotiations, which proved abortive; and, in 1812, as he could not act with the administration then in power, he obtained the appointment of governor-general of British India. In 1816, he was created viscount Loudoun, earl of Rawdon, and marquis of Hastings; and he twice received the thanks of the East India company, and of the houses of parliament, for his able services in the Indies. He returned to England in 1822, when he was succeeded by lord Amherst. In March, 1824, he was nominated governor of Malta, where he resided till near the time of his death, which occurred Nov. 28, 1825, on board his majesty's ship Revenge, in Baia bay, near Naples. The later years of the life of this nobleman were clouded by the consequences of his profuse liberality and generous hospitality, particularly to the French emigrant noblesse.

Hatching, natural and artificial. (See *Incubation*.)

Hatteras, Cape. (See *Cape*.)

Hatti-sheriff; an order which comes immediately from the grand signior, who subscribes it usually with these words:—"Let my order be executed according to its form and import." These words are usually edged with gold, or otherwise ornamented. An order given in this way is irrevocable.

Hatton, sir Christopher, an eminent statesman and lawyer in the reign of queen Elizabeth, was entered a gentleman commoner of St. Mary Hall, Oxford, but

removed, without taking a degree, to the Inner Temple, not to study law, but to enlarge his knowledge of the world. He came, on one occasion, to court at a masque, when queen Elizabeth was so much struck with his graceful person and dancing, that an introduction to her favor was the immediate result. He was made one of the queen's pensioners, gentleman of the privy-chamber, captain of the guard, vice-chamberlain, privy-counsellor, and, in 1587, lord chancellor. His inexperience created much prejudice against him, but his sound natural capacity supplied his deficiency of information, and his decisions were seldom found defective in judgment or equity. He died in 1591.

Hatzfeld, Francis Louis, prince of, was born at Vienna, 1756, and was, in 1806, governor of Berlin, when the French entered it. The French having discovered that prince Hatzfeld continued to give the Prussian government information, &c., Napoleon ordered a court-martial to try him as a spy. The wife of the prince, being informed of the danger, hastened to Napoleon, and threw herself at his feet, assuring him that her husband was incapable of doing any thing dishonorable. Napoleon showed her the letter, which she acknowledged to be written by the prince, and fainted. When she came to herself, Napoleon told her that she had the only document against her husband in her hand, and asked her why she did not burn it. She did so, and Napoleon pardoned the prince. The Memorial of Las Cases contains the touching letter which Napoleon wrote on this occasion to the empress. Hatzfeld was afterwards employed on diplomatic missions. He was Prussian minister at the Hague and Vienna, and died, in 1827, at the latter place.

Haubold, Christian Gottlieb, doctor, ordinary professor of German law at Leipsic, and one of the most celebrated jurists of the time, was born at Dresden, November 4, 1766, and died, in consequence of over exertion, March 14, 1824. He began the study of law in 1781. In 1784, he defended a thesis, *De Differentiis inter Testamentum nullum et inofficiosum*. In 1786, he delivered his first lecture on the history of Roman law. In 1788, he was made doctor of law; 1789, appointed professor extraordinary of legal antiquities; and, finally, in 1821, second ordinary professor in the university of Leipsic. Profound knowledge of classical antiquity and of the languages, prepared him for the study of the Roman law, which he pursued in all its departments, and to which he directed all the powers of his mind, although no province of jurisprudence was strange to him. He secured a permanent reputation, especially by his celebrated treatise *Institutionum Juris Rom. priv. historico-dogmaticorum denuo recognitarum Epitome*, etc. (1821); his *Lineamenta* (published from his manuscripts, after his death, by Otto, Leipsic, 1825); his *Doctrinæ Pandectarum Lineamenta cum Locis Classicis*, etc. (1820); his *Institutiones Juris Romani Literariæ* (1809); his new edition of the *Rogerius Beneventanus* (1821), and of the Legal Antiquities of Heineccius (1822); his *Manuale Basilicorum* (1819, 4to.), and his Manual of Saxon Law (1820). In his numerous dissertations, he proves himself profoundly versed in the science of jurisprudence, for which he prepared himself by his laborious researches, his iron industry, his scrupulous accuracy, and the collection, at a great sacrifice, of a valuable library. Haubold's *Opuscula Academica* was published by professor Wenck (Leipsic, 1825). In a continual intercourse with Hugo and Savigny, and other eminent jurists of our time, he has contributed much to the improved manner of studying the science of law from its sources. As an academical instructer, his celebrity was so great, that his lecture room was hardly capable of containing the crowds of young men from every part of Germany, and even from foreign countries, who came to receive the benefit of his instruction. His library, consisting of nearly 10,000 volumes on Greek and Roman law, was purchased by the emperor Alexander for the university of Abo.

Haugwitz, Christian Henry Charles, count of; first minister of state and of the cabinet to the king of Prussia, born, in 1758, upon his father's estates in Silesia. After studying at Göttingen, he married, and went to Italy, where he remained several years. On his return, the Silesian estates elected him director-general of the province. Meanwhile, Leopold II, with whom he had become acquainted in Tuscany, had ascended the throne of Germany. Leopold wished to carry certain plans into execution, in conjunction with Prussia, but his propositions met with an unfavorable reception at Berlin, where Hertzberg (q. v.) was then at the head of affairs. The emperor attributed this ill success to the Prussian ambassador, and requested Frederic William II to send count Haugwitz to his court. The king complied with this request the more readily, as the numerous enemies of Hertzberg endeavor-

ed to place Haugwitz in the most favorable light. He pleaded his inexperience in diplomatic affairs, as an excuse for not accepting the mission; but, seeing that, if he persisted in his refusal, he should only offend two powerful princes, he finally accepted the post, but declined receiving any pay. When Hertzberg retired from public affairs, Frederic William, who reposed great confidence in Haugwitz, gave him the port-folio of foreign affairs and the presidency of the cabinet. In this situation, Haugwitz, in spite of much difficulty, succeeded in making Prussia the centre of all political movements. Frederic William rewarded the services of his minister with the order of the black eagle, and the grant of estates in South Prussia. When Frederic William III ascended the throne, Haugwitz retained his situation. At this time, the tendency of Haugwitz's policy was to bring France and Prussia into a closer connexion, which procured some important acquisitions to Prussia. But, when the French troops occupied Hanover, in 1803, this step appeared dangerous to the neutrality of northern Germany, which Prussia had sought to maintain, and the views of the king were changed. Under the pretence of sickness, Haugwitz now retired to his estates. Hardenberg, who succeeded him, adopted a different system, so that Prussia remained neutral. In 1805, Haugwitz left his retreat, to negotiate with Napoleon at Vienna, and concluded, after the battle of Austerlitz, the convention by which Hanover was ceded to Prussia, and the neutrality of northern Germany was acknowledged. Haugwitz now recovered his former favor, and received anew the port-folio of foreign affairs. But the occupation of Hanover involved Prussia with England, while, at the same time, her relations with France became more embarrassing than ever. Haugwitz went to Paris to reconcile the contending interests, but returned without accomplishing his object. He was a witness of the battle of Jena, after which he again retired to his estates in Silesia, and avoided the hostile forces by taking refuge in Vienna. In October, 1811, he was appointed curator of the university of Breslau.

Haussez, baron le Mercier d', French minister of marine in 1830, was born at Neufchâtel (Normandy), in 1778. In 1799, he was accused of entering into the contra-revolutionary intrigues, and, in 1804, was implicated in the conspiracy of George Cadoudal. (q. v.) In 1814, he was appointed baron of the empire, but, in May of the same year, he was among the first to join the Bourbons. After the restoration, he was a member of the chamber of deputies, where he sat for several years in the *coté droit*, without, however, exhibiting any violence in his observations or conduct, which were rather characterized by moderation and prudence. In Aug. 1829, he accepted the port-folio of the marine under Polignac, which admiral de Rigny had declined. On the breaking out of the revolution of July, 1830, he escaped to England. (For subsequent events, see *France*, and *Polignac*.)

Hautboy; a portable wind instrument of the reed kind, consisting of a tube gradually widening from the top towards the lower end, and furnished with keys and circular holes for modulating its sounds. The general compass of this instrument extends from the C cliff note to D in alt, but solo performers frequently carry it two or three notes higher. Its scale contains all the semitones, excepting the sharp of its lowest note. The tone of the hautboy, in skilful hands, is grateful and soothing, and particularly adapted to the expression of soft and plaintive passages.

Hautelisse, and Basselisse; French words applied to tapestry. *Hautelisse carpets* are those which are worked with a perpendicular warp, and *Basselisse carpets* with a horizontal warp. The latter are preferred in modern times, because they are easier to be made, and yet possess equal beauty. In the Netherlands, Brussels and Doornik furnish the best works of this kind; in France, the manufactory of Gobelins.

Hauy, René Just, abbé, a distinguished mineralogist, the son of a poor weaver, born 1743, at St. Just, in the department of the Oise, was at first chorister, then studied theology, and, during 21 years, occupied the place of a professor, at first in the college of Navarra, and afterwards in that of the cardinal Le Moine. He studied botany as a recreation, but his taste for mineralogy was awakened by the lectures of Daubenton. An accident led him to the formation of his system of crystalography. As he was examining the collection of minerals belonging to M. France de Croisset, he dropped a beautiful specimen of calcareous spar crystallized in prisms, which was broken by the fall. Haüy observed, with astonishment, that the fragments had the smooth, regular form of the rhomboid crystals of Iceland spar. "I have found it all!" he exclaimed; for at this moment he conceived the fundamental idea of his new system. He took the fragments home, and discovered the geometrical law of crystallization. He then studied

geometry, and invented a method of measuring and describing the forms of crystals. He now, for the first time, ventured to communicate his grand discovery to his instructer Daubenton, who, with Laplace, could with difficulty persuade the modest Haüy to communicate his discovery to the academy, which, in 1783, received him as adjunct in the class of botany. He now devoted himself wholly to his studies; so that he remained a stranger to the revolution, with all its horrors, until, having refused to take the oath of obedience to the constitution required of the priests, he was deprived of his place, and was arrested, in the midst of his calculations, as a recusant priest. He calmly continued his studies in prison. In the mean time, one of his pupils, Geoffroi de St. Hilaire, now member of the academy, exerted himself in favor of Haüy; and the remark of a tradesman, an officer of police in the quarter where Haüy lived, that "it was better to spare a recusant priest than put to death a quiet man of letters," saved his life. Geoffroi hastened to him with an order for his release. It was very late, and Haüy, occupied only with his researches, wished to remain in prison until the next day. Haüy continued his studies, and even ventured to write in favor of Lavoisier, who was then in prison, and of Borda and Delambre, who had been removed from their places. After the death of Daubenton, the academy wished to name the modest Haüy his successor; but he recommended Dolomieu, who was imprisoned in Sicily, in violation of the laws of nations; the latter, however, having died soon after his liberation, Haüy received his place from the first consul. The convention had already appointed him keeper of the mineralogical collections of the *école des mines*, and the directory had created him professor in the Normal school, and secretary of the commissioners appointed to regulate weights and measures, the result of whose labors was the new decimal system; he was also made a member of the national institute. Bonaparte appointed him professor of mineralogy in the museum of natural history, and afterwards professor in the academy of Paris. By his influence, the study of mineralogy received a new impulse; the collections were increased fourfold, and excellently arranged. He was a most obliging and instructive superintendent of this collection. In 1803, at the command of Napoleon, he wrote his *Traité de Physique*, in six months. Being directed to ask some favor, he asked for a place for the husband of his niece. Napoleon granted his request, besides conferring on the modest *savant* a pension of 6000 francs. The esteem which the emperor had for this distinguished man was the more honorable both to him and to Haüy, as the latter had never stooped to flattery, and had even opposed Bonaparte's elevation to the imperial dignity, by signing *nay*, when the question was proposed for the ratification of the nation. When the emperor, after his return from Elba, visited the museum, he said to Haüy, "I read your Physics again in Elba, with the greatest interest;" he then decorated Haüy with the badges of the legion of honor. Haüy was in the habit of amusing himself by conversing with the pupils of the Normal school, who often visited at his house, and whom he always received and entertained with kindness. He was gentle, indulgent and benevolent. Nothing could ruffle his quiet temper but objections to his system. Notwithstanding his feebleness, he attained the age of nearly 80 years, and died June 3, 1822. Besides his valuable treatises in different periodicals, and his articles on natural history in the *Encyclopédie Méthodique*, his *Essai sur la Théorie, et la Structure des Cristaux* (1784), his *Traité de Minéralogie* (1801, 4 vols.), his *Traité élémentaire de Physique*, which has already been mentioned (1803, 2 vols.), his *Traité des Caractères physiques des Pierres precieuses* (1817), his *Traité de Cristallographie* (1822, 2 vols., with engravings), his *Traité de Minéralogie* (2d edit., 1822, 4 vols., with an atlas), are the most distinguished. The charge of editing the manuscripts which he left, devolved on his pupil Lafosse. The duke of Buckingham bought his precious collection of minerals, for which Haüy had refused an offer of 600,000 francs. Cuvier delivered a eulogy on him before the academy in 1823, and Brogniart, who had been his assistant, became his successor, in the museum of natural history.

Hauy, Valentin, a younger brother of the preceding, born 1746, founded the institution for the blind at Paris. Previous to this, he was an instructer in the art of calligraphy at Paris. When, in 1783, the blind pianist Mlle. Paradis, of Vienna, gave a concert at Paris, the manner in which she was able to read any thing, written or printed, by means of pins placed on it, and the manner in which she had become acquainted with geography, by the aid of maps in relief, constructed by Weissenburg, a blind man of Manheim, excited Haüy's attention. He took a poor blind boy, by the name of Lesueur, who displayed an active mind, into his

house, instructed him for some time, and then presented him to the philanthropic society. This society supplied him with the funds necessary to establish an institution, according to his plan, for 12 blind boys. Soon after, this new institution for the blind was united with that for the deaf and dumb, by the recommendation of the duke de la Rochefoucault, and removed to a building which had been a convent of the Celestines. It soon appeared, that the two kinds of unfortunates disagreed entirely, that their dislike for each other increased every day; and at length (1794) it became absolutely necessary to divide the institution. But after this separation, the establishment for the blind did not flourish so well as that for the deaf and dumb. Haüy himself was partly to blame for this. With an excellent heart, he was not sufficiently attentive to the proper management of the affairs of the establishment; and, instead of answering the design of the institution, which was to supply, as far as possible, the lost sense of the blind, he made it merely a comfortable residence for them. It was therefore abandoned, under the consular government, and the pupils were placed in the hospital of the Quinze-Vingts, with which establishment they remained connected for 14 years, until, at length, in February, 1815, Guillié, the present director of the asylum for the blind, received orders to establish an institution in another place, and to organize it in an improved manner. Haüy had involved himself in many difficulties by his hasty union with an uneducated woman, and was not successful in his attempt, after the abolition of the public institution, to establish a boarding-school for the blind (the *Musée des Aveugles*). Notwithstanding the pension of 2000 francs, which he continued to receive from the government, his circumstances became more and more embarrassed; he therefore accepted an invitation to superintend, at St. Petersburg, under the patronage of the empress-mother, an institution for the instruction of the blind, in which his scholar Fournier was to be his assistant. But this undertaking did not succeed, and he returned to Paris in 1806, where he lived, with his brother the mineralogist, until his death, in April, 1822. In the revolution, of which he was a warm admirer, he took no share; but, during the directorial government, he was, together with La Réveillère-Lepaux, one of the heads of the (so called) *theophilanthropists*. His *Essai sur l'Education des Aveugles* (Paris, 1786, 4to.) was printed with letters in relief, so that the blind could trace the lines with their fingers, and thus feel the letters and words.

Haüyne; a mineral so named by Brunn Neergaard, in honor of the celebrated abbé Haüy. It was first discovered by the abbé Gismondi, who named it *latialite*, from Latium, the ancient name of the country where it occurs. Nose, who observed it in the trap-rocks of Andernach, considered it as allied to sapphire, and described under the name of *saphirin*; but more recent examinations of its properties prove it to be identical with the species called *lazulite* (q. v.) by Haüy.

Havana, or Havannah (Spanish, *La Habana*, that is, *the harbor*); "the ever faithful city of St. Christopher of the Havana," capital of the island of Cuba, and of the province and government of the same name; situated on the northern coast of the island, at the mouth of the river Lagiza, with the sea in its front. Lat. N. 23° 9′ 24″; lon. W. 82° 23′. Population, exclusive of the garrison and strangers, is 94,023—46,621 whites, 9225 mulattoes (of whom 1010 are slaves), and 38,177 negroes (of whom 22,830 are slaves). The total population is calculated at 112,023. The Havannah is the residence of a captain-general, and the see of a bishop. It is the most important commercial port in Spanish America, and is considered as the key of the West Indies. The harbor is not only the best in the island, but is esteemed by many as the best in the world, on account of its strength, and because it is capable of containing commodiously 1000 ships, without either cable or anchor, there being generally six fathoms of water in the bay. The entrance into the harbor is by a narrow channel, about 1000 feet wide at its entrance, so difficult of access that only one vessel can enter at a time. It is strongly fortified with platforms, works, and artillery, for half a mile, which is the length of the passage; and the mouth of this channel is secured by two strong castles, one on each side. The place is also protected by other strong fortifications. The city stands on a plain on the west side of the harbor The streets are in general narrow, crooked, unpaved and dirty. The want of common sewers, and of cleanliness, and the vicinity of marshes, contribute to the insalubrity of the Havannah, which is much exposed to the ravages of the yellow fever, particularly in the months of August and September. The city contains 11 churches, which are magnificently ornamented, especially the cathedral, with gold and silver

lamps, images, &c.; 2 hospitals, a lazaretto, 7 monasteries and 4 nunneries, a university, colleges, botanical garden, nautical school, and 78 schools for both sexes; a dock-yard, and many other public buildings; a theatre, a place for bull-fights, and 2 agreeable promenades; also a lunatic asylum, and a large charity school. An aqueduct supplies the shipping with water, and turns the sawmills in the dock-yard. The houses are almost all of only one story, and of a Gothic structure. The principal ones are built of stone, and covered with terraces, having large apartments, yet little ornamented. The great square is one of the chief ornaments of the city. The population of Havannah was much increased by Napoleon's invasion of Spain, and by the revolutions in Spanish America. The morals of the place are loose. Gaming, cock-fighting, &c., are carried on to a great extent. The customs are Spanish; foreigners who go there intermarry very little with the natives, as they seldom intend to make Havannah their permanent residence. The lower clergy are ignorant, and the ceremonies of religion are surrounded with a puerile show, which intelligent Catholics do not acknowledge as a constituent part of their religion. Manufactures are still in their infancy; some coarse cloths only are made. The commerce is very extensive. It has rapidly increased of late, and the rich productions of the island, as well as the favorable situation and excellent harbor of the city, have made Havannah one of the most important commercial places in the world. (For a particular account of its commerce, see the article *Cuba*.)—The city was founded in 1511, by Diego Velasquez. It was taken in 1536, by a French pirate; afterwards by the English, French, and buccaneers; it was again taken by the English in 1762, but was restored to Spain at the peace of 1763.—The Havannah has the honor of containing the bones of Columbus, the illustrious discoverer of America. In consequence of an order contained in the will of Columbus, his body was removed from the Carthusian convent of Seville, and deposited, along with the chains with which he had been loaded at Cuba, on the right of the high altar of the cathedral of St. Domingo. When that island was ceded to the French, his descendants directed that the brass coffin, in which the whole was contained, should be removed to this city, which was done on the 19th of January, 1796. His bones are now preserved in a silver urn on the left of the altar of the cathedral. The department of Havannah contains the city and 42 places, with a population of 247,828, of whom 109,535 are slaves. (See the official work *Cuadro Estadistico de la Siempre Fiel Isla de Cuba, correspondiente al Año de* 1827 (Havana, 1829); also A. Abbot's Letters on Cuba, (Boston, 1829), and Alexander von Humboldt's *Essai politique sur le Royaume de la Nouvelle Espagne* (Paris, 1808—1809, 4to.)

Havercamp, one of the most celebrated philologists of the 18th century, born at Utrecht in 1683, made such rapid advances in his studies, that he was numbered among the learned at the time of his leaving school. Not long afterwards, he was invited to accept the professorship of the Greek language at Leyden, to which was also annexed the professorship of history and eloquence. He published a number of valuable treatises, and died in 1742. From travelling in Italy, he derived a taste for the study of medals and coins, the fruits of which he exhibited in the *Thesaurus Morellianus*, in the treatise on the coins of Alexander the Great, in his universal history according to coins, and in several catalogues of collections of coins. We pass over some other writings of his, to mention his editions of the *Apologeticus* of Tertullian (1718), of Lucretius (1725, 2 vols., 4to.), of the history of Josephus (1726, 2 vols., fol.), of Eutropius (1729), of Orosius (1738, 4to.), of Sallust (1742, 2 vols., 4to.), and of Censorinus (1743 or 1767), which are still highly esteemed for the correctness of their text and the treatises connected with them. No less esteemed is his *Sylloge Scriptorum, qui de Linguæ Græcæ vera et recta Pronunciatione Commentaria reliquerunt* (Leyden, 1736—40, 2 vols.).

Haverhill; a post-town, and the half shire town for Grafton county, New Hampshire, on Connecticut river, 70 miles from Concord, and 27 from Dartmouth college, in lat. 44° 3′ N. It is divided into two parishes, the north and the south, in each of which is a meeting-house. The principal village is in the south-west part of the township, on the river, and is called *Haverhill Corner*. Its situation is very beautiful, and it has a court-house, an academy, a jail, a bank and a printing-office. Another pleasant village is forming in the north-west part of the town. The population of Haverhill in 1820 was 1600. (For the population in 1830, see *U. States*.)

Haverhill; a post-town in Essex county, Massachusetts, on the north side of Merrimack river, 18 miles from its mouth, 15 from Newburyport, 19 from Salem, and 30 north of Boston. It is con-

nected with Bradford by a bridge with three arches of 180 feet each, supported by three stone piers 40 feet square. The tide rises here four or five feet, but the water is not salt. The river is navigable to this place for vessels of 100 tons burthen, but only flat boats ascend farther. The principal village of Haverhill is situated on the side of a hill sloping towards the river. It is a very pleasant and flourishing town, and has considerable trade. Here is a bank, an academy, a printing-office which issues a weekly newspaper, and four houses for public worship. Population in 1830, 3912.

Havre de Grâce, Le, or Le Havre; an important seaport of France, in the department of the Lower-Seine; 45 miles west of Rouen, 112 north-west of Paris; lon. 0° 16′ 46″ E.; lat. 49° 29′ 14″ N.; population 21,049. It is situated in a flat, marshy soil, intersected with creeks and ditches, on the British channel, at the mouth of the Seine. It is strongly fortified, being surrounded by lofty walls and ditches, and defended by a citadel. It is the only eligible harbor along the whole coast from Cherbourg, and is capable of containing 600 or 700 vessels, and has a long pier, and sufficient depth of water to float ships of war of 60 guns. The town has peculiar advantages from its situation at the mouth of the Seine, and its being the seaport of Paris, and is one of the most important mercantile ports of France. Steamboats start regularly for Paris, Honfleur, Rouen and England, and regular lines of packets run between this port and Cadiz, Hamburg, Portugal, Mexico, Brazil and the United States. It consists of long and narrow streets; the fronts of the houses are lofty, but have a heavy and mean appearance, being sometimes of stone, but oftener of wood. It contains two churches, three convents, an hospital, town-house, an arsenal, magazines, and store-houses necessary for the construction and arming of ships. Louis XII laid here the foundation of a town in 1509, where only a few fishing huts had previously existed. Francis I erected some fortifications, and it was some time called *Franciscopolis;* but a chapel, dedicated to Our Lady of Grace, gave it the name of *Le Havre de Grace;* it is now only called *Le Havre.* It has always been largely engaged in the Newfoundland fishery. Havre and Liverpool are the principal points of communication between the old world and the new. Several packets run monthly from New York to Havre, which, with the packets from the same place to Liverpool, are the finest in the world.

Havre de Grace; a post-town and port of entry in Harford county, Maryland, on the west side of the Susquehannah river, at its confluence with Chesapeake bay; 36 miles north-east of Baltimore, and 73 from Washington; lat. 39° 33′ N.; lon. 76° 12′ W. It contains about 50 houses, and is a place of some trade. It was burnt by the English, May 3, 1813.

Hawaii. (See *Owhyhee.*)

Hawk (*falco*). In the article *Eagle* (q. v.), part of this numerous and perplexing genus has already been spoken of. It now remains to speak of such of the remainder as are known under the common name of *hawk*, or *falcon.* These birds derive additional interest from the great use made of them in the amusement of hawking, which seems to have been almost universal, at certain stages in the progress of nations. Nothing is more arbitrary, or involved in greater uncertainty, than the classification of hawks. A man's life seems scarcely sufficient to acquire a perfect knowledge of all the species and endless varieties which some naturalists have given of this bird. This is owing to the change in the color of their plumage during the first three years of their life. We shall, therefore, give a list of all our native species, derived from Bonaparte's Synopsis, also including the arrangement of such of the falcon tribe as have been noticed under *Eagle*:—

Genus FALCO is subdivided into the following subgenera:—*Aquila, Haliaëtus, Pandion, Falco, Astur, Ictinia, Elanus, Buteo, Circus.*

I. *Bill elongated, straight at base.*

Aquila. *F. fulvus, L.* Ring-tailed eagle. Common to both continents.

Haliaëtus. *F. leucocephalus, L.* Bald eagle. Common to both continents.

Pandion. *F. haliaëtus, L.* Fish-hawk. Inhabits almost every part of the globe.

II. *Bill curved from the base.*

1. *Bill with a sharp tooth each side.*

(a) *Wings reaching to the tip of the tail, tarsi reticulated.*

Falco. *F. peregrinus, Gm.* Great-footed hawk. Both continents.

(b) *Wings not reaching to tip of the tail, tarsi scutellated.*

F. sparverius, L. American sparrow-hawk. Peculiar to N. America.

F. columbarius, L. Pigeon-hawk.

2. *Bill with an obtuse lobe each side.*

(a) *Tarsi rather short and robust.*

ASTUR. *F. palumbarius, L.* Ash-colored hawk. Common to both continents.
F. Pennsylvanicus, Wils. Broad-winged hawk. Peculiar to N. America; very rare.

(b) *Tarsi long, slender, smooth.*

F. velox, Wils. Slate-colored hawk. Sharp-shinned H. Peculiar to N. America.
F. cooperii, Bon. Cooper's hawk. Peculiar to N. America.
ICTINIA. *F. plumbeus, Gm.* Mississippi kite. Peculiar to N. and S. America.
ELANUS. *F. dispar., Temm.* White-tailed hawk. N. and S. America.
F. furcatus, L. Swallow-tailed hawk. N. and S. America.

(a) *Tarsi feathered to the toes.*

BUTEO. *F. lagopus.* Rough-legged falcon. Common to both continents.
F. Sancti-Johannis, Gm. Black hawk. Peculiar to N. America.

(β) *Tarsi partly feathered.*

F. borealis, Gm. Red-tailed hawk, and American buzzard. Peculiar to N. America.

CIRCUS. *F. hyemalis, Gm.* Winter falcon. Red-shouldered hawk. Peculiar to N. America.
F. cyaneus, L. Marsh-hawk. Inhabits both continents.

HAWKE, Edward, lord; a celebrated naval commander of the last century. His father, a member of the English bar, in compliance with the strong predilection which his son evinced, at an early age, for a sea-faring life, procured him a midshipman's birth aboard a king's ship. After going through the usual gradations, he was appointed, in 1734, to the command of the Wolf, and served with great credit. Being promoted to the command of a squadron, in 1747, he fell in with the French fleet, which he totally defeated, taking six large ships of the line. For this service, he was presented with the vacant red riband, and promoted to be vice-admiral of the blue. In 1759, being then vice-admiral of the white, he was sent in pursuit of the Brest fleet, which he came up with off Belleisle, and gave the enemy a second defeat, not inferior to the first. These successes were rewarded with a pension of £2000, voted him by parliament; and, in 1765, he reached at length the head of his profession, being appointed vice-admiral of Great Britain, and first lord of the admiralty. In 1776, he was advanced to a seat in the house of lords, but survived this accession of dignity little more than four years, dying at Shepperton, in the county of Middlesex, in the autumn of 1781.

HAWKESWORTH, John, LL. D.; the son of a watchmaker, of Bromley, in Kent, where he was born in 1715. His father apprenticed him, at an early age, to his own trade. His dislike to the business, however, soon proved insuperable, and he became clerk to a writing stationer. Some essays in the Gentleman's Magazine introduced him to the acquaintance of Cave, the proprietor of that work, who, on the secession of Johnson, placed him in his situation, as compiler of the debates in both houses of parliament. In 1752, there appeared, from his pen, the first of a series of essays, which he continued through that and the two following years, with the assistance of his friend Joseph Warton, and other occasional contributors. These were collected and published (in 4 vols., 12mo.), under the title of the Adventurer. He then undertook a commission from government to arrange and digest the discovery voyages of Byron, Wallis, Carteret and Cook, in the Pacific. This task he completed, not altogether to the satisfaction of the public, in 1773, when the work appeared in three volumes, 4to. He died at Bromley, November 16, 1773.

HAWKINS, sir John; a renowned English sea commander of the 16th century. He was a native of Plymouth, and was the son of captain William Hawkins, a naval officer. He made several voyages in his youth, and thus acquired much maritime experience. In 1562, he projected an expedition, the object of which was to procure Negroes on the coast of Africa, and convey them for sale to the West Indies. In this plan he was successful; and he is branded, on the page of history, as the first Englishman, after the discovery of America, who made a merchandise of the human species. He made two subsequent voyages for the purpose, one of which proved very profitable; and he was rewarded for the supposed benefit conferred on his country, by the addition of a crest to his coat of arms, consisting of "a demi-Moor, proper, bound with a cord." The third expedition was unfortunate; for, having endeavored to carry on a contraband trade with the Spaniards, his small fleet was attacked by an overpowering force, and only one of his ships and a bark escaped being taken or destroyed; and, after undergoing great hardships, he reached home in January, 1568. He afterwards filled the office of treasurer of the navy; and he appears to have been much

consulted on maritime affairs. In 1588, he was appointed vice-admiral of the squadron sent out against the Spanish armada, and he received the honor of knighthood for his conduct on that occasion. His last service was in 1595, when he was sent, with sir Francis Drake, against the West Indian settlements of the Spaniards. The two commanders differed in opinion; and their consequent want of success occasioned so much chagrin to sir John Hawkins, that it is supposed to have hastened his death, which took place at sea, November 21, 1595, in his 75th year.

Hawkins, sir John; a lawyer and miscellaneous writer of the last century. He was born in London, in 1719. He practised as a solicitor, with reputation, for some years, writing also for the periodical press. In 1749, he was chosen a member of a club established by doctor Johnson, with whom he formed an acquaintance which lasted during their joint lives. He contributed some notes for Johnson and Steevens' edition of Shakspeare, and for some years he was engaged in preparing for the press a General History of the Science and Practice of Music, which he published in 1776 (in 5 vols. 4to.). Sir John Hawkins, having accepted the office of executor to doctor Johnson, was employed by the booksellers to draw up a memoir of that celebrated writer, to accompany a posthumous edition of his works. Neither as editor or biographer does he appear to advantage. Some pieces, not written by Johnson, are printed among his works; and the Life, which forms a bulky octavo, seems to have served the writer as a receptacle for the contents of his common-place book. His death took place May 21, 1789.

Hawkwood, sir John; a military adventurer of the 14th century, who, by his valor and conduct as a commander, raised himself from an humble origin to rank and reputation. Having entered, in the capacity of a private soldier, the English army, then preparing for the invasion of France, with Edward III and the Black Prince at its head, his courage and military abilities soon procured him the honor of knighthood. In 1360, on the conclusion of the peace of Bretigny, sir John joined himself with some other soldiers of fortune, whose revenues were unequal to the support of their rank in times of tranquillity. These associates, under the name of *Les tard Venus*, continued, notwithstanding the cessation of national hostilities, to harass and plunder their old enemies, the French, and even extended their depredations to Italy. After leading a marauding life of this description for nearly four years, he once more took regular military service, under the republic of Pisa, and displayed his accustomed bravery. Having carried arms under this banner for three-and-twenty years, he, in 1387, exchanged the Pisan service for that of the Florentines. He died at Florence, March 6, 1393, at a great age, and was honored with a public funeral in the church of Santa Reparata.

Hawley, Joseph, a distinguished American patriot, was born, in 1724, at Northampton, Massachusetts, where he became a lawyer, after graduating at Yale college, in 1742. He soon acquired great eminence in his profession, and an extensive practice. He was distinguished for his knowledge of political history and the principles of free government—a circumstance that rendered him one of the ablest advocates of American liberty, in the defence of which he took an early and strenuous part. His influence in the quarter of the country in which he lived became very great, and was owing as much to his high-minded, inflexible integrity, as to his talents. The sentiments of enmity and dread which the friends of the British administration entertained, in consequence, towards him, caused them to seek every method of injuring him; and, by their exertions, he was at length excluded from the bar; to which, however, he was soon restored. The imputations which they cast upon his conduct irritated him to such a degree, that he pledged himself never to accept of any promotion, office, or emolument, under any government—a pledge which he amply redeemed. He was several times chosen a counsellor, but refused to accept the office, preferring a seat in the legislature, to which he was first elected in 1764. In that body he continued to exert himself, with the greatest zeal and effect, against the arbitrary measures of the government, and was one of the first to entertain the idea that they should be resisted by arms. As the crisis approached, some persons represented to him the danger of entering into a contest apparently so unequal. His answer was, "We must put to sea; Providence will bring us into port." Although major Hawley retired from the legislature in 1776, he did not abate his efforts to advance his country's cause, but, by his powerful addresses, contributed to keep up the spirits of his fellow citizens during the times of the greatest difficulties and gloom. He died March

10, 1788, aged 64 years, having been greatly afflicted, during the latter portion of his life, with hypochondriacal disorders.

Hawthorn, or White Thorn (*cratægus oxyacantha*); a small, spiny European tree, rising sometimes to the height of 20 to 25 feet, much admired for the beauty of its foliage, and forming excellent hedges. The leaves are smooth, shining, more or less deeply lobed, and of a very beautiful green color; the flowers are white, sometimes with a reddish tinge, disposed in corymbs, and possess an agreeable perfume; the fruit, when mature, is of a bright red color. The species of *cratægus* are about 30 in number, all shrubs or small trees, spiny, with alternate simple or lobed leaves, and bearing fruit resembling, in miniature, that of the apple, to which plant they are closely allied, being distinguished chiefly by their osseous seeds, and are arranged with it under the same natural family *rosaceæ*. One half of the species are natives of the U. States, many of them ornamental, and equally adapted to the formation of hedges with the European.

Haydn, Joseph; born 1732, in the village of Rohrau, on the borders of Hungary and Austria. His father, a poor wheelwright, played on the harp on Sundays, his mother accompanying with her voice. When the boy was five years old, he used, during his parents' performance, to make motions with a board and a stick, as if he was playing the violin. A schoolmaster, whom accident led to this concert, observing that Joseph kept good time, asked permission to take him to his school. Here he learned to read and write, and received instruction in singing and in playing on the violin and other instruments. After he had been here two years, he became, at the age of eight years, a chorister in St. Stephen's. At the age of ten years, he composed pieces for six or eight voices. "I then thought," he afterwards remarked, laughingly, "that the blacker the paper, the finer the music." With his fine soprano, he lost his place, in his 16th year. His situation was now very discouraging, and he had a foretaste of the difficulties which await an artist without fortune or patrons. He gave instructions in music, played in the orchestra, and occupied himself with composing. "With my worm-eaten harpsichord," said he, "I did not envy the lot of kings." At that time, the six first sonatas of Emanuel Bach fell into his hands. "I did not leave the harpsichord," said he, "until they were played through, from beginning to end; and any one, who knows me, must perceive that I owe much to Emanuel Bach; that I have carefully studied his style; and he himself once paid me a compliment about it." The youth at length had the good fortune to become acquainted with a Mlle. de Martinez, the friend of Metastasio. He instructed her in singing and playing on the harpsichord, for which he received his board and lodging. The first opera-poet of the age and the best composer of symphonies thus lived in the same house, though in very different circumstances. The poet, honored with the favor of the court, lived in the midst of pleasures, while the poor musician was obliged to pass the days in bed, for want of fuel. When Mlle. de Martinez left Vienna, Haydn was again plunged in the greatest distress. He retired into the suburb of Leopoldstadt, where a hair-dresser took him into his house. This residence had a fatal influence over the rest of his life. He married the daughter of his host, who poisoned his happiest days. Haydn was 18 years old when he composed his first quartetto, which met with general success, and encouraged him to new efforts. At the age of 19, he composed the Devil on Two Sticks, an opera which was forbidden, on account of its satirical character, after its third representation. Haydn now became so celebrated, that prince Esterhazy placed him at the head of his private chapel. For this prince he composed some beautiful symphonies,—a department in which he excelled all other composers,—and the greatest part of his fine quartetts. Here he also composed the symphony known by the name of *Haydn's Departure*, in which one instrument stops after another, and each musician, as soon as he has finished, puts out his light, rolls up his note-book, and retires. When, after a period of about 20 years, the prince Esterhazy reduced his court, and Haydn received his discharge, he went to London, to which he had often been invited. In 1794, he made a second journey thither. He found a most splendid reception, and the university of Oxford conferred upon him the degree of doctor of music. In England, Haydn first became generally known; he had not enjoyed an extensive reputation in his native country. On his return from England, he purchased a small house and garden in one of the suburbs of Vienna. Here he composed the Creation and the Seasons. The former work, which is full of the fire of youth, was finished in his 65th year. The Seasons, his last work, was completed in 11

months. Among his numerous works are also a *Te Deum*, a *Stabat*, many concerts, marches, masses, &c. Haydn made a new epoch in instrumental music. Inexhaustible in invention and execution, always new and original, always surprising and satisfying the hearer, he ruled the taste of the age. His symphonies have all these characteristics. From him the quartetts first obtained a spirit and an artful involution, which enraptured connoisseurs. Some years before his death, which happened May 31, 1809, the Dilettanti society in Vienna concluded their winter concerts with a splendid performance of the Creation, to which Haydn was invited. His reception made a great impression on him, weakened as he was by age, but his own work affected him still more deeply; and, at the passage "It was light," overpowered by the harmony which he had himself created, the tears ran down his cheeks, and, with upraised arms, he cried, "Not from me, but thence does all this come!" He sunk under the weight of his feelings, and was obliged to be carried out.

Haydon, B., a distinguished historical painter, born at Plymouth, England, 1786, was the son of a bookseller. Even while a boy, he was extravagantly fond of painting. The father earnestly begged his master to try every means to wean him from his love of the art; but his efforts had little effect, and the example of the young artist inspired many of the other school-boys with a desire of painting. The discourses of sir Joshua Reynolds, which fell into his hands, determined him to make painting his profession. His father finally yielded, and allowed him to go to London, where he began his studies in the royal academy, in 1804. Here he drew two years with unwearied industry, and, at the same time, dissected in an anatomical school. Fuseli (q. v.) became his patron, and Wilkie his friend. In 1808, he began his Dentatus; but, having been admitted to see the Elgin marbles, he rubbed out his whole work, and began it again on new principles, derived from those works, from which he sometimes drew for 12 and 15 hours at a time. The Dentatus was exhibited at the royal institution, in 1809, where it received the great prize. Being ill treated by the academy, he determined to have no connexion with it; the prize was also withheld from him, and he was therefore left entirely without resources, after he had been four months employed on his Solomon. He sold his books and clothes, and completed the picture in two years; but his application had impaired his health and injured his eyes. In 1814, he visited Paris, in company with Wilkie. His Christ entering Jerusalem was exhibited in 1820, with the greatest success. The Resurrection of Lazarus (1823) was also much admired. They were sold, the former for £350, the latter for £220.

Hayley, William, an English poet of the last century, was born at Chichester, in 1745, and studied at Trinity college, Cambridge. After quitting the university, he settled at Eartham, in Sussex, where he possessed landed property, devoting his time principally to literature. His Poetical Epistle to an eminent Painter (G. Romney), 1778, was followed by two other small poems. In 1780 appeared his Essay on History, in Three (poetical) Epistles to Edward Gibbon (4to.), and, in 1781, his Triumphs of Temper. He next published an Essay on Epic Poetry (1782), Essay on Painting, Triumphs of Music, and Essay on Sculpture. The most popular work which Hayley produced, next to the Triumphs of Temper, was a prose Essay on Old Maids (3 vols., 12mo.), illustrated by a series of fictitious narratives, chiefly satirical. In 1803, he published the life and correspondence of the poet Cowper (2 vols., 4to.), to which he added a supplement in 1806. He died November 12, 1820.

Haymarket Theatre; one of the principal theatres of London, so called from the Haymarket, where it is situated. It was opened in 1821, almost on the site of the original building, which was erected in 1702. The theatre is licensed to exhibit regular dramas during summer.

Hayne, Isaac, a patriot of the revolution, was descended from a highly respectable family in South Carolina; and when the struggle between the colonies and the mother country commenced, he was living on his plantation, in the enjoyment of an independent fortune. In 1780, he held the rank of captain in a corps of militia artillery, at the same time that he was serving as a senator in the state legislature. Having been disgusted by the promotion of a junior officer over his head, he resigned his commission, and returned to the ranks of the company which he had commanded, as a private, in which capacity he served during the siege of Charleston by the royal troops. After the capitulation of that city, by which the persons and property of the Americans were guarantied, though it precluded them from again bearing arms, Mr. Hayne returned to his farm. Here, in the beginning of 1781, when his

wife and several of his children were dangerously sick of the small-pox, he was required, by the commander of the British forces in his neighborhood, to take up arms as a British subject, or repair to Charleston as a prisoner. He refused to do either, protesting his inviolability under the capitulation of Charleston. At length, however, he was induced to go to Charleston by the assurance that he would be permitted to return to his family on engaging to "demean himself as a British subject, so long as that country should be covered by a British army." He obtained a written agreement to that effect, and, after repairing to Charleston, showed it to brigadier-general Patterson, and solicited permission to return home. This was refused, and he was told that he must either swear allegiance to the British government, or be subjected to close confinement. Thus deceived, he at length consented to subscribe a declaration of his allegiance to the king of Great Britain; but he expressly objected to the clause which required him "with his arms to support the royal government," affirming that he never would bear arms against his country. He was assured that this would not be required, and then hastened back to his family only in time to hear the expiring sigh of his wife, and to behold the corpse of one of his children. Although he might have considered himself justified in not complying with his promises to the British government, in consequence of the artifice by which he had been inveigled into the garrison of Charleston, and the compulsion by which he had been forced to *take protection*, in the language of the day, yet such was his scrupulous sense of honor, that he determined to observe them with fidelity. He continued, therefore, to reside privately upon his estate, until he was summoned, after the successes of Greene had changed the face of affairs, to repair immediately to the British standard. This was a violation of the agreement, in which it was stipulated that he should not be called upon to bear arms against his country; and finding himself consequently released from all obligation of observing it on his part, he hastened to the American camp. After serving some time, however, he was made a prisoner, and brought to Charleston, where he remained in confinement until lord Rawdon, the commander of the royal forces in South Carolina, came to the town. He was then taken before a court of inquiry, and condemned to be hanged, "for having been found under arms, and employed in raising a regiment to oppose the British government, though he had become a subject and accepted the protection of that government." This unjust and merciless sentence was accordingly put into execution on the 4th of August, 1781. Colonel Hayne met his fate with the greatest fortitude and composure. This act has since been the subject of a controversy, in which lord Rawdon, then earl of Moira, and since marquis of Hastings (see *Hastings*), endeavored to justify his conduct. His pamphlet was examined in the first number of the Southern Review, and ably refuted.

Haystack Mountain, Great, or Lafayette Mountain, is one of the highest mountains in New Hampshire, situated in the north-east part of the township of Franconia, nearly equi-distant from mount Washington in the north-east, and Moosehillock in the south-west. It has generally been known by the name of the *Great Haystack mountain;* but, in 1824, an attempt was made to change its name to that of *Lafayette mountain*. The Franconia notch is a deep ravine in the mountains, through which the road from Franconia to Plymouth passes. About the year 1825, a foot path was cleared out from this road to the top of the mountain. The point where the path commences in the notch, is six miles from the Franconia iron works, and the length of it, from the road to the summit, is three miles; and throughout this distance it is almost uniformly steep. The ascent is more difficult and fatiguing than that of mount Washington, on account of the greater and more uniform steepness, and the more rugged state of the path. A person, while descending, is more strongly impressed with the almost unvaried steepness, than while ascending. The ascent, for the distance of about two miles, is through a thick forest of hemlock, hackmetack, spruce, and other evergreen trees. Higher up, the mountain is encompassed with a zone, about half a mile in width, covered with small stunted trees, chiefly hemlock and spruce. Above the upper edge of this zone, which is about half a mile from the top, trees and shrubs disappear. The summit is composed chiefly of bare rocks, partly in large masses, and partly broken into small pieces; and it has less grass and other kinds of vegetation upon it than are found on the higher part of mount Washington. About three quarters of a mile from the top, there is a small pond of cold water. The view from the summit is exceedingly picturesque and magnificent. Although it is not so extensive

as that from the top of mount Washington, yet, owing to the situation of the Great Haystack, nearer the centre of this mountainous region, it is not inferior to it, either in beauty or grandeur. A person who has never ascended this or any of the neighboring summits, will not easily imagine what a world of mountains is here presented to view, or how well entitled this part of New Hampshire is to be styled, as it has sometimes been, the *Switzerland of America*. The view to the north-east, east, south and south-east, is one grand panorama of mountain scenery, presenting more than fifty summits, which, when viewed from this elevation, do not appear to differ greatly in height. Some of these mountains are covered with verdure to the top, while the summits of others are composed of naked rocks; and down the sides of many of them may be seen *slides*, or *avalanches*, of earth, rocks and trees, more or less extensive, which serve to diversify the scene. The whole appearance of cultivation in this entire compass, is confined to a few farms, seen in a direction west of south, on the road to Plymouth, extending along the Pemigewasset branch of the river Merrimack. To the west is seen the territory which is watered by the Connecticut and the Lower Amonoosuck. This country, though hilly, yet, when viewed from this elevation, appears almost level, and with its few small villages, scattered houses, and cultivated farms, presents a pleasing contrast to the wild and dreary prospect in all other directions. At the place in the road through the notch where the path up the mountain commences, is exhibited to the view of the traveller, on the summit of the mountain opposite to the Great Haystack, a remarkable curiosity, called the *profile*, or *old man of the mountain*, which is a singular *lusus naturæ*. It is situated on the brow of the peak, which rises almost perpendicularly from the surface of a small lake, directly in front, to the height of about 800 feet. The front of this precipice is formed of solid rock; but as viewed from the point where the profile is seen, the whole of it appears to be covered with trees and vegetation, except about space enough for a side view of the old man's bust. All the principal features of the human face, as seen in a profile, are exhibited with surprising exactness. The little lake at the bottom of the precipice, is one of the sources of the Pemigewasset river; and about half a mile to the north of this, there is another somewhat larger lake, which is about a mile in length, and surrounded by picturesque scenery. These lakes are both situated in Franconia notch, and very near the road. The northern one is 900 feet above the site of the iron works in Franconia, and the highest point of the road is 1029 feet above the same level.

Hayti, or Haiti (*the mountainous*); the Indian name of one of the Antilles, to which Columbus gave the name of *Española* (Hispaniola, Little Spain), but which was commonly called *St. Domingo* by the French and English, from its capital. It lies south-east of Cuba (from which it is separated by the Windward passage, 18 leagues in width), and east of Jamaica, and between latitude 17° 43′ and 19° 58′ N., and longitude 68° 25′ and 74° 35′ W. Its greatest length, from east to west, is about 390 miles, its breadth from 60 to 150 miles, its superficial area 30,000 square miles. On the west, it forms two remarkable promontories, between which is the gulf of Gonaives. The northern point is cape Isabella, the eastern, cape Engagno. Old cape François forms the north-east extremity of the island. On the northern coast lies the island of Tortugas, separated from the main land by the narrow channel of the same name. The face of the country is, in general, mountainous, and intersected with deep valleys. The Cibao mountains run across the island from east to west. The highest summits are about 6000 feet above the level of the sea. Monte-Christi, in the north-east, is the other principal chain. In the south-east part, particularly, there are extensive plains of savannas, occupied by large herds of swine, horses and horned cattle. That of Los Llanos, which lies east of the city of St. Domingo, is 80 miles long, by 25 to 30 broad. The Vega Reale is of nearly the same extent, and more fertile. Hayti is well watered by numerous rivers; the soil is fertile, producing every variety of vegetable for beauty and use. The climate, on account of the inequalities of the surface and diversity of situation, is various. In the plains, the great heat, joined to the natural humidity, is often fatal to Europeans, but produces a rich vegetation. On the coasts, the regular sea and land breezes are refreshing. On the mountains, the cold is often uncomfortable. As in all tropical climates, the year is divided into the dry and the rainy seasons. In May and June, the rain falls in torrents, but hurricanes are less frequent than in the other Antilles. Sugar-cane, coffee, cotton, cocoa; are produced in great abundance. Indigo was formerly much

cultivated, but is now little attended to. The plantain, vanilla, potato, manioc, &c., are spontaneous productions of this rich soil. The mountains are covered with valuable timber, oak, mahogany, satin-wood, ironwood, &c. Before the arrival of the Europeans, there were but four species of quadrupeds in the island. Of these the agouti only survives. The principal towns are Cape Haytien (q. v.), the capital, the Mole, Port-Républicain (Port-au-Prince) and St. Domingo. The island is divided into five departments, which are subdivided into 33 *arrondissements*. The population, in 1824, was 953,335, almost all blacks and mulattoes, the greater part of which is in the French division of the island. In 1789, the population was 665,000. The regular troops, in 1824, were 40,000; the militia, 113,000. The language of the government, and of the greatest part of the population, is French. The Spanish is also spoken in the eastern portion of the island. Much has been done for public instruction. There is hardly a considerable village without a school, and a college has been established at Cape Haytien, where a liberal course of instruction is pursued. The manners of the lower classes are much improved since they have gained their freedom, and they have an air of comfort, health and happiness. The Catholic is the religion of the state, but all sects are tolerated. The commerce of Hayti has been affected, of course, by the vicissitudes of its government. In 1789, the island was in a most flourishing condition, but its commerce and industry were interrupted by the bloody wars and revolutions which succeeded, and have only of late begun to revive. The exports were, in

	1791,	1804,
Coffee,	68,151,180 lbs.	31,000,000 lbs.
Sugar,	163,405,220	47,600,000
	1822,	1824,
Coffee,	35,117,834 lbs.	37,700,000 lbs.
Sugar,	652,541	725,000

Estimated value, in 1822, 9,030,397 dollars; in 1825, about 8,000,000. The revenue, in 1825, was about 4,400,000 dollars, which fell short of the expenditures. The government of Hayti is republican. The chief magistrate is the president, who is elected for life by the senate. He exercises the executive power, commands the forces of the republic, and nominates all officers. The legislative power is vested in a senate and house of representatives. The latter are chosen for five years, and consist of one representative from each commune and two from each capital city. The senate is composed of 24 members, chosen for nine years by the representatives, from a list presented by the president. A code, based on the French, has been adopted, and trial by jury introduced. (See *Present State of Hayti, by J. Franklin*, 1828; *Notes on Hayti, by Charles Mackenzie, late English Consul-General to that Island*, London, 1830.) The island of Hispaniola is memorable for having been the seat of the first European settlement in America, and the scene of the first independent empire founded by African slaves. It was discovered by Columbus, on the 6th of December, 1492, on his return from Cuba. It had borne the name of *Hayti* among the natives. Columbus called it *Española*, or *Little Spain*, and it has since acquired the name of *St. Domingo*, from the chief town. The impression made on Columbus, by the beauty of the country, determined him to form a settlement here; and he accordingly left 38 Spaniards at the bay of St. Nicholas. These were the first colonists of America. On his return, in November, 1493, he founded a second town on the northern coast, which he called *Isabella*, the first settlement having been nearly destroyed by the natives. The licentiousness and avarice of the new settlers again provoked the Indians to attempt revenge; but these miserable beings were overpowered by European skill, and great numbers perished by famine and the sword. In 1496, Columbus returned to Spain, leaving his brother Bartholomew lieutenant-governor, who soon afterwards removed the colony to the south side of the island, where he founded the city of St. Domingo. The colonists were distributed in different districts, and a certain number of natives were appointed to cultivate each allotment. This unhappy race dwindled away fast, under disease and a species of labor to which they were unaccustomed. (See Irving's *Columbus*.) Their numbers were so much reduced about the year 1513, that Ovando, to supply laborers, decoyed 40,000 of the inhabitants of the Bahamas into St. Domingo; and, notwithstanding this accession, it is said, that towards the middle of that century, scarcely 150 Indians remained alive. The colonists, in the mean time, degenerated from the spirit and enterprise of their ancestors. Their mines were deserted, and their agriculture neglected; and, although Ovando had introduced the sugar-cane from the Canary islands, yet, such was the indolence of the inhabitants, that they

could not be persuaded to cultivate it. In this state of things, the island remained for upwards of a century. About the middle of the 17th century, the French and English buccaneers (q. v.) began to attract notice. The French obtained a footing on the west end of the island about the same time that the English got possession of Jamaica. The former applied themselves to agriculture, and, in a few years, attracted the attention of the French government. Several slaves having been taken from the English, in the war of 1688, the inhabitants renewed the culture of the sugar-cane. From the year 1722, when the French colony was freed from the yoke of exclusive trading companies, it rapidly rose in prosperity, while the Spanish settlements had declined in population. It was not until 1765, when Charles II opened a free trade to all the Windward islands, that Hispaniola began to exhibit symptoms of prosperity. In 1691, Spain had ceded to France, by the treaty of Ryswick, the western half of the island. In 1776, a new line of demarcation was drawn, and a liberal commerce was opened between the two sections. From 1776 to 1789, the French colony was at the height of its prosperity. Its productions were immense and valuable, and its commerce in the most flourishing state. In 1791, an insurrection of the negroes broke out in the French colony. In two months, upwards of 2000 whites perished, and large districts of fertile plantations were devastated. In 1792, the national assembly proclaimed the political equality of the free negroes and the whites, and, in the succeeding year, appointed three commissioners, who, on their arrival, proclaimed the emancipation of the slaves. June 21, 1793, Macaya, a negro chief, entered Cape François, at the head of 3000 slaves, and began an indiscriminate slaughter. The British government, hoping to take advantage of the confusion, sent a body of troops from Jamaica, who captured Leogane and Port-au-Prince. The yellow fever, however, breaking out, reduced their numbers rapidly; and the blacks, headed by Rigaud, a mulatto, and the celebrated Toussaint Louverture, who had been appointed, by the French government, commander-in-chief, retook the principal places. The English, after an enormous loss of men, finally evacuated the island, in 1798. Previously to this, Spain had ceded to France the eastern part of the island. July 1, 1801, the independence of Hayti was proclaimed. Under the administration of Bonaparte, then first consul, a force of 20,000 men, under general Le Clerc, was despatched in December, 1801. During a truce, Toussaint was surprised and carried to France, and there died in April, 1803. Hostilities were now resumed with greater animosity on each side. The command of the black troops devolved upon Dessalines, one of the chiefs, who prosecuted the war with vigor and success. The yellow fever aided the cause of the negroes, and swept off great numbers of the French. General Le Clerc died shortly afterwards. Under his successor, Rochambeau, the French, now reduced to a handful, were driven into the Cape, where, November 30, 1803, they were forced to capitulate to an English squadron; and thus the greater part of the island was abandoned, and opposition ceased to the independence of the negroes. January 1, 1804, the general and chiefs of the army entered into a solemn compact, in the name of the people of Hayti, renouncing all dependence on France. At the same time, they appointed Dessalines governor for life, with very extensive powers. On his return, in September, from an unsuccessful expedition against the city of St. Domingo, which was still occupied by some Spaniards and French, he assumed the purple, and the title of *Jacques I, emperor of Hayti*. His reign was short, and, though some sagacious measures were adopted for the government and improvement of the people, yet his tyranny rendered him universally detested. He was slain by a military conspiracy in October, 1806. Christophe, his second in command, immediately assumed the administration of affairs, under the title of *chief of the government*. Petion, however, another chief, appeared as a candidate for the sovereign power, and the struggle between him and Christophe was long and fierce. A severe battle was fought January 1, 1807, in which Petion was defeated. Christophe's progress to supreme power was similar to that of Dessalines. In 1807, he was appointed chief magistrate for life, with the power of naming his successor, and, in 1811, he changed the title to that of *king*, calling himself *Henry I.* The office was made hereditary in his family. From 1810 to 1820, the part of Hayti formerly belonging to the French, was under distinct and rival governments. In the north was the kingdom of Christophe, and in the south a republic existed, at the head of which was Petion, who possessed both sagacity and virtue. In 1816, he was appointed

president for life, and retained the office until May, 1818, when he died, universally lamented by his fellow citizens. Christophe (q. v.) was an avaricious and cruel despot, and perished in a military revolution, in October, 1820. In consequence of this event, the whole colony has been united under Boyer, the successor of Petion in the office of president, who is said to possess many of the virtues of his predecessor. That part of the island which was originally settled by the Spaniards remained in their hands until December, 1821, when it followed the example of the inhabitants of the north-western part, and voluntarily placed itself under the government of president Boyer, who thus peaceably became master of the whole island. In 1825, Boyer negotiated an absurd arrangement with France, by which Charles X, by royal ordinance, dated April 17, 1825, acknowledged the independence of the inhabitants of the French part of the island, in consideration of which Boyer stipulated to pay to France 150,000,000 of francs, as an indemnity for the ex-colonists, in five annual instalments. (See *Boyer*.)

Hazel (*corylus*); a genus of plants of the family *amentaceæ*, containing five species, all confined to the northern hemisphere, and two of them indigenous in the U. States. They are shrubs or small trees, with simple, alternate leaves. The male flowers are in long, cylindrical aments or catkins; and the fruit, consisting of a nut, marked, at base, with a large cicatrix, is enveloped in the persistent calyx, which is irregularly toothed on the margin. The European hazel (*C. avellana*), from cultivation, has produced several varieties, differing in the size, shape and flavor of the nuts, which are commonly known under the name of *filberts*, and are imported to some extent. It grows in all situations, and is easily cultivated, but a light and tolerably dry soil is the most suitable. This plant has also gained celebrity from its twigs being believed, by the common people, capable of pointing to hidden treasures, when in the hands of certain persons. (See *Divining Rod*, and *Rhabdomancy*.) The twigs of the witch hazel (*hamamelis*) have been employed by impostors, in this country, to delude the public in a similar manner. The American hazel (*C. Americana*) very much resembles the European, but is humbler in stature, and the calyx is larger than the included nut. The flavor of the kernel is, by many, preferred to the filbert, though we know of no attempts to improve it by cultivation. It is common in most parts of the U. States. The *C. rostrata*, distinguished by having the calyx prolonged beyond the fruit, in the form of a long beak, and very hairy, is much rarer than the preceding, but occurs sparingly as far south as Boston. Both the hazel and filbert are much esteemed, but particularly the latter, the flavor of its kernels being very delicious. They are, however, difficult of digestion, and, when eaten in large quantities, sometimes produce very unpleasant effects. The oil which is obtained from hazel-nuts, by pressure, is little inferior in flavor to that of almonds; and, under the name of *nut-oil*, is often preferred, by painters, on account of its drying more readily than any other of the same quality. Chemists employ it as the basis of fragrant oils artificially prepared, because it easily combines with, and retains odors. This oil is found serviceable in obstinate coughs. If nuts be put into earthen pots and well closed, and afterwards buried 18 inches or two feet deep in the earth, they may be kept sound through the winter. In many parts of England, hazels are planted in coppices and hedge-rows for several useful purposes, but particularly to be cut down, periodically, for charcoal, poles, fishing-rods, &c. Being extremely tough and flexible, the branches are used for making hurdles, crates, and springles to fasten down thatch. They are formed into spars, handles for implements of husbandry, and, when split, are bent into hoops for casks. Charcoal made from hazel is much in request for forges; and, when prepared in a particular manner, is used, by painters and engravers, to draw their outlines. The roots are used by cabinet-makers for veneering; and, in Italy, the chips of hazel are sometimes put into turbid wine for the purpose of fining it.

Hazlitt, William, the son of a dissenting minister, was originally an artist. A few pictures, executed by him in his youth, are said to display genius. His writings show thought, disfigured by paradox and dogmatism. He died September 15, 1830, the day on which his last work, Conversations of James Northcote, appeared. He had, for years, contributed to the periodical journals, and had published an Essay on the Principles of Human Action; the Round Table, a series of Essays, written in conjunction with Leigh Hunt; the Eloquence of the British Senate from the Time of Charles I, with Notes (2 vols. 8vo., reprinted New York, 1810); Characters of Shakspeare's Plays; a View of the English

Stage, containing a Series of Dramatic Criticism; Lectures on the English Poets (reprinted Philadelphia, 1818); Political Essays, with Sketches of Public Characters; Lectures on the English Comic Writers; Table Talk; a Letter to W. Gifford; an English Grammar, &c. Two or three years before his death, he published a life of Napoleon Bonaparte (4 vols., 8vo., 1828 et seq.). He was also one of the writers in the Supplement to the Encyclopædia Britannica. The editor of the London Literary Gazette, in noticing his death, says, "Though differing widely from him in most of his opinions, we must allow that he produced much which did credit to his abilities. It was his asperities which rendered his performances generally unpalatable to us, and the dislike was not removed by an officious and affected style. Yet there were bright parts, and of these alone we would now cherish the remembrance, as of a clever but unamiable man, who was, as he himself tells us, 'at feud with the world,' and who, consequently, treated the world with ill will, if not malice, which the world requited with something of resentment and scorn."

Head; the part of the animal body which contains the brain and the higher organs of sense. In many animals, it is connected with the trunk, by the neck, and is more or less movable; in some animals, however, it is immovable, and is merely a prolongation of the trunk. The head in animals is more distinct in proportion as the brain is more fully developed as the centre of the nervous system. It is entirely wanting in the lowest classes of animals, which, therefore, from the intestinal worms downward, form a third class, in the system of Latreille, under the name of *acephala* (headless animals), while those provided with heads are divided into two classes, the *vertebral animals*, having distinct and proper heads, and the *cephalidia*, having small and less distinctly formed heads. In this part the mouth (q. v.), as the opening of the œsophagus, is always situated. In the second class of animals, in which the head is less distinct, that part of the body which is provided with the mouth, may be called the *head end*. In the vertebral animals (mammalia, birds, reptiles and fish), the head has a bony basis (cartilaginous only in the cartilaginous fishes). In fishes, the bones of the head are not united with each other; and the formation of the separate bones is various. In cartilaginous fishes, the head is more or less oblong and angular; in osseous fishes, it is less flattened, and composed of a considerable number of bones connected in various ways; in all fishes, the cavity of the brain is very small and oblong. Equally various is the formation of the head in the different classes of reptiles. In general, the head is composed of few bones, and more rounded in proportion as the brain is more developed. In birds, the bones of the head are more closely formed into one whole, constituting a skull more or less round, which contains the brain, and to the fore part of which the beak is attached. But the head is most perfect in the mammalia, and resembles the human head more nearly as the animal approaches more nearly to man. In general, the human head may be considered as the standard, which may be traced, with gradual deviations, through the different classes, until it entirely ceases in the lower orders of animals. Nowhere is its proper office, to serve for the reception of the nervous system, so distinct as in the human head; the cavity of the skull containing the principal organ of sensitive life—the brain; as the great cavities of the trunk contain—the chest, the organs of irritable life (the heart and lungs), and the abdominal cavity, the organs of the reproductive life (the organs of digestion and generation). The superiority of the head over the other two parts just mentioned, appears also from the circumstances, that whilst it is preeminently the seat of the nervous system, it also contains organs essential for functions of the irritable and reproductive system; as the inspiration and expiration of the air are effected through the nostrils and mouth, and the entrance of food into the abdominal cavity, as well as the preparation of it for digestion, by mastication and the production of saliva, is effected by the mouth; and these organs appear more prominent, in the heads of animals, as their sensitive system sinks lower in the scale. It must not be forgotten, that the head also contains the tongue, an organ not only important in respect to nourishment, but also communicating the desires and thoughts, until it becomes in man the organ of oral intercourse, of language, and of the finest music—singing. The human head, and, more or less, the head of other animals, is divided into two chief parts, the skull (see *Skull*) and the face (q. v.). The importance of the head as the noblest part of the animal system, has occasioned it to be used metaphorically, in all languages, to denote that which is chief. (See *Ear*, *Eye*.)

Hearing. (See *Ear*.)

Hearne, Samuel; an English traveller in the service of the Hudson's bay company. He was employed, in 1769, to explore the north-western part of the American continent. The narrative of his researches, published after his death, which occurred in 1792, is entitled a Journey from the Prince of Wales's Fort, in Hudson's Bay, to the Northern Ocean (1795, 4to.).

Heart; a hollow, muscular organ, the function of which is to maintain the circulation of the blood, and which is of different formations in different animals. The organs of circulation are the heart, the arteries, the veins (see *Blood Vessels*), and the capillary vessels. The blood (q. v.) is divided into the arterial blood and the venous blood. The object of the circulation (see *Harvey*) is to carry the venous blood, which has returned from the body, into the lungs, where, by the influence of the air, it is converted into arterial blood, which is then again sent out into the system, to nourish it and repair its losses. The heart in men, quadrupeds and birds (see *Animal*) is composed of four cavities, two auricles and two ventricles (thence called *double*). It is enveloped in a membrane called the *pericardium*, situated toward the left of the cavity of the chest, between the lungs, and resting on the diaphragm. Its form is that of a cone flattened on its inferior and superior faces, the latter formed principally by the right, the former by the left auricle and ventricle. The right auricle communicates with the right ventricle, besides which there are in it three openings, that of the *vena cava inferior*, that of the *vena cava superior*, and that of the coronary vein. The communication between this auricle and ventricle is closed by a valve when the heart contracts. The right or pulmonary ventricle communicates with the pulmonary artery, which is provided with three valves. When these valves are brought together, they interrupt the communication between the ventricle and the artery. The left auricle communicates with the left ventricle, and contains also the orifices of the four pulmonary veins. The left ventricle, besides the communication with the left auricle, contains the orifice of the aorta. (q. v.) The ventricles are divided from each other by a fleshy wall, called the *septum cordis*. The valves at the openings of the arteries are called *semilunar*; that at the orifice of the right auricle, *tricuspid*; that at the orifice of the left auricle, *mitral*; and that at the orifice of the *vena cava inferior*, the *Eustachian* valve. The heart is formed of a firm, thick, muscular tissue, composed of fibres, interlacing with each other. It is also composed of nerves, membranes and vessels. The coronary arteries arise from the aorta, and are distributed on the heart. The coronary veins return the blood of the heart into the right auricle. The arteries (from the Greek ἀηρ, *air*, and τηρειν, *to preserve*, because they were thought to contain air) are the vessels which serve to carry the blood from the heart to all parts of the body. They terminate in the capillary vessels (q. v.)—a series of extremely minute vessels, which pass over into the veins. The veins are the channels by which the blood passes back from the body into the auricles of the heart. The blood which is returned from the veins is black, and is called *venous*; that which leaves the heart is red, and is called *arterial*. The red blood, possessing nourishing and vital properties, rises in the capillary system of the lungs, flows into the pulmonary veins, thence is received into the left cavities of the heart, from which it passes into the aorta, and is transmitted to all parts of the body, to the capillary system. It there loses two degrees of temperature, and undergoes other changes, by the loss of some of its elements in the important functions of nutrition, calorification, and the secretions. It is now become black, passes through the veins, from the extremities of the body towards the heart, receives the chyle and the lymph, and is emptied into the right cavities of that organ, which returns it, through the pulmonary artery, to the capillary vessels of the lungs, where it is subjected to the influence of the air, resumes the qualities of red or arterial blood, and is ready for a new course. Having thus described the route of the blood through the different parts of the system, we will now explain the mechanism of the sanguineous system. The blood contained in the two *venæ cavæ* is poured into the right auricle, which contracts, and thus forces the fluid to escape; but the *vena cava superior* opposes to its passage the column of blood which it contains, the other veins are closed by valves, and it must therefore pass into the right ventricle. The ventricle then contracts, and the tricuspid valve closing the passage through which the liquid entered, it is forced forward into the pulmonary artery, which contracts, and its orifice being closed by the semilunar valve, propels the blood still forward into the capillary system of the lungs, whence it passes into the pulmonary veins, which pour it into the left auricle by their four orifices. The contraction of the auricle impels it

into the left ventricle, by which it is, in the same manner, driven forward into the aorta (the mitral valve preventing its return into the auricle), and thence into the general circulation as above described. The two auricles contract and dilate simultaneously with each other, as do also the two ventricles. The dilatation is called *diastole;* the contraction, *systole.* It is difficult to determine what quantity of blood the heart projects at each systole. It is generally estimated at two ounces. The causes of the alternate contraction and dilatation of the heart are not less difficult to decide. They are entirely involuntary and dependent on the nervous system. The force of its contractions is likewise unknown. The systole of the ventricles is the cause of the motion of the blood in the arteries, which also dilate with each wave driven into them by the motion of the heart. (See *Pulse.*) By what means the blood is made to penetrate the thousand windings of the capillary system, and what causes impel it to flow back through the veins, are yet subjects of dispute among physiologists. The time in which a drop of blood completes its circle of motion, has been differently estimated, at from 24 hours to 2 minutes. Among the lower orders of animals, the organization of the circulating system is very different. The infusoria, polypi and intestinal worms have no distinct vessels, much less a heart; the echinodermata have distinct organs of circulation, but no part resembling a heart. Insects have a small cylindrical vessel, running along the back, which is rather the rudiment of a vascular system, than of a heart. The first traces of a heart are found in some worms, in which some expansions are perceptible in a part of the vessel which runs the whole length of the body. In the spiders, lateral vessels are given off from the main vessel, and a pulsation is perceptible. The crustacea have a heart composed of one fleshy ventricle. In the mollusca, the heart appears completely formed; some of them have three cavities. The four classes of vertebral animals have red blood, but fishes and reptiles have only what is called a *single heart*, that is, composed of one auricle and one ventricle.

Heart's-Ease. (See *Violet.*)

Heat. (See *Caloric*, and *Animal Heat.*)

Heath (*erica*); a beautiful genus of shrubby plants, admired on account of their lasting verdure, their light foliage, and the elegance of their flowers. Their leaves are simple and entire; their flowers oval, cylindrical, or even swelled at the base, resembling those of *vaccinium* and *andromeda*, to which genera they are allied; the corolla is four-cleft; the stamens eight, terminated by anthers, which are usually notched or bi-aristate at the summit. More than 250 species are known, 12 or 15 of which inhabit Europe, and have small flowers, whilst all the remainder are natives of South Africa, many of them bearing large and brilliantly-colored flowers, forming one of the most characteristic genera of that singular region, where, however, according to Burchell, their range is very limited, the whole tribe totally disappearing on approaching the tropic from the cape. They are very difficult of cultivation. The common heath of Europe (*E. vulgaris*), a low shrub, often covers, exclusively, extensive tracts of barren land, and is used for some purposes of domestic economy: mixed with oak bark, it is employed in tanning; and, also, when tender, for fodder. Notwithstanding the depth to which the roots penetrate, and the difficulty of exterminating it, such has been the progress of agriculture in Great Britain, that a considerable portion of these tracts have been reclaimed.

Heathfield, lord. (See *Eliott.*)

Heaven, in a physical sense, is the azure vault which spreads above us like a hollow hemisphere, and appears to rest on the limits of the horizon. Modern astronomy has taught us, that this blue vault is, in fact, the immeasurable space in which our earth, the sun, and all the planets, with the countless host of fixed stars, revolve. The blue color of the heavens is, according to Nollet, an effect of the light of the sun and stars. According to this explanation, the boundless fields of unillumined space must, like all things else in the absence of light, appear black; but the light of the celestial bodies, which is reflected by the earth to the air, and thence again to the earth, occasions the blue color. Saussure derives the blue color, indeed, from the reflected light, but attributes the reflection not to the air, but to the vapors which it contains. He supports his opinion in this way: that if this were owing to the reflection of light from the air, glaciers and mountains covered with snow, seen at a distance of 70 to 90 miles, would appear blue. That the rays of light are, in fact, reflected by the vapors in the atmosphere, appears also from this circumstance, that the heavens, seen from a high mountain, appear of a much darker blue than when seen from a plain; and even from this last situation, the blue is very different at different times, and ap-

pears dark in proportion to the purity of the atmosphere. Saussure, on the basis of these observations, has invented an apparatus, called a *cyanometer*, in order to determine the quantity of vapor in the atmosphere, from the degree of blueness in the color of the sky.—*Heaven*, in the ancient astronomy, denoted an orb or circular region of the ethereal heaven. The ancient astronomers assumed as many different heavens as they observed different celestial motions. These they supposed to be all solid, thinking they could not otherwise sustain the bodies fixed in them; and spherical, that being the most proper form for motion. Thus they have seven heavens for the seven planets, the Moon, Mercury, Venus, the Sun, Mars, Jupiter, and Saturn. The eighth was that of the fixed stars, which was particularly denominated the *firmament*. Ptolemy adds a ninth heaven, which he calls the *primum mobile*. After him, two crystalline heavens were added by Alphonso, king of Castile, to account for some irregularities in the motions of the other heavens; and, lastly, an empyrean heaven was drawn over the whole, for the residence of the Deity; which made, in all, twelve heavens. But others admitted many more heavens, according as their different views and hypotheses required: Eudoxus supposed 23; Regiomontanus, 33; Aristotle, 47; and Fracaster no less than 70.

Heavy Spar. (See *Barytes, Sulphate of.*)

Hebe; the goddess of youth, and the cup-bearer on Olympus, a daughter of Jupiter and Juno, who gave her as a wife to Hercules, in reward of his achievements. In the arts, she is represented with the cup, in which she presents the nectar, under the figure of a charming young girl, her dress adorned with roses, and wearing a wreath of flowers. An eagle often stands beside her (as at the side of Ganymede), which she is caressing.

Heber, Reginald, DD., bishop of Calcutta, was born April 21, 1783, at Malpas, in Cheshire, and, in 1800, was sent to Brazen-nose college, Oxford. In 1802, he obtained a university prize for a copy of Latin hexameters; and the following year he greatly distinguished himself by another prize poem—Palestine—in English. He was elected to a fellowship in All Souls' college, and, soon after, travelled in Germany, Russia, and the Crimea, and made observations, from which many curious extracts were published in the travels of doctor E. D. Clarke. Having returned home, he published an English poem, entitled Europe, Lines on the present War (1809). About the same time, he was presented to the family living of Hodnet, and he married Amelia, daughter of the reverend W. Shipley, dean of St. Asaph. For several years subsequently, he devoted himself, with great assiduity, to his duties as a parochial priest. In 1822 appeared his life of Jeremy Taylor, with a review of his writings. On the death of bishop Middleton, he was offered the see of Calcutta, which he accepted, and, June 16, 1823, embarked for the East Indies. On Ascension day, 1824, bishop Heber held his first visitation, in the cathedral of Calcutta; and he subsequently made progresses through various parts of his very extensive diocese, consecrating churches, and taking the appropriate steps for extending the knowledge of Christianity among the Hindoos. Having taken a journey in the discharge of his episcopal duty, he arrived at Tirutchinopoli, April 1, 1826; and, on the next day, while bathing, he was seized with an apoplectic fit, which terminated his existence. Since the death of this prelate, has been published, a Narrative of a Journey through the Upper Provinces of India, from Calcutta to Bombay (2 vols., 4to., new edition, 3 vols., 8vo.). His widow has also published his biography (2 vols., 4to., London, 1830).

Hebert, James René, notorious during the French revolution, was born at Alençon, in the department of the Orne, about 1755. When yet very young, he went to Paris, where he supported himself by very dishonorable methods. Employed as a checque-taker at the *Théâtre des Variétés*, he was dismissed for dishonesty; after which he lived with a physician, whom he ungratefully robbed. At the beginning of the French revolution, Lemaire published a journal supporting constitutional principles, under the title *Père Duchêne*, which was distributed in the streets. The Jacobins soon established another paper, also called *Père Duchêne*, and Hébert became editor. It owed its success to the warmth and virulence with which he advocated the popular cause, and abused the court and the monarchy. August 10, 1792, he became one of the members of the municipality of Paris, which contributed to the massacre in the prisons in the following September. Hébert was soon after nominated attorney-general of the commune, and employed all his influence in forwarding a project to establish the authority of the commune on the ruins of the national representation. The Hebertists rejected the advances of the Orleans party,

and separated from the Cordeliers, of whom they had hitherto formed a part. The Girondists, who were at that period contending against the Mountain, had credit enough to procure the arrest of Hébert, May 24, 1793. He was defended by Marat in the convention; the deputies of all the sections spoke in his favor at the bar on the 25th, and on the 27th, after a tempestuous session, he was again restored to liberty. Prompted by revenge, as well as other motives, he assisted with all his power and influence in the proscription of the Brissotins. Their downfall hastened his own. He established the feast of reason, and afterwards accused Danton of having violated the nature of liberty and the rights of mankind. This terrified both Danton and Robespierre; they suspended their mutual jealousies to accomplish his destruction; and Hébert, with the greater part of his associates, was arrested, and condemned to death, March 24, 1794. None of the numberless victims died in a more cowardly manner. Besides his journal, he was the author of some other political pieces of a similar description. Among the crimes of this man were the calumnies with which he assailed the character of the queen of France. His wife, a former nun, was executed a few days after him.

Hebrews. The appellation of *Hebrew*, so far as we can learn from history, was first given to Abraham by the people of Canaan, among whom he dwelt. (*Gen.* xiv. 13.) It seems to have been applied to him on account of his emigration (about 2000 B. C.) from Mesopotamia, beyond the Euphrates, into the land of Canaan (Palestine). Some, however, consider it as a patronymic derived from Heber, great-grandson of Shem, from whom Abraham was descended. Whatever meaning was attached to the term *Hebrews* before the time of Jacob (Israel), it appears afterwards to have been limited to his posterity, and to have been synonymous with *Israelites*. This singular people, which has exercised a more permanent and extensive influence by its religion, than polished Greece by her taste, or triumphant Rome by her arms; which has survived the last wrecks of its palaces and cities, and the annihilation of its political existence as a state; and which presents the wonderful spectacle of a race preserving its peculiarities of worship, doctrine, language and feelings in a dispersion of 1800 years over the whole globe,—presents to the mere philosopher a not less important subject of contemplation than to the theologian, who reads in its history a series of direct and striking interpositions of Providence. (See Bossuet, *Histoire Universelle.*) Its history reaches back to the earliest periods of the world; its code of laws has been studied and imitated by legislators of other ages and distant countries, and the two religions, which now divide the greater part of the civilized world, have been engrafted on the stock planted by the children of Abraham. The Hebrew history begins with the patriarch of the nation, with Abraham (q. v.); but that of the Hebrew state with the acquisition of Palestine. I. *The History of the Hebrews, as a Nomadic Nation, from Abraham till the Establishment of their State in Palestine, B. C.* 2000—1500. Under Abraham, Isaac and Jacob, they merely formed one nomadic family, whose history exhibits pictures of the wild hunter, the migratory herdsman and the incipient husbandman, and in which we already find the worship of one God, the rite of circumcision, and other traits of the future nation. It was in Lower Egypt, however, whither Israel had migrated, and where his descendants resided 430, or, according to some, 250 years, that they became a powerful nation. Joseph, having become grand vizier of Egypt, assigns his brothers a residence in the fertile Goshen. They increase rapidly, and become formidable to the Egyptian monarchs, who require them to build and inhabit cities. The oppressions to which they are subjected, lead them to flee from the tyranny of their hard masters, and they find a leader and deliverer in a lonely exile, who had 40 years before committed the crime of slaying an Egyptian officer, and had since resided on the borders of Arabia, tending the flocks of his father-in-law. (See *Moses.*) The number which left Egypt was 603,550 fighting men, exclusive of the Levites. This unarmed, or, at least, unwarlike crowd is pursued by the Egyptians, but escapes across an arm of the Red sea, the waters of which swallow up the chariots and horsemen of the pursuers. Niebuhr thinks that this passage was effected near Suez, where he himself forded the sea, which is about two miles across. Burckhardt is of the same opinion. The law, a code at once moral, religious and political, is given to the Hebrews from mount Sinai; God himself is their leader, their king; the constitution is strictly theocratic; a violation of it is sacrilege, and is attended with punishments from heaven; the possession of Palestine is assured to them, and they set forward again for the promised land. On arriving at the frontiers of their new country, their spies bring

them back word, that it is occupied by fierce and warlike people, and they immediately demand to be led back to Egypt. But Moses determines to conduct them again into the desert, to form a new generation of bold and hardy warriors; there they pass thirty-eight years as a nomadic nation. After the death of their great lawgiver, on the summit of mount Nebo, the Hebrews entered the land which contained the bones of their fathers, and the long promised streams and mountains of their God. Joshua assumed the command, led them across the Jordan, and, after a contest of seven years, obtained possession of the country.—II. *Period of the Federative Republic from the Conquest of Palestine to the Establishment of the Monarchy*, 1500—1100. This period of 400 years may be considered as the heroic age of the nation, which, after its gradual transition to stationary abodes and agriculture, lived in constant disputes with its neighbors, the Arab nomades, the Philistines and the Edomites. The country was divided among twelve tribes; viz. the ten tribes of the sons of Jacob—Reuben, Simeon, Judah, Dan, Napthali, Gad, Asher, Issachar, Zebulon and Benjamin, and the two tribes of the sons of Joseph, Ephraim and Manasseh; the tribes of Reuben, Gad, and half Manasseh being on the east of the Jordan. The tribes were kept distinct, each preserving its chief and elders, as in the nomadic constitution; but the worship of Jehovah was a common bond of union, which formed them into a federal state. The preservation of the confederacy and of the Mosaic law, was especially provided for by the distribution of the Levites (a caste of priests) in 48 cities throughout the country, and by making the high-priesthood (see *High-Priest*) hereditary in the family of Aaron. The judges (*sophetim*), who appear in times of emergency, delivering their country from the foreign yoke to which it was repeatedly subjected, were active and heroic military leaders, whose authority extended sometimes over a greater, sometimes over a less number of tribes, according to circumstances, and ceased with the cessation of the danger. Disobedient to the command of Moses to exterminate the former inhabitants of the soil, the Hebrews were often false to their God and their theocratic constitution; and their folly, if not impiety, was punished by internal disorders, and subjection to the hated and despised heathen. During eight years, they were oppressed by the Mesopotamian king Cushan-Rishathaim, from whose yoke they were delivered by Othniel; eighteen years of Moabitish and twenty of Canaanitish servitude (from which they were delivered by the heroic exertions of Deborah), were followed by seven years of devastation by the wild Midianites, who were destroyed by Gideon. Jephtha, a captain of freebooters, expelled the Ammonites, who had overrun nearly the whole country, and offered up his daughter as the price of the deliverance. The incursions of these Bedouin hordes were desolating, but transient. The longer oppression of the Philistines, to which even the strength and courage of Samson could not put an end, was accompanied with the captivity of the ark of the covenant, and seemed to threaten the destruction of the state. But Samuel (q. v.), at once a prophet and a judge, restored the worship of Jehovah, reformed the manners of the people, and forced the Philistines to evacuate the country. His design of rendering the judicial dignity hereditary in his family, was frustrated by the corrupt character of his sons; and the nation demanded a king. Samuel nominated Saul, a youth of a tall person, but of no political importance, to the throne, and a formal constitution was drawn up for the new monarchy, and deposited in the ark.—III. *Period of the Monarchy from* 1100 *to* 600. 1. *The Jewish State as one Kingdom, from* 1095 *to* 975. The king was little more than the military leader of the nation, bound to act according to the commands of Jehovah, without a court or permanent residence. The nation was still a mere agricultural and pastoral people, without wealth or luxury, but gradually acquiring a more warlike character. Saul (q. v.) gained some victories, and was acknowledged king at an assembly of the people, in which Samuel resigned his dignity of judge. But the victorious monarch was unwilling to submit to the dictation of the prophet, and ventured to consult Jehovah himself. The offended Samuel secretly anointed another king, the young shepherd, David, son of Jesse, who finally succeeded to the Hebrew throne on the death of Saul. He was at first acknowledged only by his own tribe, that of Judah. The eleven other tribes declared for Ishbosheth, son of Saul. On the death of the former, however, David became king of the whole nation. His reign (1055—1015) is the era of an entire change in the constitution of the state and the condition of the nation. By his brilliant victories over the Jebusites, Philistines, Amalekites, Idumæans, Moabites, Ammonites and Zeba, the state received large

additions by way of conquest, and his kingdom extended from the Euphrates to the Mediterranean, and from Phœnicia to the Arabian gulf. A new residence was fixed at Jerusalem, which was intended to be the seat of a national sanctuary. The strict observance of the worship of Jehovah, as the exclusive national worship, was maintained; commerce was established, and the general cultivation of the nation promoted. At the same time, the foundation was laid for the future disunion and final decline of the state: for although the nation, during his reign and that of his son Solomon (q. v.), reached the highest point of its power and prosperity, the excessive splendor of the religious worship appealed too much to the senses, and the introduction of foreign manners and customs enervated the national character and the moral simplicity of the people; too many of the conquered nations revolted, and the jealousy entertained by the other tribes of the ruling tribe, and the discontent of the people with their increasing burdens, afforded too many subjects of dissension, to allow of the long continuance of this golden age of Israel. The reign of Solomon (1015—975) was the splendid reign of an unwarlike, ostentatious, but cultivated monarch. The government was administered from the interior of the seraglio. The kingdom was organized anew for the maintenance of a luxurious court. (For an idea of the luxury of the Jews, consult professor Hartmann's *Die Hebräerin am Putztische.*) Foreign commerce was carried on as a monopoly of the crown, and a costly temple and palace were erected in the royal residence. But while the metropolis grew rich, the country was impoverished and oppressed by the profuse expenditures of the court. The gradual internal decline was hastened by the introduction of the worship of foreign gods, and Syria, which had been gained by conquest, was lost. Rehoboam was so little able to avert the threatening storm, that he succeeded to the government of only two tribes, Judah and Benjamin; the ten other tribes formed the kingdom of Israel under Jeroboam.—2. *The Jewish State as a divided Kingdom;* 975—588. The capital of Israel was at first Sichem, afterwards Samaria; that of Judah was Jerusalem. Although Israel was larger and more populous, Judah was richer, and in possession of the national temple and the priesthood, so that the power of the states was nearly equal, and the contest between them obstinate. The kings of Israel endeavored to confirm the political division of the nation by establishing a sanctuary in their own territory, and prohibiting their subjects from visiting the ancient national sanctuary in Jerusalem. They were therefore denominated enemies of Jehovah. Even in the kingdom of Judah, some of the kings introduced the service of other gods. But oppression itself preserved the worship of Jehovah. The number and political importance of the prophets increased, the more the oracles of God were rendered necessary by troubles. The notion of a future period of prosperity under a powerful king, the idea of a Messiah and his kingdom, was continually more and more developed and cherished. The jealousy and wars between the two kingdoms not only continued with little interruption, but were rendered more dangerous by connexions with foreign princes, particularly with the kings of Damascus and Egypt, until these feeble states were destroyed by the more powerful empires of Asia. The kingdom of Israel survived the separation 253 years, under 19 kings of different houses, who succeeded each other by means of violent revolutions. Shalmaneser, king of Assyria, took Samaria, the capital, and put an end to the kingdom of Israel, carrying away the inhabitants captive into the interior of Asia, B. C. 722. The kingdom of Judah existed, under 20 kings of the house of David, until 588. The throne passed successively from father to son, and the succession was only twice interrupted, by the usurpation of Athaliah and by foreign interference. Jehosaphat (914—891) restored the worship of Jehovah. Hezekiah, in whose reign Isaiah prophesied (728—699), delivered his country from the tribute which Tiglath-Pileser had exacted in the reign of his predecessor. During the reign of Manasseh (699—644) the worship of the Phœnician Baal was introduced, and the laws of Moses fell into oblivion. Josiah (642—611) restored the temple and worship of Jehovah, recovered the lost book of the law, and introduced strict reforms according to it. In 606, Nebuchadnezzar rendered the country tributary to Babylon, and on a third invasion, in consequence of an attempt to throw off the Babylonian yoke, took Jerusalem (588), and carried away the inhabitants, who had been spared on his second campaign. After their return from the captivity, the name of *Hebrews* gives way to that of *Jews*, under which head their history will be continued. (See *Hebrew Language and Literature.*)

Hebrew Language and Literature. The influence which the monotheism of the Hebrews has exerted over the civilization of the human race, through Christianity and Mohammedanism, gives to the old national documents, in which this religion has come down to us purer than in the worship of their descendants, the Jews, a universal historical importance. Hebrew literature, therefore, independently of its containing the records of a divine revelation, possesses a peculiar scientific interest. It surpasses in antiquity, general credibility, originality, poetic strength and religious importance, that of any other nation before the Christian era, and contains most remarkable memorials and trustworthy materials for the history of the human race, and its mental developement. Though the Hebrew is no longer to be considered as the original language of the human race (see Wahl's *General History of the Oriental Languages*, &c., Leipsic, 1784), yet it is evidently one of the oldest of the Shemitish languages (the Chaldee, Aramæan, Hebrew, Syriac, Arabic, Phœnician and Æthiopian, so called on account of the supposed descent of these different nations from Shem, the son of Noah). In its formation, the following periods are to be distinguished: 1. from Abraham to Moses, when the old Aramæan stock was changed by the influx of the Egyptian and Arabic; 2. from Moses, or the composition of the Pentateuch, to Solomon, when it attained its perfection, not without being influenced by the Phœnician; 3. from Solomon to Ezra, when, although increasing in beauty and richness, it became less pure, by the adoption of foreign ideas and idioms; 4. from Ezra to the end of the age of the Maccabees, when it was gradually lost in the modern Aramæan, and became a dead language. Traces of different dialects appear about the end of the third period; for after the captivity, the old Hebrew, the language of the manuscripts of the Old Testament that have come down to us, was distinguished under the name of *Jehudit*, that is, the Judaic language, from the Samaritan and Aramæan. The Hebrews had characters or letters as early as the beginning of the third period, until the captivity. Their written characters were the same as the Phœnician, to which the letters of the Samaritan manuscripts approach the nearest. During the Babylonish captivity, they received from the Chaldees the square character in common use; and in the time of Ezra, the old Hebrew manuscripts were copied in Chaldee characters. This character, according to some, had originally three vowel-points; but the position that the written vowel signs are of recent date, is now admitted by all critics of any note. The punctuation was not settled before the 7th century of the Christian era. (See *Masora*.) The introduction of the accents, and the division of the words, were also innovations of a late period. Thus the external form of the text had undergone many changes; and, as some critics believe, the contents of the books which now compose the Old Testament, cannot have come down to us perfectly unchanged. Moses, they say, wrote upon stone; for a long time after him the Hebrews appear to have engraved whatever they wished to perpetuate, only upon stone, brass or wood, and not to have used, before the time of Samuel, and the school of the prophets established by him, any more convenient materials for writing, such as linen or papyrus, which alone, according to our ideas, could have made the origin of a literature possible. And even at this time, writing was very rare among all nations. Many books of the Old Testament, for example, the books of Moses, the book of Job, and some of the Psalms, evidently indicate an earlier origin. The supposition cannot therefore be avoided, that only their principal points were in part written by the authors to whom they are ascribed, and in part handed down by oral tradition, and that they were afterwards revised by later hands, completed from tradition, and collected into that form in which they now exist. The same is true in regard to the greatest part of the remaining books of the Old Testament, the composition of which, according to general opinion, belongs to the age before the captivity. The genuineness of the form, in which we possess them, can therefore be allowed only in a limited sense, by the Orientalists of our times. In this view, not only the arrangement, but much of the contents of the old Hebrew writings, especially the historical, must be considered as more or less the work of a later period than they were formerly considered to belong to. But the genuineness of the facts which they relate, and of the spirit which is peculiar to these books, can by no means be rendered doubtful by this circumstance. The scrupulous conscientiousness and veneration, with which the Hebrews regarded their sacred writings, even to the minutest particulars, must free them from the slightest suspicion of any arbitrary additions or alterations, even if it were not for the internal evidence derived from the

peculiar character of each book, which is abundantly decisive of their genuineness. That much must have been lost from the treasures of Hebrew literature, which was very rich, particularly in the age of Solomon, is evident from passages in the Old Testament itself. But whatever, in the small part which we possess, has relation to the history of the Hebrews and religion, belongs, as to its substantial, historical and religious contents, to the epochs to which it relates. Hence the succession of the different ages, into which the history of the Hebrews is divided (1. patriarchal, the first covenant with God; 2. Moses and the giving of laws (*Thorah*); 3. heroic ages under the judges, the theocratic republic; 4. the reign of David and Solomon, the theocratic monarchy; 5. the prophets, the contest of theocracy with monarchy; 6. the Babylonish exile; 7. the age after the return from captivity), appears in the gradual developement of the spirit which breathes through their writings. The supposition of these works having been committed to writing at a comparatively late period, still remains good in this view. When, from the first period, the accounts contained in Genesis (see *Patriarchs*, *Abraham*, *Isaac*, *Jacob*, *Joseph*), from the second, the laws inscribed by Moses on stone, the fuller rules for the worship of God and the constitution of society, the historical accounts and hymns delivered by oral tradition (see *Moses*), and from the third, similar accounts (the contents of the books of Joshua, Judges, Ruth) had come down to the fourth period, the historical and poetical materials (the Pentateuch, or the five books of Moses, Joshua, Judges, the books of Samuel) were reduced to writing, and new poetical creations arose. The Hebrew authors would find strong impulses to poetry in the pastoral life of their patriarchs, the beautiful and grand scenery of their country, in the wonderful history of their nation (their deliverance from Egyptian bondage, their struggles with nature and with hostile hordes during the forty years' wandering in the desert, and the wars under the judges), in the practice of singing at divine worship, in their passion for music, strengthened by this circumstance, and in the existence of an order of prophets (teachers and poets). (See Lowth, *De Sacra Poesi Hebræorum*, translated into English, and Herder's Spirit of Hebrew Poetry, 3d edition, by doctor Justi, in 2 volumes, Leipsic, 1825, a work of greater originality.) Poetry was the foundation of their literature. Lyric poetry prevailed under David, who was equally successful in song and elegy; didactic poetry under his successor, when attempts were likewise made in pastoral (Ruth) and the shorter epic. (See *David*, *Psalms*, *Solomon*, *Solomon's Song*, *Job*.) Strong religious feeling distinguished the spirit and subject of these poems. Never has the reverence for Jehovah's laws been displayed in a more lively manner than in the holy songs of David's time. On the contrary, Solomon, in his actions as well as in the writings which bear his name, inclines evidently to a philosophic and even worldly indifference, very remote from the Israelitish character. After the division of the kingdom, religion and literature alone preserved a residue of national vigor, and the prophets now became the instructers and comforters of this morally and politically degraded people, until the unfortunate time of the Babylonish captivity; before which, under the kings, lived Jonas, Joel, Amos, Hosea, Isaiah, Micah, Obadiah, Nahum and Habakkuk. During the captivity flourished Jeremiah, Ezekiel, Daniel, Zephaniah; and at the time of the return, Haggai, Zachariah and Malachi. (For the circumstances of their lives, and the peculiar spirit of the writings which are known under their names, see *Prophets*, and the separate articles, *Isaiah*, *Jeremiah*, &c.) These writings are, for the most part, later collections of their actions, discourses and prophecies, the unequal extent of which has given occasion to the distinction of the *great prophets* (Isaiah, Jeremiah, Ezekiel and Daniel) and the *minor prophets*. We have not even the works of the former complete, and evidently but fragments of the latter. The period of the restitution of the Mosaic institution after the return from the captivity, was of the highest importance to the Hebrew literature, as Ezra established the great synagogue—a college of 120 learned men, to collect the ancient treasures; and Nehemiah, soon after him, preserved this or a new collection in the temple. (See *Jews*.) The design of these reformers, to give the Jews a religious canon in their old national writings, induces us to believe that they engaged in the work with the greatest fidelity to the old Mosaic institution; and it is certain, that the canon of the Old Testament, in the time of the Maccabees, was the same, as to the number and order of the books, as at present, and that the present division into historical, poetical and prophetic, was then observable. To the historical belong, besides those collected in the time of Da-

vid and Solomon, the books of the Kings and the Chronicles, which were compiled after the captivity, from the old annals of the kings, and the books of Ezra and Nehemiah. To the poetical belong Job, the Psalms, Solomon's Proverbs, Song and Ecclesiastes, the elegies called the Lamentations of Jeremiah, the book of Esther and the idyl of Ruth. The prophetic embraces the writings of the abovenamed four great and twelve minor prophets. The Mosaic religion is the all-prevailing soul of this literature. As, in the historical books, the selection and arrangement of the matter seem to depend upon the theocratic nature of the religion, and the religious feeling breathes throughout the poetical; so, likewise, anger and grief for the degeneracy of the people, threats against their apostasy, and consolations for the pious, are mingled in the prophetic writings. The promise of an anointed Messiah, who should raise the nation from its degradation, and restore the happy age of David, spreads through the productions of the prophets. But in the prophets who flourished during and after the Babylonish captivity, the influence of Chaldæan dogmas, which were derived from the precepts of Zoroaster, and many alterations, which the peculiar notions of the Jews underwent in consequence of their destiny and their intercourse with foreign nations, are perceptible. (See Gesenius, *Geschichte der Hebr. Sprache und Schrift*, Leipsic, 1815.) The best German grammars of the Hebrew language are those of Michaelis, Güte, Hezel, Pfeiffer, Jahn, Wezel, Vater, Wekherlin, Hartmann and Gesenius (q. v.); the best in English is by professor Moses Stuart. There are Hebrew and German lexicons by Castelli, Coccejus, Simonis, Michaelis, Schulz, and a later and more excellent one by Gesenius (translated by J. W. Gibbs, Andover, 1824). The translation has been reprinted in London. An abridgment by Mr. Gibbs was printed at Andover, 1828. (See *Jews*, *Hellenists*, *Septuagint*, *Rabbinical Language and Literature*, and *Cabala*.)

Hebrides, or Western Islands; a cluster of islands, situated on the western coast of Scotland, in the Atlantic ocean. They extend about 180 miles in length, from 58° 35′ N. lat. to 55° 22′; and they are from 10 to 30 miles in breadth. They contain, as nearly as can be computed, 2,000,000 of English acres. The principal islands are Lewis and its adjacent islands, belonging to Ross-shire; Harris, North Uist, Benbecula, South Uist, Sky, Barra, Eigg, and the smaller neighboring islands, attached to Inverness-shire; and Rum, Muck, Canna, Coll, Tyrie, Mull, Lismore, Staffa, Luing, Scarba, Colonsay, Oronsay, Jura, Isla, Gigha, Cara, &c., belonging to the shire of Argyle. To these we may add those islands which lie in the Frith of Clyde, to the eastward of the peninsula of Kintyre, viz., the isles of Bute, Arran, Cambrays (Greater and Lesser), and Inchmarnock, which form the shire of Bute. The various tracts of ground and clusters of rocks, thus detached from the main land, are estimated to amount to 300, of which 86 are inhabited, and are calculated to contain 70,000 inhabitants. They were ruled by their own independent princes until the 8th century, when the Pictish kingdom was overthrown by Kenneth II. They continued, during the 10th, 11th and 12th centuries, the haunts of pirates, who infested the neighboring countries; and when they came under the dominion of the kings of Scotland, their chieftains were long lawless and turbulent. The act of parliament of 1748, abolishing all heritable jurisdictions, gave the final blow to the influence of the independent chieftains of the Western Isles. (See MacCulloch's *Descriptions of the Western Islands;* London, 1819.)

Hebrides, New; a group of islands in the South Pacific ocean, discovered by Quiros in the year 1506. In 1773, captain Cook surveyed this group, and gave to the whole the appellation of *New Hebrides*, from considering them to be the most western islands of the Pacific ocean. They are situated between lon. 166° 41′ and 170° 21′ E., and lat. 14° 29′ and 20° 4′ S., extending 125 leagues, in the direction of N. N. W. ½ W. and S. S. E. ½ E. These islands are fertile, producing figs, oranges, bananas, the bread fruit and the sugar cane. The only quadrupeds observed in them are rats and swine. The inhabitants are of different races, but in general are less pleasing than those of the other islands of the Pacific. Like other inhabitants of the tropical regions, they are active, but impatient of labor. They are of a dark complexion, and have black, short, frizzled hair.

Hecate; the daughter of Tartarus, or, according to some, of Night. Others call Jupiter her father, and Juno, or Ceres, or Asteria, or Phocæa, a daughter of Æolus, her mother. She was the infernal goddess, who presided over magic. Juno having committed the care of her education to the nymphs, she stole the paint-box of the queen of the gods, and gave it to Europa, the daughter of Phœnix. When

Juno was about to punish her, she fled to a woman in childbed, and afterwards to a funeral procession. Jupiter caused her to be plunged into the pool of Acheron, by the Cabiri, for the purpose of purification; and from that time she became an infernal goddess. Various accounts are given of her. Hesiod says, her power extended over the earth and sea; she had a place among the stars, and enjoyed peculiar honor with the gods. She gave fame and wealth to her favorites. She made the warrior victorious, sat by the judge to aid him in his decisions, strengthened the *athlete*, blessed the labors of the fisherman and the herdsman, and promoted the growth and progress of the young. All the magic powers of nature were at her command. She afterwards became the symbol of the moon, and was then the same as Diana; but her authority extended to the infernal world, whence she was called the *Infernal Diana*. As a goddess of the lower regions, she is generally called *Hecate;* in heaven, *Luna;* and on earth, *Artemis* or *Diana*. Magicians and witches prayed particularly for her aid. Sacrifices used to be offered to her, at places where three ways met, especially dogs. Her mysterious festivals were celebrated annually at Ægina. Her appearance was frightful. She had serpents' feet, and serpents hung hissing around her neck and shoulders. In reference to her threefold relations, she was painted with three faces or three heads; hence called *Triformis*. With the progress of the fine arts, she was represented only with the three faces of the virgin Diana. Various figures of her are found on gems.

Hecatomb (from the Greek ἑκατον, a hundred, βους, oxen); at first, signifying a sacrifice of a hundred oxen; afterwards, of a hundred beasts of any sort. Thus Homer speaks of a hecatomb of lambs. Some explain the word as a poetical figure, denoting, in general, a sacrifice of many victims.

Heckewelder, John, reverend, was born in Bedford, England, March 12, 1743. His father, a member of the society of United Brethren at Herrnhut, went to England, in the prosecution of plans for communicating the gospel to heathen nations, and, in 1754, removed to Pennsylvania, with his family. At that time, John was in his 12th year, and had been brought up to the trade of a cooper and joiner. When but nineteen, he accompanied Mr. Post in the perilous expedition upon which he was sent, by the government of Pennsylvania, to attempt to conciliate the hostile Indian tribes on the Ohio (in 1762). The interest he took in the aboriginals was great, and this expedition made them the principal object of his thoughts. In the year 1771, he entered among them as a missionary, and, for a long series of years, devoted himself entirely to that benevolent, and, at the time, dangerous calling. In common with his brethren, he suffered all the horrors which the revolutionary war entailed upon the Christian Indian flock, and which almost annihilated the fruit of forty years' labors. Until the year 1786, he followed the wrecks of that once flourishing community, and then returned to Bethlehem, in Pennsylvania. He had acquired, during this period, a perfect knowledge of the Delaware language, and an extensive acquaintance with Indian affairs generally. On that account, he was several times requested by president Washington to accompany missions to the western Indians, to induce them to adopt pacific measures. In 1797, he went to reside in Ohio, in order to superintend the management of the lands granted by congress on the Muskingum, to the remnants of his former Indian congregation. There he remained until 1810, when he finally took up his residence at Bethlehem. He wrote a Narrative of the Mission of the United Brethren among the Delaware and Mohegan Indians, and contributed largely to the first volume of the Transactions of the Historical and Literary Committee of the American Philosophical Society, of which he was a member. Many manuscripts of his are now in the possession of that society, and some of them are soon to be published. He also wrote several pamphlets and books in the German language. He died in 1823.

Hecla; a volcanic mountain, about 5000 feet high, in the south-western part of Iceland. At the foot of the mountain is the river Wester Rangaa, the bed of which consists of large masses of lava. The nearest inhabited place is the farm Naifurholt. Hecla has three summits, of which the central is the highest. The whole consists of volcanic masses, loose grit and ashes. The crater is not much over 100 feet deep. Since 1004, 24 eruptions are said to have taken place, of which the latest were those in 1766, in 1818 and in 1823. A hot vapor issues from various small openings near the top; and the thermometer, which in the air stands below the freezing point, will rise, when set on the ground, to 120, or even 150 degrees. Sir Joseph Banks visited the mountain in 1772, and sir George Mackenzie in 1810.

From the summit there is an extensive view, two fifths of the island being visible, as the country is level, except where a *jocul*, or glacier, intervenes. (See *Iceland*.)

Hector; the son of Priam and Hecuba, the bravest of the Trojans, whose forces he commanded. His wife was Andromache, the daughter of Aëtion, king of Cilicia, by whom he had Astyanax or Scamander, and, according to some, Laodamas and Amphinous. His exploits are celebrated in the Iliad. He encountered the Grecian heroes in battle, and often gained advantages over them. His words and example animated the Trojans with new courage whenever their strength failed: in council, he recommended perseverance, unity, and contempt of danger. By his presence, Troy was invincible. But when he had slain Patroclus, the friend of Achilles, the latter, forgetting his dispute with Agamemnon, resumed his arms to avenge the death of his beloved companion. Pierced by the spear of Achilles, the body of Hector was dragged at the chariot wheels of the conqueror, and afterwards delivered to Priam for a ransom, who gave it a solemn burial. Hector is, indisputably, the finest hero in the Iliad. Inferior to no one in valor, he fell by the hand of Achilles, not from want of courage, but because he had entered the contest wearied with a protracted battle, and faint with wounds, and trusting to the aid of Deiphobus, under whose form Minerva deceived him. In humanity, Hector stood alone. One of the finest episodes in the Iliad, is the relation of his parting from Andromache, where he expresses the best feelings of a prince, a husband and a father.

Hecuba (Greek Ἑκαβη), a daughter of Dymas, king of Thrace; according to some, of Cisseus, or of the river Sanagrius and Metope. She was the second wife of Priam, king of Troy, to whom she bore Hector and Paris. While pregnant with the latter, she dreamed that she brought a torch into the world, which consumed all Troy. The explanation of this dream, given by the soothsayers, was, that her son should occasion the ruin of the kingdom. He was consequently exposed, but miraculously rescued from death. Hecuba afterwards became the mother of Creüsa, Laodice, Polixena, Cassandra, Deiphobus, Helenus, Pammon, Polites, Antiphus, Hipponous, Polydorus, Troïlus. After the conquest of Troy, the unhappy princess fell to the share of Ulysses, as a slave. Rendered desperate by this misfortune, she exasperated the Greeks by her reproaches, and was at last stoned to death by them. Under the stones, instead of the body of Hecuba, was found that of a dog. The old tragedians represent her on the stage as a tender mother, a noble princess, and a virtuous wife, subjected to the most cruel destiny.

Hedgehog (*erinaceus*, Lin.). These quadrupeds are distinguished by having the body covered with spines, instead of hair. The skin of the back is provided with muscles, which enable the animal to roll itself up in the form of a ball. The tail is very short, and the feet furnished with five toes. There appear to be but two species well ascertained; the third, given by Desmarest, being founded on a short description by Seba, which may possibly belong to an animal of another genus. The best known is the common hedgehog (*E. Europæus*), a native of most of the temperate parts of Europe and Asia. This species has a long nose, the nostrils bordered on each side by a loose flap; the ears are short, rounded, naked and dusky; the upper part of the face, sides and rump covered with strong, coarse hair, of a yellowish ash color, the back with sharp, strong spines, of a whitish tint, with a bar of black through their middle. They are usually about 10 inches long, the tail about one. Their usual residence is in small thickets, and they feed on fallen fruits, roots and insects; they are also fond of flesh, either raw or roasted. Pallas remarks, that they can eat hundreds of cantharides, without suffering from them, whilst a single one of these acrid insects will cause the most horrible torments in dogs or cats. It has been asserted, that they mount fruit-trees, and come down with apples, pears, &c., stuck upon their bristles. This is equally false with the imputation that they suck cows, and injure their udders. Mr. White observes, that the manner in which they eat the roots of the plantain is very curious. With their upper mandible, which is much longer than the lower, they bore under the plant, and gnaw off the root upwards, leaving the tuft of leaves untouched. The hedgehog defends himself from the attacks of other animals by rolling himself up, and thus exposing no part of his body that is not furnished with a defence of spines. It may be rendered domestic to a certain degree, and has been employed in Europe to destroy cockroaches, which it pursues with avidity. In the winter, the hedgehog wraps itself up in a warm nest, composed of moss, dried hay and leaves, and remains torpid till the return of spring. The fe-

male produces four or five young at a birth, which soon become covered with prickles. These animals are sometimes used as food, and are said to be very delicate. The skin was formerly used for the purpose of napping cloths. The long-eared hedgehog (*E. auritus*) is smaller than the common, and is distinguished by the great size of its ears; in its manners, it is said to be similar to that species. The female produces twice each year, having six or seven young at a birth. This species inhabits from the northern part of the Caspian sea to Egypt.

Hedlinger, John Charles, the most celebrated die-cutter of his age, was born at Schweitz, in 1691, and, while a boy, manufactured graving tools for his own use. At his own request, his father placed him with the director of the mint, Cramer, to learn the art. In 1717, Hedlinger went to Paris, and was intrusted with the execution of some works, which gained for him the notice of the king of France. At that time, baron Gőrtz was in Paris, having been commissioned by Charles XII, among other things, to select artists who might be prevailed upon to go to Sweden. Hedlinger accepted his proposals, and was made director of the mint, upon his own conditions. Charles XII soon after fell at Fredericshall, and Hedlinger honored his memory by the productions of his art. The favor manifested by Charles towards Hedlinger was continued by his successor. On this account, the artist refused the offers of Peter the Great. He made a journey to Italy in 1726, and met there a distinguished reception. Benedict XIII conferred upon him the order of Christ, for a medal which the artist presented to him. After his return, the empress Anna repeated the invitation to come to Petersburg, in so pressing a manner, that Hedlinger at last, with the approbation of his court, went thither in 1735, and remained two years; after which he returned to Stockholm, loaded with honors. In 1741, he returned to his native country, and was married. He afterwards visited Sweden frequently, where the academy, in 1744, elected him one of its members, and the king honored him with new dignities; but, in 1745, he left Sweden forever. On his last voyage from that country, he lost his property, which was in another vessel, by shipwreck; the consequences of which would have been very distressing, but for the kindness of the king of Sweden. Hedlinger henceforth lived in peaceable employment in Schweitz, where he found consolation, in the society of a daughter, for the loss of a wife, whom he honored by some very splendid medals. He died in 1771. His works are distinguished by simplicity and correctness of design, and a softness which by no means injures the distinctness of them. They are, for the most part, happily designed. It is generally remarked, in Hedlinger's works, that there are greater endeavors to attain the elegance and precision of the French models, than to produce imitations of the ancients. A splendid work of Chr. de Mechel (*Œuvres du Chevalier Hedlinger, ou Recueil des Médailles de ce celebre Artiste*—Works of the Chevalier Hedlinger, or a Collection of the Medals of this celebrated artist, folio, Basil, 1775), contains elegant copies of his medals, and a well deserved eulogy of this excellent artist.

Heemskerk, Martin van, a Dutch painter, born in 1498, at the village of Heemskerk, from which he derived his name, was the son of a mason, of the name of Van Veen, who at first placed him with a painter at Haerlem, but afterwards took him home, to learn his own trade. The young Martin returned to his father's house unwillingly, and seized the first opportunity of leaving it again. He then went to John Lucas, a painter of some celebrity at Delft; but, finding that his master did nothing for him, he placed himself under the direction of J. Shoreel, a celebrated artist, who had brought from Rome and Venice many valuable studies. Heemskerk now made such rapid progress, that his master, fearing to be eclipsed by him, sent him away. He then executed his picture of St. Luke painting the blessed Virgin and the child Jesus, and presented it to the corporation of painters at Haerlem. This picture had great success. Heemskerk afterwards visited Italy, remained there about three years, forming his taste on ancient models, and enjoyed the instructions of the celebrated Michael Angelo, who, at that time, was enriching the capital of the Christian world with the works of his pencil. When he returned to Holland, some of his admirers lamented that they no longer found in his pictures the charms which had delighted them; but connoisseurs knew how to appreciate the progress which he had made in the art of drawing, and his improvement in taste. His apartments were soon filled with scholars, and in a short time he became rich. A great part of the now rare works of this diligent and prolific artist were lost, in 1572, at the capture of Haerlem, where his own house was like-

wise destroyed. Heemskerk's drawing is firm and accurate, but his outlines are without elegance or grace; his drapery is stiff, and overloaded with folds, and his heads want dignity. He is chiefly indebted for his fame to his knowledge of anatomy, in which he endeavored to imitate Michael Angelo. He died at Hearlem, 1574.

Heeren, Arnold Hermann Lewis, professor of history at Göttingen, knight of the order of Guelph, &c., was born October 25, 1760, at Arberg, near Bremen, where his father was a preacher. He was educated principally at the cathedral school in Bremen and the university of Göttingen. He visited Italy and the Netherlands, and spent two months at Paris. In 1787, he was appointed extraordinary, and in 1794, ordinary professor of philosophy at Göttingen, and, in 1801, ordinary professor of history. He was also chosen fellow of literary academies at Paris, Münich, Copenhagen, Berlin, &c. This historian has investigated the most important periods of the political existence of the ancient and modern nations with great sagacity, and has portrayed them with great perspicuity. It did not escape him, that many of the revolutions of the Greeks and Romans had been rendered much more intelligible by the events of our times. For this reason, his Manual of the History of the Ancient States, which appeared in 1818 (translated into English by Mr. Bancroft, Northampton, 1828), is so rich in references. The colonial system now became more important than ever in European policy, and he gave a more complete sketch of it than had ever before appeared, in his Manual of the History of the System of the European States and their Colonies (of which the 4th edition appeared in 1822), which was brought down to 1821 (translated into English by Mr. Bancroft, 1829). In his Ideas on the Commerce and Politics of Antiquity, which appeared in 1805, he has investigated the commercial channels of the ancient nations, with an ingenuity and freedom hitherto unknown. His History of Classical Study (1797—1802) has less merit; for a work of this kind must be the essence of the most profound erudition. He obtained the prize from the French national institute for his Inquiries concerning the Crusades, which shows an intimate knowledge of the middle ages. A collection of his Historical Works has appeared, in two parts. The first was published at Göttingen, in 1821, in nine volumes. The first volume contains a biographical sketch of Heeren, by himself. Of the second, three volumes appeared at Göttingen in 1824, and three volumes in 1826, forming the 4th edition of the 1st part of his Ideas, of which the second part appeared in 1829. Mr. George Bancroft has translated the part which relates to Greece into English. They have also been translated into French.

Hegel, George William Frederic, ordinary professor of philosophy at Berlin, was born at Stuttgard, Aug. 27, 1770. His father was secretary to the ducal chamber, and provided carefully for his education. Intimate with the classical writers of ancient and modern literature, as well as with the (so called) philosophical views on religious dogmas, he entered the university of Tubingen in his 18th year, where he devoted five years, in the theological foundation, to philosophical and theological studies. He attended particularly to the philosophical lectures; but in metaphysics, as it was then taught, did not find a satisfactory explanation of our inward operations. This impelled him to study the writings of Kant. In connexion with philosophy, he also applied himself zealously to the natural sciences, as well as to mathematics and physics. To obtain a knowledge of the world, which began to be agitated with mighty convulsions, he went as a private teacher to Switzerland, and thence to Frankfort on the Maine, &c. Some property, which fell to him at the death of his father, enabled him to go to Jena to pursue the idea of philosophy, which he had formed. He wrote there *Ueber die Differenz der Fichte'schen und Schelling'schen Philosophie*—On the Difference between the Philosophy of Fichte and Schelling (Jena, 1801)—and published, with Schelling, the *Kritische Journal der Philosophie*—The Critical Journal of Philosophy (Jena, 1802). He also began to deliver lectures as a private teacher, and was appointed, in 1806, professor extraordinary of philosophy. At this time, he was employed in preparing a work to exhibit his peculiar views in philosophy. It appeared as a *System der Wissenschaft*—System of Science (1st vol., Bamberg, 1807). In the night before the battle of Jena, he finished the last pages of the manuscript. After this catastrophe, he went to Bamberg, where he remained till he was appointed, in the autumn of 1808, by the Bavarian government, rector of the gymnasium of Nuremberg, and professor of certain branches of philosophical science. While he held this station, he completed the *Wissenschaft der Logik*—Science of Logic—which forms the first part and

foundation of his philosophical system. The first part appeared in 1812, the third and last in 1816. In the autumn of the latter year, he was invited to Heidelberg, as professor of philosophy. Here he wrote his *Encyklopädie der Philosophischen Wissenschaften*—Encyclopædia of the Philosophical Sciences (Heidelberg, 2d ed. 1827)—intended to give the public, and especially his hearers, a short view of his course and method in philosophy. From Heidelberg, he was invited to Berlin, in Fichte's stead, and entered upon his office in the autumn of 1818. Here he has published his *Grundlinien des Rechts oder Naturrecht und Staatswissenschaft in Grundrisse*—Elements of Right, or the Basis of Natural Law and Political Science (Berlin, 1821). (See *Philosophy*.)

Hegira (*Hedschra*); an Arabic word signifying *flight*. The Mohammedans designate, by this word, the flight of Mohammed, their prophet, from Mecca to Yatreb (Medina), which latter place was, in consequence, called *Medina al Nabi*, that is, the City of the Prophet. From this flight, which they fix on the 16th of July, A. D. 622, they begin their computation of time. The reduction of the years of the Hegira to the corresponding period in the Christian computation, where strict accuracy is not required, may be performed as follows: Since the Mohammedan year is a lunar year of 354 days, 33 Mohammedan years amount to about 32 Christian or tropical years. We must, therefore, subtract from the number of Mohammedan years, one for every 33 years, and add thereto 622 years. Thus, for example, the year 1000 of the Mohammedan reckoning will correspond to the year 1593 of the Christian; and the year 1830 after Christ is equivalent to the year 1246 of the Hegira. (See *Epoch*, and *Æra*.)

Heiberg, Peter Andrew, a political and dramatic writer, born in Denmark, in 1758, distinguished for his talents and his knowledge of the ancient classic and modern languages, lived in Copenhagen till 1800. On account of some writings, partly of a political nature, he was banished from his native country. He went to Paris, and, during the reign of Napoleon, was employed in the bureau of foreign affairs. After Napoleon's abdication, he resigned, or was dismissed from his post, and continued to reside in the capital of France. As a dramatic poet, he has, after Holberg, given the greatest number of original comedies to the Danish stage, most of which were received with great applause. They are characterized by knowledge of men, by acuteness and wit; but his satire is oftener caustic than comic; and he sometimes paints his characters with strong and bright rather than with genuine comic colors. His two comic operas, the China-man and the Solemn Entry, both belonging to the low comic—the former set by Schall, the latter by Schulz—were very successful. But the best dramas of Heiberg belong to the higher comedy. His *Heckingborn* (in 5 acts) is distinguished by its well executed plan, interesting situations, original and free exhibition of characters, and was translated into German and English. He has more recently been employed in political and popular philosophical writings, especially in essays in the French journals on Danish literature. He wrote *Précis Historique de la Monarchie Danoise* (Paris, 1820). His work in Danish, on Capital Punishments (Christiana, 1821), maintains the necessity of the punishment of death. In his *Lettres d'un Norwégien de la vielle Roche* (Paris, 1822), an imitation of Junius, he exhibits the danger of altering the Norwegian constitution.

Heidegger, John James; a Swiss adventurer, who took up his residence in England, in 1708, and, obtaining a commission in the guards, was known in fashionable society, by the appellation of the *Swiss count*. An opera, entitled *Thomyris*, which he produced, meeting with success, gained him so much credit, that he was enabled to undertake the management of the opera-house, in London. In his conduct of that establishment, he was very fortunate; added to which, by giving concerts, masquerades, &c., under the patronage of the court, he gained a handsome income, which he expended in keeping a hospitable table and relieving the unfortunate. Heidegger was a great favorite with king George II, who often visited a villa which the Swiss had at Barnes, in Surrey. He was a sort of butt for the wits of his time; and, having a very peculiar visage, he is reported to have made a bet with lord Chesterfield, that he could not produce an uglier man throughout the metropolis, and to have won the wager. He died in 1749, aged 90.

Heidelberg; a city of the grand-duchy of Baden, equally distinguished for its charming situation and its university; at the foot of the beautiful Königstuhl, and on the left bank of the lovely Neckar, over which is a bridge 700 feet long, and from which a most superb view extends between high mountains, over the valley

of the Rhine, to the Vosges; 1¾ league from Manheim; lat. 49° 24′ 43″ N.; lon. 8° 41′ 46″ E.; 10,370 inhabitants. The city has rather an old appearance, but the walks are as various as they are beautiful. The view from the Königstuhl is one of the most enchanting on the Rhine, embracing many villages and cities, and distant chains of mountains. Here are four Protestant churches, one Catholic, and one synagogue. The university called the *Rupert-Caroline university* was founded in 1386, and is the oldest in Germany, after those of Prague and Vienna. It early adopted the Calvinistic doctrines, and took an important part in the reformation. In the 30 years' war, Heidelberg was taken by the Catholic general Tilly, in 1622; he carried off the library, and the university declined. Heidelberg was ceded to Baden in 1802, and a new era began in her university; the grand-duke Charles Frederic is considered its restorer. It has now an annual income of 66,000 guilders, and is divided into five departments—the theological, with three *professores ordinarii;* the legal, with five; the medical, with four; that of political economy, with five; and the philosophical, with seven. There are, besides, many *professores extraordinarii*, and lecturers. The library of the university contains, at present, 45,000 volumes. The university has two botanical gardens, a clinical institute, a lying-in hospital, &c. &c. In 1829, there were 600 students. Heidelberg also has some trade. There is a gymnasium for Lutherans, Calvinists and Catholics. We must not forget the famous tun in the cellar of the castle, made of copper, with iron hoops, and containing 600 hogsheads.

Heidelberg Catechism; a work of much celebrity in the history of the reformation. Frederic III, elector of the Palatinate, belonging to the Calvinistic church, caused it to be written, for the purpose of having a uniform rule of faith. The principal contributors were Zacharias Ursinus, professor of theology at Heidelberg (died 1583), and Caspar Olevianus, minister and public teacher at Heidelberg (died 1587). The Catechism was published in 1563, under the title Catechism, or Short System of Christian Faith, as it is taught in the Churches and Schools of the Palatinate. It has been translated into many languages. (See *Creed.*)

Heights, Measurement of. A knowledge of the relative heights of different parts of the surface of the earth, is not only an important part of physical geography, but is likewise practically useful, in connexion with agriculture and the application of the arts. A knowledge of the elevation of a country enables us to determine its climate, to lay out roads and aqueducts properly, and to guard against inundations. The geologist must, in the chart of the country which he wishes to describe, make divisions, according to the most prominent points; but, in order to do this, he must first have a knowledge of the measurement of altitudes. The military man, unless he is acquainted with the altitude of the points upon the chart before him, cannot form an accurate idea of the ground on which he is to execute his plan of operations. The topographer, who wishes to represent a country in plaster of Paris, clay, &c., must also be acquainted with all its elevations and depressions. It was, therefore, very important to invent a method for quickly and accurately determining heights, by a knowledge of the atmosphere, and by the use of instruments, particularly of the barometer and thermometer. As soon as it was discovered, that the air which surrounds our globe was possessed of gravity and elasticity, the operation of which had been perceived on the barometer, it was inferred that its effects on the barometer would be different at different heights in the atmosphere, and that these variations must follow a certain law. Efforts were made to discover this law by experiment. The barometer and thermometer were carried to known heights, observations were there made, and from these observations, rules were derived for finding the elevation of a place above the level of the sea. The famous Pascal (q. v.), upon the 19th of September, 1648, on the Puy de Dome, near Clermont, made the first experiment, the result of which he had already anticipated. It appeared that the barometer stood at the height of 26 French inches 3½ lines, in the garden of the monastery at Clermont, but at only 23 inches 2 lines upon the summit of the above-mentioned mountain. It followed as a necessary consequence, that the height of the column of mercury was diminished in the same proportion as the mass of the atmosphere which supported it in the barometer; and Pascal concluded that, by this process, we could determine whether two places were at the same height, or which of them was the higher, even though they were at a great distance from each other. Succeeding philosophers followed this idea; but the little success which they

met with at first, shows how many difficulties the subject presented, although it now appears so simple. They had the scales, but were unacquainted with the value of the weights. Barometrical admeasurements first acquired precision and accuracy with Deluc (1754). This philosopher distinguished the effects produced by heat, on the air and on mercury, from those which depend upon their weight; and the improvements which he made form an epoch in the history of the barometer. This history has been written by Pictet, who himself played an honorable part in it. Biot also published inquiries made for the purpose of perfecting the theory of barometrical measurements, and some tables to facilitate the calculations. Ramond, in 1809, devoted himself to this subject. In his works, which appeared at Clermont (1811), he has determined the conditions of a good observation; he has arranged and explained the circumstances which are peculiar to barometrical observations, in order that the effect of the state of the atmosphere on the correctness of the calculations may be known, that the amount of error may be estimated, and may be made use of for the advancement of meteorology. Since Deluc's discovery, the remarkable formula proposed by the author of the *Mécanique céleste* (vol. iv, p. 289) is the most distinguished discovery on this subject. (See Puissant's *Géodésie*, vol. ii, and Biot's *Astron.*, vol. iii.) He reduced to a certain point, in a more natural and simple manner, all the corrections which are to be made, on account of the influence of temperature, of moisture and gravity on the mercury and the air. He rested his theory on the most accurate data; but the coefficient which he had assumed, in order to represent the relation between the weight of the atmosphere and that of the mercury, appeared to have too little foundation: the formula was to be proved; the length of the columns to be substituted for their weight; many causes of errors remained to be ascertained; the coëfficient was to be improved, or, rather, a new one was to be determined. Ramond has done all this. By a comparison between barometrical observations, and actual measurements of the heights where the observations were taken, he has determined the coëfficient, as it is contained in Laplace's last formula. Ramond and many other observers have shown, by experiment, that this formula is not only adapted to small as well as great heights, but is also useful in taking measurements under the surface of the earth. Barometrical observations may attain great accuracy, when they are made with good instruments, by good observers, and under favorable circumstances. In order to ascertain the relative height of two points, two barometers and four thermometers are requisite; two of the thermometers being attached to the barometers, and two of them being free. These instruments must be as simple as is consistent with convenience and accuracy; and they must agree perfectly. The observers must be well acquainted with their instruments, in order to be able to use them; and it is particularly necessary that they should know on what the observations depend. If two or more observers undertake to ascertain the elevation of a place or country by barometrical measurement, they must attend especially to the following particulars:—*a*, that the instruments hang perpendicularly, protected from the sun, and that the free thermometers be raised, at least, nine feet from the ground, and from any objects which might have an influence on their temperature; *b*, the barometers should be accurately regulated, and the degree at which the mercury stands in the barometer and thermometer should be carefully noted; and, *c*, after the instruments are made to correspond, the observations should be made contemporaneously: finally, the observer must be particularly careful to note the state of the atmosphere. Observations should not be taken in stormy weather, or when the quicksilver in the barometer is liable to sudden variations; moderate weather, when the atmosphere is either calm, being clear or cloudy, or when there is a light wind, is the most suitable time for making observations. The instruments should not be at too great a distance from each other. The greatest intervening space should not exceed 90 miles. If these general rules for measuring heights by the barometer are attended to, it is far preferable to every other instrument, to ascertain, expeditiously, the height of a mountain, the descent of a river, &c., for a certain space; the relative height of different points, the depth of a cavity, and the thickness of the strata of a mountain. We cannot, indeed, ascertain the fall of a river to an inch by barometrical measurement; but, by careful observations, we may come very near the truth. Tables founded on Laplace's formula, give great facility in calculating these observations. Among many others, *Tables hypsométriques* (Paris, 1809) are particularly good, on account of their correctness and adap-

tation for use. Also the tables by Gauss, published, 1818, in Bode's *Astronom. Jahrbuch*, are to be commended for their brevity, though one must also have at hand the usual logarithmic tables. Biot's *Tables barométriques* (Paris, 1811) are not less excellent. The labors of the distinguished natural philosopher and mineralogist D'Aubuisson (1809), the progress and result of which are detailed in a memoir read before the mathematico-physical class of the institute, at Paris, March 26 and April 9, 1810, are particularly worthy of notice.

Heiligen (from *heilig*, German for *holy*); a word in many geographical names; as *Heiligenstadt*.

Heim; the root of many German words, and a syllable appearing at the end of many geographical names, signifying *home* (with which it has a common origin) or *dwelling*; as *Manheim*. The Swedish *hem* signifies the same thing; also the English *ham*, in Durham, &c.; and the French *hameau* is derived from it.

Hein, Peter Petersen; a man of obscure origin, who, by his bravery, rose to the dignity of high admiral of Holland. He was born in 1577, rose gradually to the rank of vice-admiral of the East Indian fleet, and, three years afterwards, received the chief command. He attacked the Portuguese, in 1626, on the coast of Brazil, took several ships, and carried home a rich booty. The same year, he captured the Spanish plate fleet, and obtained an immense booty. In 1629, he was appointed high admiral in reward for his services; and was soon after killed in an engagement with a fleet from Dunkirk, of which he had already captured three ships.

Heineccius, John Gottlieb; a German author, who wrote on logic, jurisprudence and ethics. He was born in 1680, at Eisenberg, and studied at Halle, where he afterwards obtained a professor's chair in the sciences of philosophy and law. In 1724, he quitted Halle for Franeker, and remained there till 1727, when he accepted an invitation, given him by the king of Prussia, to settle at Frankfort on the Oder. Here he resided upwards of six years, when he returned to Halle. His works were collected and published at Geneva, in eight quarto volumes, three years after his decease, which took place in 1741. The principal are, *Syntagma Antiquitatum Romanorum Jurisprudentiam illustrantium; Elementa Juris Civilis; Elementa Philosophiæ Rationalis et Moralis; Historia Juris Civilis; Elementa Juris Naturæ et Gentium* (translated into English by Turnbull); *Fundamenta Styli cultioris*; and several academic dissertations.

Heinecken, Christian Henry, a child greatly celebrated for the premature developement of his talents, was born at Lübeck, Feb. 6, 1721. He could talk at ten months old, and had scarcely completed his first year, when he knew and recited the principal facts in the five books of Moses, and, at fourteen months, knew the history, both of the Old and New Testament. At two years and a half, he could answer questions in geography, and in history, ancient and modern; soon after, he learned Latin and French. In his fourth year, he had learned the doctrines of divinity, with their proofs from the Bible; modern history; ecclesiastical history; the institutes; 200 hymns, with their tunes; and 1500 verses and sentences from the ancient Latin classics. His stupendous memory retained every word repeated to him; and, at the court of Denmark, he delivered 12 speeches without once faltering, and underwent public examinations on a variety of subjects. He spoke German, Latin, French and Low Dutch. He was exceedingly good natured and well behaved, but of a most tender and delicate constitution. He never ate solid food, but chiefly subsisted on his nurse's milk, not being weaned until within a few months of his death, which took place at the age of four years and four months, on the 27th June, 1727. A dissertation on this extraordinary child was published by M. Martini, at Lübeck, in 1730, and addressed to M. Schönich, the child's tutor, who had published an account of him in the 5th volume of the Republic of Letters, which statement was republished in the German language in 1778 or 1779.

Heinitz, Anthony Frederic, baron of; born 1724; died 1802. In 1763, he laid the plan of the famous mining academy in Freyberg, the beneficial effects of which have been extensively felt. In 1776—77, he travelled in France and England, and, in consequence of his journey, wrote his *Essai d'Économie politique*. Frederic II of Prussia appointed him minister of state and chief of the mining department.

Heinsius, Daniel; a celebrated Dutch philologist, born at Ghent, in 1580. At 14, he was sent to the university of Franeker to study the civil law; but he applied himself chiefly to Greek literature. Removing to Leyden, he continued his studies under Joseph Scaliger, who paid great attention to so promising a pupil.

He read public lectures on Greek and Latin authors at 20; and he was afterwards chosen professor of history in the university of Leyden. He was so much attached to his bottle, as occasionally to incapacitate himself for his professorial duties. He died at Leyden, Jan. 15, 1655. His Latin poems consist of elegies, satires, and two tragedies, besides other pieces. He also wrote Greek poems, which were much esteemed, and verses in the Dutch language.

Heinsius, Nicholas, son of the preceding, cultivated the same branches of learning with his father with success. He was born at Leyden, in 1620, and carefully educated under the paternal roof. He travelled in England, through the Low Countries, in France and Italy. His father wishing for his return, he went to Leyden; but remained only a few months, as Christina of Sweden invited him to her court. He established himself at Stockholm in 1650, and was appointed resident from the states of Holland, in October, 1654. The death of his father determined him to return to his native country. In 1658, he retired to the Hague. He gave up all his leisure to literature; and it was against his inclination that he went on a public mission to Muscovy, in 1667. He returned home, with his health much debilitated, in 1671. He died at the Hague, Oct. 7, 1681. Much of his time was devoted to literature, notwithstanding his public employments; and he gave to the world several critical editions of Latin authors.

Heinsius; grand pensionary of Holland, the favorite and confidant of prince William of Orange, who, in 1688, ascended the English throne as William III. William sent him to Paris, after the peace of Nimeguen, in order to enforce there his claims on the princedom of Orange. Heinsius spoke so boldly for his prince and the Protestants, that Louvois threatened him with the Bastile. From that time, he was the declared enemy of France, and was particularly active during the war of the Spanish succession, to humble Louis XIV. But his opposition to the peace brought the burden of a great debt upon the republic; and he lost his office, after having held it for 30 years. He died at the Hague, at the age of 87 years.

Heir. (See *Descent.*)

Heir Apparent is a person so called in the lifetime of his ancestor, at whose death he is heir at law.

Heir Presumptive is one who, if the ancestor should die immediately, would, under existing circumstances, be his heir; but whose right of inheritance may be defeated by some nearer heir being born.

Heldenbuch (German; *Book of Heroes*); a celebrated collection of old German poems, drawn from national traditions of events which happened in the time of Attila and the irruption of the German nations into the Roman empire. It contains the exploits and adventures of the emperor Otnit and the dwarf Elberich, of Hugdietrich, Wolfdietrich, king Giebich of Worms, Dietrich of Berne, of king Laurin, the history of the famous garden of roses at Worms, of Hörnensiegfried, of the court of Attila, &c. These poems excite the imagination by their lively tales of war and of love. They were written at different times, by various poets. The oldest are of the Suabian period, and, in their form and style, resemble the *Nibelungenlied.* (q. v.) Among the authors are Henry of Ofterdingen, and Wolfram of Eschenbach. A later text was given in 1472, by Caspar von Roan, and some parts have become popular stories in prose. The oldest impressions give the revised text. The first edition appeared about 1490; the second, at Augsburg, 1491; the third, at Hagenau, 1509; all folio. The beginning of a modernized edition by Von der Hagen appeared at Berlin, 1811, and the Heldenbuch in the Original Tongue—*Das Heldenbuch in der Ursprache*, &c. (Berlin, 1820—24, 2 vols., 4to.)—by the same and A. Primisser.

Helena; the most beautiful woman of her age, sprung from one of the eggs which Leda, the wife of king Tyndarus, brought forth after her amour with Jupiter, metamorphosed into a swan. (See *Leda.*) According to some authors, Helen was daughter of Nemesis by Jupiter, and Leda was only her nurse; and, to reconcile this variety of opinions, some imagine that Nemesis and Leda are the same persons. Her beauty was so universally admired, even in her infancy, that Theseus, with his friend Pirithoüs, carried her away before she had attained her 10th year, and concealed her at Aphidnæ, under the care of his mother Æthra. Her brothers, Castor and Pollux, recovered her by force of arms, and she returned safe and unpolluted to Sparta, her native country. There existed, however, a tradition recorded by Pausanias, that Helen was of nubile years when carried away by Theseus, and that she had a daughter by her ravisher, who was intrusted to the care of Clytemnestra. Her hand was afterwards eagerly solicited by the young princes of Greece, including Ulysses, Diomed, Ajax, son of Oileus,

Ajax and Teucer, sons of Telamon, Patroclus, son of Menœtius, Menelaus, son of Atreus, Thoas, Idomeneus and Merion. At the proposal of Ulysses, Tyndarus bound all the suitors, by a solemn oath, to approve of the choice which Helen should make of one among them, and engage to unite together to defend her person and character, if ever any attempts were made to ravish her from the arms of her husband. Helen chose Menelaus. Hermione was the early fruit of this union, which continued for three years with mutual happiness. After this, Paris, son of Priam king of Troy, came to Lacedæmon on pretence of sacrificing to Apollo. He was kindly received by Menelaus, and, in his absence in Crete, he corrupted the fidelity of Helen, and persuaded her to follow him to Troy. At his return, Menelaus assembled the Grecian princes, and reminded them of their solemn promises. They resolved to make war against the Trojans; but they previously sent ambassadors to Priam, to demand the restitution of Helen. The influence of Paris at his father's court prevented the restoration. Soon after, the combined forces assembled, and sailed for the coast of Asia. When Paris was killed, in the ninth year of the war, she voluntarily married Deiphobus, one of Priam's sons; and, when Troy was taken, she made no scruple to betray him, and to introduce the Greeks into his chamber, to ingratiate herself with Menelaus. She returned to Sparta, and Menelaus received her again. Some writers, however, say that she obtained even her life with difficulty from her husband. After she had lived for some years at Sparta, Menelaus died, and she was driven from Peloponnesus by Megapenthes and Nicostratus, the illegitimate sons of her husband; she retired to Rhodes, where, at that time, Polyxo, a native of Argos, reigned over the country. Polyxo, whose husband, Tlepolemus, had been killed in the Trojan war, meditated revenge on Helen. While Helen, one day, retired to bathe in the river, Polyxo disguised her attendants in the habit of furies, and sent them with orders to murder her enemy. Helen was tied to a tree and strangled, and her misfortunes were afterwards remembered, and the crimes of Polyxo expiated by the temple which the Rhodians raised to Helen *Dendritis*, or *tied to a tree*. There is a tradition mentioned by Herodotus, which says that Paris was driven, as he returned from Sparta, upon the coast of Egypt, where Proteus, king of the country, expelled him from his dominions for his ingratitude to Menelaus, and confined Helen. Priam therefore informed the Grecian ambassadors, that neither Helen nor her possessions were in Troy, but in the hands of the king of Egypt. In spite of this assertion, the Greeks besieged the town, and took it after ten years' siege; and Menelaus, visiting Egypt as he returned home, recovered Helen at the court of Proteus, and was convinced that the Trojan war had been undertaken upon unjust grounds. Helen was honored, after death, as a goddess, and the Spartans built her a temple at Therapne, which had the power of giving beauty to all the deformed women that entered it. Helen, according to some, was carried into the island of Leuce, after death, where she married Achilles, who had been once one of her warmest admirers.

Helena, St.; an island in the Atlantic ocean, standing entirely detached from any group, and about 1200 miles from the nearest land, on the coast of Southern Africa; lon. 15° 55′ W.; lat. 5° 49′ S. It was discovered by the Portuguese, in 1501. It was afterwards possessed by the Dutch, and finally came into the possession of the English about the year 1651, in whose possession it has, with a short interval, ever since remained. It was granted to the East India company by Charles II. St. Helena is 10½ miles long by 6¾ broad, and about 28 miles in circumference. It presents to the sea, throughout its whole circuit, nothing but an immense wall of perpendicular rock, from 600 to 1200 feet high, like a castle in the midst of the ocean. On entering, however, and ascending by one of the few openings which nature has left, verdant valleys are found interspersed with the dreary rocks. There are only four openings in the great wall of rock which surrounds St. Helena, by which it can be approached with any facility. These are all strongly fortified. The climate of St. Helena is not liable to the extremes of heat or cold; but it is moist, and liable to strong gusts of wind. There is only one place in the island which can be called a town, situated in a narrow valley, between lofty mountains, called James's Valley. The principal plain in the island, called *Longwood*, situated in the eastern part, has become celebrated by the residence of Napoleon. The illustrious captive arrived at St. Helena in November, 1815, and died there May 5, 1821. His tomb is in a secluded recess, near Longwood. It is surrounded by a fence, enclosing a piece of ground con-

taining weeping willows, and by an interior iron fence. The tombstone is about nine inches high, without an inscription. The body is deposited in a mahogany coffin, which is placed within three other cases: on the external one is the inscription, *General of the French.* By his side lies the sword which he wore at Austerlitz.

Helenus; son of Priam, and twin-brother of Cassandra, endowed with the gift of prophecy. After the death of Paris, he wished to marry Helen; and, irritated by the failure of his suit, he betrayed Troy into the hands of its enemy. The invention of the wooden horse is ascribed to him. After the destruction of Troy, he fell into the hands of Pyrrhus, son of Achilles, who gave him Andromache, his brother Hector's widow, in marriage. He was the only one of Priam's sons who survived the ruin of his country. After the death of Pyrrhus, he reigned over a part of Epirus. He received Æneas on his voyage to Italy.

Heliacal, as applied to the rising of a star, planet, &c., denotes its emerging out of the sun's rays, in which it was before hid. When applied to the setting of a star, it denotes the entering or immerging into the sun's rays, and thus becoming lost in the lustre of his beams. A star rises heliacally when, after it has been in conjunction with the sun, and on that account invisible, it gets at such a distance from the sun as to be seen in the morning before the rising of that luminary.

Heliades; 1. the seven sons of Helios (Sol), the god of the sun, who were born when the warm beams of Helios dried up all the moisture of the island of Rhodes. Their only sister, Electrione, died a virgin, and received divine honors from the Rhodians. The brothers distinguished themselves by their knowledge of the sciences, particularly of astronomy; they improved ship-building, and divided the day into hours. Thenages excelled all his brothers in intellect; on which account they put him to death. When the act became known, they all fled from the island, except two, whose hands were not stained with the blood of Thenages.—2. The daughters of Helios and the nymph Merope or Clymene were also called *Heliades.* (See *Phaëton.*)

Helianthus. (See *Sunflower.*)

Helicon (now *Sagara*); a celebrated mountain in the western part of Bœotia, where the Greeks placed the residence of the muses, who, together with Apollo, had temples and statues here. In this mountain, also, were the fountains of the muses Aganippe and Hippocrene, and the fountain in which the unhappy Narcissus saw his own image. The region around was extremely fertile, and so healthy that even the serpents were fabled to be harmless. (See *Parnassus.*)

Heligoland, or Heilgoland (anciently *Hertha*); an island in the North sea, about nine miles in circumference, on the coast of Holstein, about 28 miles from the mouths of the Weser, Elbe, and Eyder; formerly belonging to Denmark, now to Great Britain. It is divided into *Klif* and *Duhnen*, or high and low land. It produces barley and oats, but not enough for the consumption of the inhabitants, who chiefly subsist by fishing. On the highest part of the west Klif, in lon. 7° 53′ 13″ E., and lat. 54° 11′ 34″ N., is a light-house, which is of great use in guiding ships amidst the surrounding rocks and shoals, and also as a mark for directing vessels to the mouths of the nearest rivers. Population, 2200, subsisting chiefly by fishing and acting as pilots. It was taken, in 1807, by admiral Russel, from the Danes, and since the peace of Kiel, has belonged to England, which exacts no taxes from it, and takes no concern in its internal administration. The British ceased to occupy it as a military post in 1821. The inhabitants are of Frisian descent, and the old Frisian dialect is still spoken here. During the last general war in Europe, great magazines of colonial goods were formed on the island, in order to be smuggled to the continent, as occasions offered; and it is so favorably situated to be the centre of a contraband trade, that it did much to defeat the exclusive system in the north of Europe.

Heliocentric Place of a Planet is that place in the ecliptic in which the planet would appear if viewed from the centre of the sun; and consequently the heliocentric place coincides with the longitude of a planet, as viewed from the same centre.

Heliodorus; one of the best Greek amatory writers. He was a native of Emesa, in Syria, and lived near the end of the fourth century. He was a believer in the Christian religion, and bishop of Tricea (Tricala), in Thessaly; but towards the close of his life, he was deposed. His youthful work, *Æthiopica* (i. e. Æthiopic History), or the Loves of Theagenes and Chariclea, in poetical prose, and an almost epic tone, is distinguished by its strict morality from the other Greek romances, and interests the reader by the wonderful ad-

ventures it recounts. The best editions are those of Bourdelot (Paris, 1619; Leipsic, 1772), of Coray (Paris, 1804, 2 vols.; Leipsic, 1805, 2 vols.).

Heliogabalus, M. Aurelius Antoninus; a Roman emperor, son of Varius Marcellus. He was called *Heliogabalus*, because he had been priest of that divinity in Phœnicia. After the death of Macrinus, he was invested with the imperial purple, and the senate, however unwilling to submit to a youth only 14 years of age, approved of his election, and bestowed upon him the title of *Augustus*. Heliogabalus made his grand-mother Mœsa, and his mother Sœmias, his colleagues on the throne, and, to bestow more dignity upon the sex, he chose a senate of women, over which his mother presided, and prescribed all the modes and fashions which prevailed in the empire. Rome now displayed a scene of cruelty and debauchery; the imperial palace was full of prostitution, and the most infamous of the populace became the favorites of the prince. He raised his horse to the honors of the consulship, and obliged his subjects to pay adoration to a god called *Heliogabalus*. This was no other than a large black stone, whose figure resembled that of a cone. To this ridiculous deity temples were raised at Rome, and the altars of the gods plundered to deck those of the new divinity. In the midst of his extravagances, Heliogabalus married four wives. His licentiousness soon displeased the populace, and Heliogabalus, unable to appease the seditions of the soldiers, whom his rapacity and debaucheries had irritated, hid himself in the filth and excrements of the camp, where he was found in the arms of his mother. His head was severed from his body, A. D. 222, in the 18th year of his age, after a reign of three years, nine months and four days. He was succeeded by Alexander Severus. Heliogabalus burdened his subjects with the most oppressive taxes, his halls were covered with carpets of gold and silver tissue, and his mats were made with the down of hares, and with the soft feathers which were found under the wings of partridges. He was fond of covering his shoes with precious stones, to draw the admiration of the people as he walked along the streets, and he was the first Roman who ever wore a dress of silk. He often invited the most common of the people to share his banquets, and made them sit down on large bellows full of wind, which, suddenly emptying themselves, threw the guests on the ground, and left them a prey to wild beasts. He often tied some of his favorites on a large wheel, and was particularly delighted to see them whirled round like Ixions, and sometimes suspended in the air, or sunk beneath the water.

Heliometer (called, also, *Astrometer*); an instrument for measuring small distances on the sky, particularly the apparent diameters of the sun and of the moon, more conveniently than can be done with the micrometer. There are different ways of constructing it. The heliometer of Bouguer is an astronomical telescope, provided with two object-glasses, one of which is movable, and which form two distinct images of the same object, visible through the same eye-glass. If, in contemplating a celestial body, the object-glasses are placed so as to bring the images to touch each other, the distance of the centres of the glasses gives the diameter of the image. In this manner, the instrument gives, for instance, the difference of the diameter of the sun in the perigee and apogee. (See Lalande's *Astronomie*, second edition, § 2433).

Heliopolis, in Cœlosyria. (See *Balbec.*)

Heliopolis (*city of the sun*), which, in the Egyptian language, was called the *city of On*, was situated a little to the north of Memphis, and was one of the most extensive cities of Egypt, during the reign of the Pharaohs, and so adorned by monuments as to be esteemed among the first sacred cities of the kingdom. The temple dedicated to Re was a magnificent building, having in front an avenue of sphinxes, celebrated in history, and adorned by several obelisks, raised by order of Sethosis Rameses, 1900 years B. C. By means of lakes and canals, the town, though built upon an artificial eminence, communicated with the Nile, and, during the flourishing ages of the Egyptian monarchy, the priests and scholars acquired and taught the elements of learning within the precincts of its temples. At the time of Strabo, who visited this town soon after the death of our Savior, the apartments were still shown, in which, four centuries before, Eudoxus and Plato had labored to learn the philosophy of Egypt. Here Joseph and Mary are said to have rested with our Savior. It is now called *Metarea*. Near the village stands the pillar of On, a famous obelisk, supposed to be the oldest monument of the kind existing. Its height is 67½ feet, and its breadth at the base 6 feet. It is one entire mass of reddish granite. Hieroglyphical characters are rudely sculptured upon it. A bloody battle was

fought here, March 20, 1800, between the French and the Turks.

Helios; the god of the sun (in Latin, *Sol*), in the Greek mythology; son of Hyperion and Theia, and brother of Eos (Aurora, the dawn) and Selene (Luna, the moon). He dwells with Eos in the ocean, behind Colchis. From the portals of the morning, he rides through the air, in an oblique curve, to the gates of evening; and, after having cooled his horses in the ocean, he drives his chariot into a self-moving golden vessel, made by Vulcan, which, with wonderful rapidity, bears him along the northern shore of the ocean back to Colchis, where he bathes his horses in the lake of the sun, and rests during the night, till the dawn of the morning. Later authors assign him a palace in the west, where he refreshes himself and his horses with ambrosial food. Respecting the history of Helios, the poets relate his contest with Neptune for the isthmus of Corinth, his revealing the secret amours of Mars and Venus, and his disclosure to Ceres of the ravisher of her daughter. In Sicily, he had a herd of cattle dedicated to him, with the sight of which he was delighted, as he rode through the sky. His vengeance fell heavily upon the companions of Ulysses, who slaughtered some of them. He threatened to descend into Orcus, and to give light to the dead, if Jupiter did not punish the criminals. The thunder dashed their vessel to pieces, and sunk them in the waves. As he was descended from the race of the Titans, he is often called *Titan*. His worship was very extensively diffused, and he had many temples and statues; for instance, in Corinth, Argos, Trœzene, Elis, but particularly in Rhodes, where a team of four horses was annually sacrificed to him, by being precipitated into the sea. White lambs were also sacrificed to him. Horses, wolves, cocks and eagles were sacred to him. He is represented as a youth, with most of his body covered with clothing, and having his head surrounded with rays. Sometimes he rides upon a chariot drawn by four horses. (See *Apollo*.)

Helioscope is a telescope, behind which the image of the sun is received upon a plane surface. An astronomical telescope is drawn out a little farther than is necessary for common use, and directed towards the sun. The image which is formed, is received in a dark place. For this purpose, a dark chamber is employed, or the telescope is placed in a dark funnel-shaped enclosure, the bottom of which is covered with oiled paper, or closed with ground glass, on which the sun's image is formed. Upon this paper or glass a circle is described equal to the image, and divided, by five concentric circles, into 12 digits. With this instrument the spots on the sun, eclipses, &c., may be observed without injuring the eyes. For greater exactness, however, it is better to observe the sun through a telescope, the glasses of which are smoked or colored. Astronomical telescopes are commonly provided with colored plane glasses, which may be screwed on when the sun is to be observed.

Heliotrope. (See *Quartz*.)

Hell, Maximilian, a learned astronomer, was born in 1720, at Chemnitz, in Hungary, and first educated at Neusohl. Having, in 1738, entered the society of the Jesuits, he was sent to the college at Vienna, where he exhibited a genius for mechanics. He then applied to mathematics with great diligence, and became assistant at the observatory belonging to his order. In 1750, he published *Adjumentum Memoriæ Manuale Chronologico-Genealogico-Historicum*, which has been translated into various languages. In 1752, he became professor of mathematics at Clausenburg. From 1757 to 1786, he published, annually, the Ephemerides, which is much esteemed by astronomers. He was soon after recalled to Vienna, to be astronomer and director at the new observatory. In 1769, at the desire of the king of Denmark, he went to observe the transit of Venus, in an island in the Frozen ocean. He died in 1792. Hell is to be ranked among those who have rendered essential services to astronomy.

Hellas, Hellenes, Hellenism (Ἑλλας, Ἑλληνες). Hellas, in a narrower sense, was Greece Proper, with its eight states (the modern Livadia, q. v.); in a more extensive sense, it signified all Greece, with the islands and colonies.—*Hellenes* is the general name of the Grecians. (See *Greece*.) They are said to have derived their name from *Hellen*, who contributed to the civilization of the Pelasgi, the earliest inhabitants of Greece. The term *Hellenes* is therefore used sometimes in opposition to *Pelasgi*, and then we understand by it that cultivated race of men, who inhabited Greece, and have become immortal in history. The first dawn of civilization was spread from Thessaly among the Pelasgian savages, by the descendants of Prometheus. It is not therefore strange, that with the name of *Hellenes* were associated the ideas of greater refinement and superior genius. The question, How did the

savage tribes of Greece acquire the improved character of Hellenes? may be answered by a consideration of the following causes: 1. The influence of a favorable climate. In a land abounding in natural beauties, in a climate which is neither relaxing by heat, nor contracting by cold, the mental faculties are naturally developed with greater energy. 2. A finer original organization of the Greek race. 3. From these causes arose the natural activity, vivacity and inquisitiveness of the nation, a lively imagination, ingenuous feeling, a fine sense of the beautiful and the true in science and in the arts. Curiosity became the mother of knowledge. Opportunities for satisfying it were afforded by the conflux of so many tribes, general emigrations, voyages, and early intercourse with civilized nations. 4. The political freedom, and the peculiar constitution of the nation, which was divided into many small republics. This circumstance facilitated the developement of every talent according to its natural bent. 5. The situation of the country, and the frequent intercourse of the people with other nations. 6. The comforts and pleasures of life, and the spirit of social intercourse which existed among them. By the exemption of the people from heavy taxes and other public burdens of despotic governments, the number of persons enjoying competency was increased. 7. Their education, according to which man was not made a mere machine of the state and of prejudices, and his faculties were allowed to unfold freely and harmoniously. 8. Freedom of thought. As there was no separate class of priests, the intellect and imagination expatiated freely on the subject of religion. Their religion gave them a form of worship, but imposed no constraint. It was less mystical in its tendency than plastic, and was formed and refined by poetry. Hence their fanciful and bright conceptions, and traditions of their gods, from which the plastic art created its divine forms and beautiful ideals. Even what the Greeks borrowed from foreign nations, became Grecian in their hands. From the shapeless *fetiches*, they first made images in the human form, and obtained from their national traditions a race of gods in the shape of men. 9. By this their attention was directed to what constitutes the true dignity of man. Frequent political and social intercourse cultivated a practical knowledge of man, which formed and strengthened in the Greeks a spirit of observation, for which their poets, orators and philosophers are so highly distinguished. The forms of their political constitutions, which caused every thing to be transacted in public, afforded them a full field for exercise. How otherwise could be explained, at so early an age, those striking representations of character, that rich knowledge of mankind, that power of creating and developing ideas, that expressive and pathetic language? This is therefore a main point in Greek civilization and refinement, which explains some of the most beautiful traits of Grecian genius. 10. Some great geniuses, who fortunately sprung up in this nation. Where free observation is united with natural feelings and a lively imagination, there are the elements of poetry and art, which, however, can reach perfection only by a particular favor of nature. Great minds appeared of a truly Grecian character, and the effect they have produced, by their creations, is well known. It was under so rare a union of favorable circumstances, that the genius which characterized the inhabitants of ancient Greece, as Hellenes, was developed; and it is not strange that the word *Hellenic* or *Grecian* immediately awakens in us an idea of something beautiful in literature or art.

Helle; a daughter of Athamas and Nephele, sister to Phryxus. She fled from her father's house with her brother, to avoid the cruel oppression of her mother-in-law, Ino. According to some accounts, she was carried through the air on a golden ram, which her mother had received from Neptune, and, in her passage, she became giddy, and fell from her seat into that part of the sea, which, from her, received the name of *Hellespont*. Others say that she was carried on a cloud, or rather upon a ship, from which she fell into the sea, and was drowned. Phryxus, after he had given his sister a burial on the neighboring coasts, pursued his journey, and arrived safe in Colchis. (See *Phryxus*.)

Hellebore (*helleborus*); a genus of plants allied to and resembling the ranunculus, but the large green, whitish or purplish flowers of the different species give them a different aspect. Ten species are known, all natives of the northern parts of the eastern continent. These plants have a bitter and somewhat acrid taste, and a nauseous, disagreeable odor. The root of one of them has been employed as a purgative from remote antiquity, and was a very celebrated remedy with the Greeks and Romans, particularly in mania. So far was this superstition carried, that the most celebrated philoso-

phers drank hellebore to keep their brain clear before undertaking intellectual labor; and it was pretended that certain precautions were necessary in collecting this plant. It is still sometimes employed as a purgative, but is apt to act violently if an overdose be taken.

HELLENES. (See *Hellas.*)

HELLENISTS; scholars learned in Grecian antiquities, particularly in the Greek language and literature.

HELLENISTS, EGYPTIAN; the Jewish colonists, who settled in Egypt, after the destruction of the kingdom of Judah, about 600 B. C. Their number was increased by the many colonies of Jews planted by Alexander the Great, 336 B. C., and later by Ptolemy Lagus. Under the reign of the emperor Augustus, they amounted to nearly 1,000,000. The mixture of the Jewish and Egyptian national characters, and the influence of the Greek language and philosophy, which were adopted by these Jews, laid the foundation of a new epoch of Greco-Jewish literature, which, from its prevailing character, received the name of the *Hellenistic*. The systems of Pythagoras and Plato were strangely combined with those Oriental phantasies, which had been reduced to a system in Egypt, and with which the mystical doctrines of the Gnostics were imbued. The most noted of the Jewish Hellenistic philosophers was Philo of Alexandria (q. v.), and the chief of the learned labors of the Alexandrian Jews, was the Greek translation of the Old Testament. (See *Septuagint.*)

HELLESPONT; the straits between Europe and Asia, now called the *Dardanelles*. (For the mythological origin of the name, see *Helle.*) Its shores were lined with pleasant hills, towns and villages. Here were, in ancient times, Lampsacus, with its beautiful vineyards; the mouth of the Ægos Potamos, immortalized by the victory of Lysander over the Athenian fleet; the cities of Sestos in Europe, and Abydos in Asia, rendered famous through the poem of Musæus on the loves of Hero and Leander. The strait is here but 7 *stadia* wide. In this place Xerxes passed from Asia to Europe over a double bridge. Lord Byron swam across the Hellespont, in 1810, in one hour and five minutes, in company with lieutenant Ekenhead. The rapidity of the current is such that no boat can row directly across, and lord Byron calculated that the whole distance, from his place of starting to his landing, on the Asiatic side, was more than four miles, although the strait is but a mile and a half wide at the broadest part, and half a mile at the narrowest. Cocks are heard crowing from the opposite shores. The length of the strait is about 33 miles.

HELL-GATE. (See *East River.*)

HELM; a long and flat piece of timber, or an assemblage of several pieces, suspended down the hind part of a ship's stern-post, where it turns upon a kind of hinges to the right or left, serving to direct the course of a vessel, as the tail of a fish guides the body. The helm is usually composed of three parts, viz., the rudder, the tiller and the wheel, except in small vessels, where the wheel is unnecessary. The rudder becomes gradually broader in proportion to its distance from the top, or its depth under water. The back or inner part of it, which joins the stern-post, is diminished into the form of a wedge throughout its whole length, so that it may be more easily turned from one side to the other, when it makes an obtuse angle with the keel. The length and thickness of the rudder is nearly equal to that of the stern-post. The tiller is a long bar of timber, fixed horizontally in the upper end of the rudder, within the vessel. The movements of the tiller to the right and left accordingly direct the efforts of the rudder to the government of the ship's course, as she advances, which is called *steering*. The operations of the tiller are guided and assisted by a sort of tackle, communicating with the ship's side, called the *tiller-rope*, which is usually composed of untarred rope-yarns, for the purpose of traversing more readily through the blocks or pulleys. In order to facilitate the management of the helm, the tiller-rope, in all large vessels, is wound about a wheel, which acts upon it with the powers of a windlass. The rope employed in this service, being conveyed from the fore end of the tiller to a single block on each side of the ship, forms a communication with the wheel, by means of two blocks fixed near the mizzen-mast, and two holes immediately above, leading up to the wheel, which is fixed upon an axis on the quarter-deck, almost perpendicularly over the fore end of the tiller. Five turns of the rope are usually wound about the barrel of the wheel, and when the helm is a-midship, the middle turn is nailed to the top of the barrel with a mark, by which the helmsman readily discovers the situation of the helm. The spokes of the wheel generally reach about eight inches beyond the rim or circumference, serving as handles to the person who steers the vessel. As

the effect of a lever increases in proportion to the length of its arm, it is evident that the power of the helmsman to turn the wheel will be increased according to the length of the spokes beyond the circumference of the barrel, so that if the helmsman employs a force of 30 pounds, it will produce an effect of from 90 to 120 pounds upon the tiller (the barrel being one fourth or one fifth of the radius of the spokes), which again forming the long end of a lever 10 or 15 times the length of its shorter arm, the force of the rudder will, by consequence, be from 10 times 90 to 15 times 120, or from 900 to 1800 pounds. When the helm operates by itself, the centre of rotation of the ship and her movements are determined by estimating the force of the rudder by the square of the ship's velocity. When the helm, instead of lying in a right line with the keel, is turned to one side or the other, it receives an immediate shock from the water, which glides along the ship's bottom in running *aft*, on the side towards which the helm is turned, and pushes it towards the opposite side, whilst it is retained in this position, so that the stern, to which the rudder is confined, receives the same impression, and accordingly turns in one direction, whilst the head of the ship moves in the opposite. The more the velocity of a ship increases, the more powerful will be the effect of the rudder, because the water will act against it with a force which increases as the square of the swiftness of the fluid, whether the ship advances or retreats. The direction given in the two cases will of course be contrary.

Helmers, John Frederic, a Dutch poet, born at Amsterdam, in 1767, was destined for commerce, and attended particularly to the study of the modern languages; but the reading of the German, French and English poets soon inspired him with a taste for literature and poetry. Kindled by the classical models of foreign countries, Helmers composed, in his 19th year, an ode On Night, the beauty of which first revealed his talents. His ode The Poet first established his reputation. From this time, he yielded wholly to the impulse of his genius, and, in 1790, published a larger poem, Socrates, in three cantos, which gave him a high rank among the poets of his nation. But his tragedy, Dinomachus, or the Liberation of Athens, met with but little success on its representation. He afterwards undertook a theatrical journal for dramatic criticism; but his attempt did not receive any encouragement from the Dutch public. He afterwards devoted himself to lyric and epic poetry. In 1810, a collection of his poems was published at Amsterdam. His national poem, Holland (in six cantos, Amsterdam, 1812), which was universally admired by his countrymen, soon followed. Helmers died February 26, 1813. The works found among his papers appeared, under the title *Nalezing van Gedichten*, at Haerlem (2 vols., 1814 and 1815), and, almost at the same time, in another better edition, at Amsterdam.

Helmet; a defensive armor, for the protection of the head, composed of skins of animals, or of metals. Some of Homer's heroes are represented as wearing brazen helmets, with towering crests, adorned with plumes of the tails or manes of horses. Among the Romans, the *cassis* was a metallic helmet; the *galea*, a leathern one. (See Lipsius, *De Militia Romana*, III, 5.) In modern times, they have been of different kinds, some with and others without vizors.

Helminthagoga; medicines against worms.

Helminthiasis; the disease which proceeds from intestinal worms.

Helmont, John Baptist van, born, in 1577, at Brussels, studied natural philosophy, natural history and medicine, in which he made such rapid proficiency, that, in his 17th year, he gave public lectures on surgery at Louvain. The study of the ancients convinced him of the insufficiency of many of their theories on the nature and cure of diseases; in particular, the system of Galen appeared to him to have great defects. He announced, therefore, his intention of making a reform in medicine. But his inability to cure the itch suddenly inspired him with an aversion to medical science, which he declared to be uncertain, and renounced entirely. He left his country, distributed all that he had gained by his practice in medicine, and, for ten years, wandered about the world; when, having become acquainted with an empirical chemist, he entered eagerly upon the study of chemistry. After the example of Paracelsus, he employed himself in seeking a universal remedy by means of that study. His former passion for medicine now revived, but it was a novel kind of medicine, of his own creation. He styled himself *medicus per ignem*, alluding to the source from which he derived his remedies. He now married, and retired to the little city of Vilvorde, near Brussels. Here he occupied himself till his death with medical

labors, boasted of having found the means of prolonging life, and composed visionary theories on the spiritual and physical formation of man, and on the causes and treatment of diseases. Though chemistry was still in its cradle, yet he made many discoveries, such as the laudanum of Paracelsus, the spirit of hartshorn, the sal volatile, &c. He intended to have overthrown the whole science of medicine, as it was taught in the schools, which he criticised with much justice; but what he produced himself was much more uncertain than all the existing theories. According to him, life is ruled by a principal power, which he called *Archæus, the ruler*, and by other subordinate powers. The system of Van Helmont resembles that of Paracelsus, yet it is more clear and scientific. Helmont never quitted his laboratory during the thirty years he lived in Vilvorde, yet he asserts that he cured annually more than a thousand men. The emperors Rodolph II, Matthias and Ferdinand II, invited him to Vienna, with promises of wealth and dignities; but he preferred the independence of his laboratory. He died December 30, 1644. Having given his manuscripts, before his death, to his son, with the request that he would publish them if he thought fit, they were printed by Elzevir.

Helmstadt; a town, with 5200 inhabitants, in the duchy of Brunswick. The university of Julia Carolina, established in 1576 in Helmstädt, was suppressed by Jerome, ex-king of Westphalia, December 10, 1809. The town has a gymnasium, a seminary for the education of teachers, &c., besides manufactories of linen, cotton, flannel, soap, hats, liqueurs and perfumes. In the neighborhood is a mineral spring.

Héloïse, Eloïse, or Louisa, celebrated for her beauty and wit, but still more on account of her love for Abelard, was born in Paris, in 1101. After her cruel separation from her illustrious lover, she became prioress of the convent of Argenteuil; but she attended more to study than to the monastic discipline of those under her charge, who, finally, were dispersed, in 1129, on account of their licentiousness. She then accepted the invitation of Abelard, and entered, with some of her nuns, the oratory of Paraclete, where she founded a new convent. Here she lived in exemplary piety. The bishops loved her as a daughter, the abbots as a sister, and the laity as a mother. Abelard, at her request, wrote the rules for her convent, which were confirmed by pope Innocent II. She died in 1164. Contemporary writers speak in high terms of the genius of Heloïse. She understood Latin, Greek, Hebrew, was familiar with the ancients, and had penetrated the depths of philosophy and theology. Among Abelard's letters, we find three which are ascribed to her, full of fire, genius and imagination. The two first of her letters, which paint the conflict between her present duties and former feelings, and vividly contrast the inward storm of the passions with the repose of the cell, furnished Pope with some of the finest passages of one of his best productions. (See *Abelard.*)

Helots; slaves in Sparta. The name is generally derived from the town of Helos, the inhabitants of which were carried off and reduced to slavery by the Heraclidæ, about 1000 B. C. They differed from the other Greek slaves in not belonging individually to separate masters; they were the property of the state, which alone had the disposal of their life and freedom. They formed a separate class of inhabitants, and their condition was, in many respects, similar to that of the boors in some countries of Europe. The state assigned them to certain citizens, by whom they were employed in private labors, though not exclusively, as the state still exacted certain services from them. Agriculture and all mechanical arts at Sparta were in the hands of the Helots, since the laws of Lycurgus prohibited the Spartans from all lucrative occupations. But the Helots were also obliged to bear arms for the state, in case of necessity. The barbarous treatment to which they were exposed often excited them to insurrection. Their dress, by which they were contemptuously distinguished from the free Spartans, consisted of cat's-skin, and a leather cap, of a peculiar shape. They were sometimes liberated for their services, or for a sum of money. If their numbers increased too much, the young Spartans, it is said, were sent out to assassinate them. These expeditions were called κρυπτεια; but this account has been disputed. Their number is uncertain, but Thucydides says that it was greater than that of the slaves in any other Grecian state. It has been variously estimated, at from 320,000 to 800,000. They several times rose against their masters, but were always finally reduced.

Helsingfors, in the grand-duchy of Finland, on the gulf of Finland, a seaport and commercial town, with an excellent and strongly-fortified harbor, has manufactories of sail-cloth and linen; popula-

tion, 8000. Since the cession of the grand-duchy to Russia, Helsingfors has been made the capital, on account of its commodious situation and its vicinity to Petersburg. October 1, 1819, all the higher offices of the government were transferred hither from Abo. This has promoted the growth of the place. Lat. 60° 10′ N.; lon. 20° 17′ E.

Helst, Bartholomew van der; painter, born at Haerlem, in 1613. Without having studied the great masters of the Italian school, he attained to a high degree of excellence as a portrait painter. "Before I had seen the works of this painter," says Falconet, "I found it difficult to credit those who thought him superior to Rembrandt, Van Dyke, and similar masters. Since I have examined them closely, I believe that, without prejudice, Helst is, in some respects, superior to those great painters, for his style is more true to nature," &c. All his works show a grand manner; there is nothing frigid nor stiff. His drapery is flowing; his figures well drawn; the accessory parts are closely copied from nature. The year of his death is unknown; it is only certain that he lived in Amsterdam, and that his son was also a good portrait painter.

Helvetia. Between the Rhone and the Rhine, the Jura and the Rhætian Alps (in the canton of the Grisons), lived the Helvetii, a Gallic or Celtic nation, more numerous and warlike than the neighboring Gallic tribes. They were not known to the Romans until the time of Julius Cæsar, who, as governor of Gaul, prevented their intended emigration, and after many bloody battles, in which even the Helvetian women fought, pressed them back within their frontiers. Helvetia, which was less extensive than the present Switzerland, was divided into four districts, which had an entirely democratical constitution. Cæsar subjected the country to the dominion of the Romans, who established several colonies there, the names of which only have remained (for example, Augusta Rauracorum in the Frickthal), and introduced Roman civilization. Christianity was afterwards introduced into Helvetia. (See *Switzerland*.)

Helvetius, Claude Adrien, born at Paris, 1715, received a careful education. The tales of Lafontaine delighted his childhood, as Homer and Curtius captivated his youth. The study of Locke's Essay on the Human Understanding, at the college of Louis-le-Grand, inspired him with a love of philosophy, to which he remained faithful. After the termination of his law studies, he was placed by his father, a celebrated physician, Adrien Helvétius, at Caën, for the purpose of acquiring a practical knowledge of finance. At the age of 23 years, he obtained, through the patronage of the queen, the honorable and lucrative post of a farmer-general. Alive to all the pleasures of society, which were now placed within his reach, he did not suffer himself to be alienated from the muses. He kept up his early intimacy with many distinguished men of letters, and, with a noble liberality, supported several young men of talents. As farmer-general, he was distinguished by his mildness and indulgence from his colleagues, whose base practices filled him with indignation. He therefore resigned his office, and purchased the place of *maître d'hôtel* to the queen. So ambitious was he of every sort of applause, that he even danced on one occasion at the opera. He aspired no less after literary fame. At first he directed his efforts to the mathematics, because he once saw a circle of the most beautiful ladies surrounding the ugly geometrician Maupertuis, in the garden of the Tuileries. He next attempted to rival Voltaire by a number of philosophical epistles, and he is also said to have written a tragedy. The brilliant success of Montesquieu's *Esprit des Lois*, then inspired him with the bold resolution of preparing a similar work. He therefore determined to retire into solitude. But he wished to sweeten his retreat by the society of a wife, and, in 1751, he married Mademoiselle de Ligniville, no less distinguished for her beauty than her wit. In the retirement of his estate of Voré, he devoted himself entirely to the happiness of his dependants, to domestic enjoyments, and to study. In 1758, he published his book *De l'Esprit*, the materialism of which drew upon him many attacks. Objectionable as the doctrines in this work may be, it undeniably contains the most various information. Helvétius went, in 1764, to England, and, the year afterwards, to Germany, where Frederic the Great and other German princes received him with many proofs of esteem. After his return to France, he published his work *De l'Homme*, which is to be considered as a continuation of the former, and contains a fuller developement of the doctrines laid down in it; but, at the same time, many new ones, particularly such as relate to the science of education. Helvétius died in 1771, in Paris. Besides the above-mentioned works, he wrote epistles in verse, and an

allegorical poem, *Le Bonheur*. There are several complete editions of his writings. His wife, daughter of the count Ligniville, was one of the most excellent women of her time. After his death, she retired to Auteuil, where her house, like that of Madame Geoffrin, became the rendezvous of the most distinguished literati and artists of her time. She died Aug. 12, 1800, at Auteuil. (q. v.)

Helvig, Amalia von; born at Weimar, Aug. 16, 1776, one of the most distinguished female poets of Germany. Her father travelled in France, England, Holland, and resided seven years in the Indies; and the mind of the lively girl was early awakened by his narratives of what he had seen and heard in foreign countries. When eight years old, she spoke English and French fluently, besides her mother tongue. She had just reached the age of 12 years, when she lost her father; and the lady who now had charge of her education kept her so closely employed, that her poetic spirit found no opportunity to develope itself. She had already begun to make rhymes before she was seven years old. In her 15th year, she went to reside at Weimar, and soon after become acquainted with Bürger, Hölty, Stolberg, and other poets of the time. At this period she began to learn Greek, and, four weeks after entering on the study, was able to commence the reading of Homer. A little poem, written by her, was presented to Louisa, duchess of Weimar, and found its way to Schiller, who invited the fair author to his house at Jena. Göthe then passed much of his time at Jena, and the young poetess, in their society, heard the most instructive observations on poetry and literature. She was afterwards appointed lady of the court of Saxe-Weimar. Here she became acquainted with her future husband, whom she afterwards followed to Sweden. Her health suffered there, and she returned to her own country. In 1813, she published the first *Taschenbuch der Sagen und Legenden*. She has translated several works from the Swedish, among others, the *Frithiofs-Sage* of Es. Tegner, in 1826.

Helvin; the name of a rare mineral, bestowed by Werner, in allusion to its sun-yellow color, found in a mine near Schwartzenburg, in Saxony, disseminated through an aggregate of chlorite, blende and fluor, in minute tetrahedral crystals, with their solid angles truncated. These crystals cleave parallel to the faces of the regular octahedron. Its hardness is about the same with quartz; its specific gravity, 3.100. It consists, according to Gmelin, of silex, 33.258; glucine and a little alumine, 12.029; protoxide of manganese, 31.817; protoxide of iron, 5.564; sulphuret of manganese, 14.000; and volatile matter, 1.555.

Helvoetsluys; a seaport in the province of Holland and kingdom of the Netherlands, on the south side of the island of Voorn; 12 miles W. Dort; 15 S. W. Rotterdam; lon. 4° 8′ E.; lat. 51° 50′ N.; population, 1208. It has a good harbor, about 12 miles from the open sea, in the middle of a large bay, capable of holding the whole fleet of the country. The town is small, but well defended with strong fortifications. This is the general port for packets from England, chiefly from the port of Harwich. Here is a naval school. The ship channel, from Rotterdam to Helvoetsluys, was completed in November, 1830. William III sailed from this port for England, Nov. 11, 1688, with 14,000 men.

Hemerodromi; a kind of couriers among the Greeks, famous for their extraordinary swiftness, and used, on that account, by the state, as messengers. They were employed, not only in times of peace, for the conveyance of letters, but also in war, as spies and bearers of orders. Of their great swiftness, the ancients report several instances.

Hemlock. It is still a matter in dispute, whether the hemlock, so celebrated among the ancients, and used at Athens for the execution of those condemned to death, was the plant at present denominated by botanists *conium maculatum*, or the *cicuta virosa*. These are both umbelliferous plants, resembling each other somewhat in appearance, but differing essentially in the degree of their virulence, the *cicuta* being by far the most powerful. Another opinion is, that the deadly potion was a compound of the juice of several umbelliferous plants. The *conium maculatum* is now naturalized in the U. States, and is an upland plant, common in waste places. The confusion of names in our materia medica, has rendered this plant liable to be confounded with the *cicuta maculata*, a truly native plant, growing in wet places, and possessing a much less nauseous odor than the preceding, but vastly more dangerous in its properties, and which is the cause of many deaths in the U. States, from its being eaten through mistake.

Hemlock Spruce. (See *Spruce*.)

Hemmling, or Hemmlink, Hans; an eminent painter, who lived about the middle of the 15th century. He is

commonly thought to have been born in Flanders, and to have been carried, as a poor sick soldier, into St. John's hospital, at Bruges, where, on his recovery, his extraordinary genius for painting disclosed itself. According to later researches, he was probably born at Constance, and went to the Netherlands in order to study the art of painting in the school of Eyck. De Bast, of Ghent, asserts, in his *Messager des Sciences et Arts* (1825, No. 4—7), that the name of this artist was Hans Memling. Of his works, which have remained in the Netherlands, the above-mentioned hospital possesses the best; among them, a reliquary of St. Ursula, of which Van Keverberg published a description (1818), under the title *Ursula, Princesse Britannique d'après la Légende et les Peintures d'Hemmling*, containing also information on the other works of this artist.

Hemorrhage (Greek *αἷμα*, blood, and *ῥηγνυμι*, to burst); a flux of blood from the vessels which contain it, whether proceeding from a rupture of the blood-vessels or any other cause. Hemorrhages produced by mechanical causes, belong to surgery; those produced by internal causes, to medicine. The cutaneous system is rarely, and the cellular and serous systems are never, the seats of hemorrhages; that of the mucous membranes is the most subject to them. The symptoms of the disease are not less various than its causes and its seats, and the treatment must of course be adapted to all these different circumstances. A hemorrhage from the lungs is called *hemoptysis*; from the urinary organs, *hematuria*; from the stomach, *hematemesis*; from the nose, *epistaxis*.

Hemorrhoids (Greek *αἷμα*, and *ῥεω*, to flow); literally, a flow or flux of blood. Until the time of Hippocrates, this word was used, conformably to its etymology, as synonymous with *hemorrhage*. It was afterwards used in a narrower sense, to indicate the flux of blood at the extremity of the rectum, and in some other cases which were considered analogous to it; thus we hear it applied to the flow of blood from the nostrils, the mouth, the bladder and the matrix. It is at present used to signify a particular affection of the rectum, although the disease is not always attended with a flux; in this sense it is also called *piles*. Certain general causes may produce a predisposition to this disease; in some cases, it appears to be the effect of a hereditary disposition; in general, it manifests itself between the period of puberty and old age, although infants and aged people are not entirely exempt from its attacks. The bilious temperament seems to be more exposed to it than any other. Men are oftener affected with it than women, in whom it is sometimes produced by local causes. It often shows itself in subjects who pass suddenly from an active to a sedentary life, or from leanness to corpulency. Any circumstance which produces a tendency or stagnation of the blood at the extremity of the rectum, is to be reckoned among the local causes. The accumulation of fecal matter in the intestines, efforts to expel urine, the pressure produced by polypi, the obstruction of any of the viscera, especially of the liver, worms, the frequent use of hot bathing, of drastic purges, and particularly of aloes, long continuance in a sitting posture, riding on horseback, pregnancy, the accumulation of water by ascites,—such are some of the ordinary causes of hemorrhoids. They are distinguished into several sorts, as external, when apparent at the anus; internal, when concealed within the orifice, blind or open, regular or irregular, active or passive, periodical or anomalous, &c. There is also a great difference in the quantity of blood discharged; it is usually inconsiderable, but, in some cases, is so great as to threaten the life of the subject. The quality, color, &c., of the blood, also differ in different cases. The number, seat and form of the hemorrhoidal tumors likewise present a great variety of appearances. When the disease is purely local, we may attempt its cure; but in the greatest number of cases, it is connected with some other affection, or with the constitution of the subject. In these cases, if the tumors are not troublesome on account of their size, or if the quantity of blood discharged is not very considerable, the cure may be attended with bad consequences. The best mode of treatment is, then, to recur to hygietic rather than medicinal influences. The subject should avoid violent exercises; but moderate exercise will be found beneficial; the food should not be too stimulating or nutritious. Travelling, or an active life, should succeed to sedentary habits. The constipation, with which the subjects of this disease are liable to be affected, should be remedied by laxatives or gentle purgatives. If bathing is used, it should be in lukewarm or cold water. Any thing which may be productive of a local heat, should be avoided; as warm seats, soft beds, too much sleep. If the pain is considerable, recourse should be had to sedatives, gentle bleeding, leeches. If the dis-

ease appears under a more severe form, more violent remedies will become necessary. If the sanguineous fluxion becomes excessive, particular care must be paid to regulate it. If the tumors acquire a considerable volume, surgical operations may become necessary. If any bad consequences result from the suppression of the hemorrhoids, care must be taken to give the blood the salutary direction which it had previously; this may be effected by the use of laxative baths, emollient fomentations, the application of leeches to the anus.

Hemp (*cannabis sativa*); a plant belonging to the same family with the hop and nettle, extensively cultivated, and important on account of the various uses of its seed and the fibres of its bark. Poultry and small birds are very fond of the former, and it furnishes an expressed oil, very good for burning, and also employed by painters; the latter is made into cordage, ropes, cables and cloth of every quality, from that used for the sails of vessels to the fineness of linen. The stem is herbaceous, upright, simple, slightly pilose, attaining the height of four to six feet; the leaves opposite on foot-stalks, divided into five lanceolate and coarsely serrate leaflets; the male flowers, which are on separate stems, are green, resembling those of the hop, and consist of a five-leafed perianth and five stamens; the female flowers are inconspicuous, and the fruit is a little, hard, bivalve capsule, containing a single seed. The plant is annual, and possesses a strong odor, with intoxicating and narcotic properties, on which account it is usual, in India and other Eastern countries, to mix the leaves with tobacco for smoking. It is a native of India and Persia, and was transported into Europe, where it is now cultivated successfully, even in the northern parts. In the U. States, the hemp has become naturalized in many places, and is common in waste places, along road sides, &c. Though cultivated to some extent in the U. States, it still forms a large article of import from Europe, and particularly from Russia. The seeds do not preserve their vegetative properties beyond one season, on account of the quantity of oil they contain. Their goodness may also be determined by the taste. If an acrid or rancid flavor be present, the seeds have lost the power of germination; all that have a white or pale greenish color should likewise be rejected. A strong, heavily manured soil, is the most suitable for its cultivation; on which account it succeeds so well on newly cleared lands. It should be sown more or less densely, according to the use for which it is intended; if very thick, the fibres are finer, have a better lustre, are more easily bleached, and of course more suitable for the finer kinds of cloth; if scattered sparingly, the plants attain a greater elevation, produce a stronger, coarser and longer fibre, better adapted for cordage. Care should be taken not to cover the seed too deeply with earth, and when a few inches high, it should be thinned and cleared of weeds; once is sufficient, for the hemp soon acquires such an ascendency as to entirely prevent the growth of other plants. The harvest is at two distinct periods. Soon after flowering, the male plants should be pulled up without disturbing the roots of the females, which are to remain some weeks longer, in order to bring the seed to perfection. With unscientific people, however, these terms are transposed, the *males* are called *females*, and *vice versa*. The males should be tied immediately in bundles, the roots cut off while fresh, the upper leaves also beaten off; and it is the most eligible practice to immerse them in water without delay, for rotting. The females, which are three times more numerous than the males, should be pulled very carefully, without shaking or inclining the summits, and the flail should not be used, as it bruises the seed. The seed, when separated, should be spread out, turned at intervals, and exposed to a current of air, otherwise there will be danger of fermentation. The process of rotting consists in the decomposition of the substance which envelopes and unites the fibres, and takes place much more rapidly in stagnant pools than in running water or extensive lakes—in warm weather than in the reverse. The time requisite varies from 5 to 15 days, even in stagnant water. The water in which hemp has been rotted, acquires an excessively disagreeable odor and taste, proving fatal to fishes, and should be at a distance from any inhabited place, lest it engender pestilential diseases; neither should it be permitted to corrupt those sources which are used for drink by man or beast. When water is not at hand, hemp may be rotted in the open air, by spreading it at night upon the green-sward, and heaping it together in the morning before the sun's rays have much power. In wet weather, it may be left on the ground during the whole day, and, should the nights be very dry, it is better to water it. This process is

called *dew-rotting*, and is very tedious, requiring three, six or even eight weeks. Another method, again, is by placing it in a pit, and covering it with about a foot of earth, after having watered it abundantly a single time; but even this method requires double the time of water. After being rotted and rapidly dried, the hemp is ready for combing, beating, &c.; but these subsequent manipulations are found by experience to be very unhealthy, probably on account of the fine, penetrating dust which is created; wherefore, in this instance, at least, the employment of some of the various machines which have been invented is supported on the plea of humanity.

Hemsterhuis, Tiberius, a Dutch philologist, celebrated for his learning, particularly in the Greek and Roman languages, and for the new philological school which he founded, was born at Groningen, in 1685, died in 1756, at Leyden, where he was professor of the Greek language and of history. His father was a learned and respectable physician in Groningen, from whom he received his first instruction; and, as early as his 14th year, he entered the university of his native city, where he studied particularly mathematics. Some years afterwards, he went to Leyden, where he was commissioned to arrange the manuscripts in the library of the university. He was not 20 years old when he was appointed professor of mathematics and philosophy at Amsterdam. Here he entered into the philological career. He now undertook an edition of Julius Pollux, the lexicographer, and was thus led into a correspondence with the great Bentley, whose overpowering, though friendly criticism, for a short time, discouraged the young man. But he soon applied himself more zealously to the study of all the Greek authors, in chronological order, and with such success, that he may justly be said to have been the most profound Hellenist of the age. He was, in the full sense of the words, a grammarian and critic at the same time, and he united to this the most comprehensive knowledge of all matters connected in any manner with his studies. We are indebted to him for the foundation of the study of the Greek language, on the basis of analogy, for which Joseph Scaliger and Salmasius had prepared the way. By this analogical method, new light was shed on the origin and signification of words; the relation of single words to similar ones was pointed out, as well as their relation to the Latin language, which he frequently traced back to the Æolian dialect. Hemsterhuis was not less familiar with Latin, although his style in that language wants the easy grace which we find in Ruhnken. This philologist and Valkenaer were his most distinguished pupils. His principal works are the above-mentioned edition of the *Onomasticon* of Julius Pollux, Select Dialogues of Lucian, and the Plutus of Aristophanes. Besides these, he wrote a number of excellent annotations and emendations to different authors, and several academical discourses. He was remarkable for mildness and modesty of character, and was entirely exempt from the severe and dogmatical tone of many of the Dutch philologists. His grateful pupil and friend, Ruhnken, in the classical memoir which he has consecrated to his memory, gives some fine traits of his character. Jac. Geel has published from the manuscripts of Hemsterhuis, which are preserved in the library at Leyden, *Anecdota Hemsterhusiana* (Leyden and Leipsic, 1825).

Hemsterhuis, Francis; son of the preceding. To the classical learning which he inherited from his father, he added the study of philosophy, in particular that of Socrates, which speaks in all his productions. Hence his predilection for the animated form of the dialogue, in preference to a systematic method. The sensual system of Locke was the foundation of his philosophy, but was extended by him with great acuteness, interwoven with observations of his own, and exhibited in a manner full of life and taste. In the society of the princess Gallitzin, to whom he dedicated several of his writings, under the name of *Diotima*, and of the count of Fürstenberg, he made a journey through Germany, in which he collected a rich treasure of observations on the fine arts, which he communicated to his friend and colleague Smeth, in a letter originally written in Dutch, and translated into French. His philosophical views he has expressed, in particular, in the dialogue *Sophyle ou de la Philosophie*. Another class of his writings refers chiefly to the philosophy of the arts and to archæology; among which, the *Lettre sur la Sculpture* (1760), in which he treats on the objects of the fine arts, and in particular of sculpture, and on their different periods. The dialogue *Aristée ou de la Divinité* (2d edit., 1779) is devoted to the philosophy of religion, as well as the celebrated *Lettre de Diocles à Diotime sur l'Athéisme* (1785), which was first made known and answered by his friend F. J. Jacobi (Essay on the Doctrine of Spinoza). His

other writings are a dialogue *Alexis, ou de l'Age d'Or* (On the Golden Age), and the masterly *Description philosophique du Caractère du feu M. Fr. Fagel* (1773). All these writings were collected and published by Jansen, first in 1792, and in a 2d edition in 1809 (Paris, in 2 vols.). Of the circumstances of his life, we know nothing more particular, than that he was born in 1720, that he resided first at Leyden, then at the Hague, as a private individual; that he occupied, for some time, the post of first clerk in the office of the secretary of the United Netherlands, and was one of the directors of the drawing academy at Amsterdam. He died at the Hague, in 1790.

Hemus. (See *Balkan.*)

Henault, Charles John Francis; president of the parliament of Paris; an eminent French historian, and writer on polite literature. He was the son of a farmer-general, and was born at Paris in 1685. He first adopted the ecclesiastical profession, and entered among the fathers of the oratory; but he quitted that society for the long robe, and obtained the posts of president of the chamber of inquests, and superintendent of the finances of the queen's household. He produced a poem, which, in 1707, obtained a prize from the French academy. In 1713, his tragedy of Cornelia was brought on the stage, where, however, it was not well received. In 1723, he was admitted into the French academy; and he also became a member of the academy of inscriptions and belles-lettres, and of other literary associations. He was intimately connected with madame du Deffand, and from his rank, as well as his talents, he held a distinguished station among the Parisian literati. His *Abrégé Chronologique de l'Histoire de France*, exhibiting a tabular view of French history, has been translated into several languages, and been repeatedly imitated; last edition (Paris, 1821), continued by Walckenaer. He was also the author of comedies, poems, academical discourses, &c. He died in 1770. In the following year was published, posthumously, his *Histoire Critique de l'Etablissement des Français dans les Gaules* (2 vols., 8vo.); and in 1806 appeared *Les Œuvres inédites du Président Hénault* (8vo.).

Henbane (*hyoscyamus niger*); a herbaceous annual plant, growing to the height of about two feet, with sinuate leaves, and yellow flowers, veined with purple, and situated in the axils of the superior leaves. The whole plant is hairy, and, like others of the same natural family (*solaneæ*), possesses a heavy, disagreeable odor, and dangerous narcotic properties. Cases of poisoning, from eating this plant through mistake, have been frequent in Europe. This plant has been imported from the eastern continent, and has now become naturalized in this country, occurring in waste places, along road-sides, in various parts of the Union. From its narcotic qualities, it is occasionally employed in medicine. Twelve species of *hyoscyamus* are known, all of them natives of the eastern continent.

Hendecasyllables; a verse of 11 syllables, which, among the ancients, was used particularly by Catullus, and which is well adapted for elegant trifles. The measure is — — | — ⏑ ⏑ | — ⏑ | — ⏑ | — ⏑

Hengist, the founder of the kingdom of Kent, in Great Britain, and his brother Horsa, were renowned among the Saxons for their bodily strength and the antiquity of their family, which derived its origin in a direct line from Odin. In 449, the Britons sued for aid from the Saxons, against the inroads of the Scots and Picts. The Saxons had long been desirous of invading this beautiful island, and therefore gladly accepted the invitation. Under the command of Hengist and Horsa, they landed at the mouth of the Thames, attacked the enemies of the Britons, and defeated them near Stamford. The victory, obtained with so much facility, convinced them that they could easily subdue a people who were unable to resist so feeble an enemy. They sent intelligence to Saxony, of the fertility and wealth of the country, and represented as both easy and certain, the subjection of a people who had so long forgotten the use of arms, and who were divided among themselves. As soon as they had received reinforcements from home, they sought occasion for a quarrel, under the pretext, that their subsidies were ill paid, and their supplies withheld; and, ceasing to dissemble any longer, they united with the Scots and Picts, and attacked the Britons. The latter had taken up arms, deposed their king, Vortigern, who had become odious by his vices and by the ruinous consequences of his policy, and placed his son Vortimer upon the throne. The war was carried on with the greatest fury. The Anglo-Saxons penetrated to the interior of the country, laying waste all before them, and practising the most shocking cruelties. The Britons were forced to flee or submit to the yoke of the victors. Some fled to Armorica (*Haute-Bretagne*), to which they

gave their name. Hengist, who had lost his brother in the battle near Eglesford (now Ailsford), founded the kingdom of Kent, which embraces the present counties of Kent, Middlesex, Essex, and part of Surrey. He established his residence in Canterbury, and died about the year 488, leaving his kingdom to his posterity. A brother and a nephew, whom he had called over to England, settled in Northumberland. Their example was followed by other chiefs, who founded the Saxon Heptarchy.

Henke, Henry Philip Conrad, vice-president of the consistory of Wolfenbuttel, first professor of theology at Helmstädt, the son of a minister in Brunswick, was born in 1752, at Hehlen. His father's death left him, at the age of 12 years, in indigence, and he was supported by the liberality of some wealthy patrons. He applied himself particularly to philology. His favorite author was Quintilian, with a translation of whom he began his literary career. Henke was one of the editors of the Latin Journal, then published under the direction of Schirac, professor in Helmstädt, and received his degrees in the philosophical faculty. In 1778, he received the place of a professor extraordinary of theology at Helmstädt. His literary reputation was founded on his Ecclesiastical History, of which the first volume appeared in 1788, and which passed through several new editions before it was completed by Vater, 8 vols. (Königsberg, 1820.) This book contains a treasure of historical learning. Henke was an enemy of that dogmatical theology, which imposes constraints on opinion, and discourages free investigation. He was a Protestant, in the true sense of the word. His work on dogmatics is written in classical Latin, and is another proof of his learning in the history of theology. He went, in 1807, as deputy for Brunswick to Paris, to pay homage to the king of Westphalia. He died May 2, 1809.

Henley, John; an English clergyman, possessed of considerable talents, but principally distinguished for the irregularity of his conduct, and commonly known, towards the middle of the last century, by the title of *Orator Henley*. He was educated at Cambridge, and entered into holy orders. After having conducted a free school, and held a curacy, he grew tired of his secluded situation, and went to London in search of an ampler field for his abilities. He was first engaged as a preacher at an Episcopal chapel. Dissatisfied with his prospects of church preferment, he resigned his appointments, and commenced public orator. Having opened a chapel in the neighborhood of Newport market, he gave lectures on theological topics on Sundays, and other subjects on Wednesdays, every week. Novelty procured him a multitude of hearers; but he was too imprudent to gain any permanent advantage from his project. After having served as a butt for the satirical wits, poets and painters of his time, he removed his oratory to Clare market, and sunk into comparative obscurity and contempt, previously to his death in 1756.

Henlopen; a cape on the coast of Delaware, at the entrance of Delaware bay. It is 18 miles south-west of cape May. Latitude of the light-house on the cape, 38° 47′ N.; lon. 75° 10′ W. The light-house is of an octagon form, handsomely built of stone, 115 feet high, and its foundation is nearly as much above the level of the sea.

Henna Plant (*Lawsonia alba*), the *cyprus* of the ancients, is a shrub bearing opposite entire leaves, and numerous small flowers, which are disposed in terminal panicles, and possess an agreeable odor. Externally it bears considerable resemblance to the European privet, but belongs to the natural family *lythrarieæ*. It grows in moist situations throughout the north of Africa, Arabia, Persia and the East Indies, and has acquired celebrity from being used by the inhabitants of those countries to dye the nails of their fingers, and the manes, hoofs, &c., of their horses. For this purpose the leaves are dried, powdered, and made into a paste with hot water, which, when applied to the above-mentioned parts, leaves a yellow color, requiring, however, to be renewed every three or four weeks. The Egyptian mummies have their nails stained yellow, probably by the use of the henna. This circumstance, however, is by some referred to the various drugs used in the process of embalming. It is cultivated extensively in Egypt, and the powdered leaves form a large article of export to Persia and the Turkish possessions. The coloring matter of this plant is very abundant, and it may be advantageously used for dyeing woollens, not only yellow, but brown of various shades, provided that alum and sulphate of iron be employed.

Hennepin, Louis, a French recollet friar, a missionary and a traveller in North America, was born in Flanders about 1640. He entered a convent, and, being sent by his superiors to Calais and Dunkirk, the stories he heard from the sailors

inspired him with a desire to visit distant countries. At length he embarked for Canada, and arrived at Quebec in 1675. Between that period and 1682, he explored the regions afterwards called Louisiana, and, returning to Europe, published an account of his researches, entitled *Description de la Louisiane nouvellement découverte au sud-ouest de la Nouvelle France, avec la Carte du Pays, les Mœurs et la Manière de Vivre des Sauvages* (Paris, 1683, 12mo.). He afterwards produced other works, containing fuller descriptions of the result of his observations.

Henrietta, Anna, of England, duchess of Orleans, daughter of king Charles I, was born at Exeter, England, June 16, 1644, amidst the turbulent scenes of the civil war. She was hardly three weeks old, when her mother fled with her to France, and, after the death of Charles, repaired to the convent of Chaillot, and there devoted herself to the education of her daughter. Henrietta united with great sweetness of character the charms of a beautiful person. Her nuptials with the brother of Louis XIV, Philip of France, duke of Orleans, were celebrated in March, 1661; and Louis XIV, to whom her hand had been offered, now seemed to regret that he had refused the lovely Henrietta. He did not conceal his admiration for her, and the princess is said not to have remained insensible to the homage of the king. This circumstance, and the indiscretion with which she permitted the attentions of some of the courtiers, excited the jealousy of the duke of Orleans, and rendered their marriage unhappy. Henrietta would have suffered more from the severe and gloomy character of her husband, had she not found protection in the king, who afterwards employed her mediation in political affairs. Louis XIV was desirous of detaching her brother, Charles II, from the triple alliance with Holland and Sweden, in order to accomplish his plan of obtaining possession of a part of Holland. As the common method of diplomatic transactions was not sufficient for this purpose, Louis resolved to make his sister-in-law his confidant in this affair, and the duchess of Orleans embraced his proposals with the greater readiness, as they flattered her pride, and opened a wide field for her spirit of intrigue. She went, therefore, in 1670, with the court, to Flanders, and, under pretence of visiting her brother, passed over to Dover, where Charles was awaiting her arrival. Mademoiselle de Kéroual, a native of Brittany (afterwards mistress of Charles II, under the title of duchess of Portsmouth), accompanied her. The persuasions of the sister, aided by the charms of her companion, succeeded in gaining Charles II, in the short space of ten days, entirely to the interest of Louis. Soon after madame d'Orleans' return to France, while all were eager to offer their congratulations on her success, she was suddenly seized with violent pains, which terminated her life at St. Cloud, June 29, 1670. A suspicion of poison was immediately excited, and, although, on an examination of the body in the presence of the English ambassador, the physicians asserted the contrary, there is little doubt, that she fell, in the flower of her age, a sacrifice to a base revenge. It may be gathered from the facts collected by the second wife of the duke of Orleans, the princess of Bavaria, and from other accounts, that the chevalier de Lorraine (the intimate friend of her husband) was considered the contriver of this detestable crime. He was then living in exile in Rome, was desirous of returning to France, and knew her to be the only obstacle to his return. The circumstance that Louis XIV permitted the chevalier, two years after the death of the duchess, to appear again at court, and raised him to the dignity of a marshal of France, by no means weakens this suspicion, since the king then stood in need of the influence of the chevalier over the duke of Orleans. The sweetness of her manners made this unfortunate princess an object of general regret, and her grace and beauty often caused her to be compared with her still more unfortunate ancestor, Mary Stuart. It is related that the oral confession made to Louis XIV by the *maitre d'hôtel* of the duchess, entirely convinced the king of the guilt of the chevalier de Lorraine, but that motives of policy, both in regard to his brother and to England, induced him to throw a veil over the whole transaction, and to leave even the actual perpetrator of it unpunished. Bossuet pronounced her funeral oration.

Henry I (*the Fowler;* a surname which, according to the account of recent writers, he received from the circumstance that the messengers of the German princes, sent to announce his election, found him engaged in fowling) was born in the year 876, and was the son of Otho the Illustrious, duke of Saxony, who had refused the regal dignity offered him in 912. Henry, on the death of his father, became duke of Saxony and Thuringia. He was elected sovereign of Germany in

919, at Fritzlar. He had to contend with anarchy within and enemies abroad, but his prudence and activity overcame these difficulties. Lorraine, which had been separated from Germany by the Western Franks, Henry reunited to the German empire in 923, and erected it into a duchy. During the disturbances in Germany, the Hungarians had often made inroads without meeting much resistance, and compelled the payment of a yearly tribute. A general of the Hungarians having been made prisoner, Henry released him without ransom, and, in 924, made a truce of nine years with these barbarians without paying tribute. During this time, he improved the art of war among the Germans, exercised the troops, and gave a new arrangement to the cavalry, whose heavy armor had hitherto prevented it from effecting any thing against the Hungarian light-horse. One of the most useful measures which Henry adopted for the defence of Northern Germany was, the surrounding the cities, which for the most part were nothing but a collection of log and mud huts, with walls and ditches. The ninth part of the nobility and freemen were compelled to remove to these cities, and those who remained without the city had habitations provided for them in case of a hostile invasion; provisions were also brought in from the country for their support. All public meetings for the discussion of public affairs, he provided, should be held in these cities. These measures gradually formed a third estate, to which Germany and other countries are chiefly indebted for their progressive civilization, since in the cities originated the mechanical trades, manufactures and commerce. While Henry thus provided for the internal regulation of Germany, he attended no less to the protection of the frontiers. In order to prevent the invasions of the Normans or Danes, he carried the war into their own country, and thus extended the limits of Germany over the Eyder as far as Sleswic, where he founded a Saxon colony, and placed a margrave, in 931. Different Sclavonic and Wendish tribes in the Mark and in Meissen, as well as the Bohemians, were compelled to submit to him; and he founded the margraviates of Meissen in 927, and North Saxony, afterwards Brandenburg, in 931. At the end of the nine years' truce with the Hungarians, he refused the tribute. They entered Thuringia and Saxony with two armies, but were completely routed by Henry before Merseburg (in 933 and 934). They were obliged to flee with the loss of all their booty and prisoners. This success was the fruit of the improvements in discipline which Henry had introduced, and of the reputation which he had acquired among the Germans, who now willingly supported him. The Hungarians did not dare, for a long time after, to repeat their incursions into Germany. After these successes, Henry desired to go to Italy, in order to be crowned emperor at Rome; but he died in 936, at Memleben, a little more than 60 years old, after a fortunate and glorious reign of 16 years, and was buried with great pomp at Quedlingburg. He was distinguished for excellent qualities, mental and bodily. His naturally clear understanding supplied his defects of learning. He has been reproached for his love of show, and the impetuosity of his temper. What he had begun, his son and successor, Otho I, gloriously completed.

Henry III, son of the emperor Conrad II, and descended from the Salian Franks, was born in 1017, and succeeded his father in the imperial dignity, 1039. He had already been chosen king in 1027. Nature had given him the talents, and education the character, suitable for an able ruler. The church was compelled to acknowledge its dependence on him. Upon his first journey over the Alps, in 1046, he deposed three popes, put upon the vacant chair a new one, Clement II, and established his right to interfere in the choice of the Roman bishop so firmly, that as long as he lived the papal chair was filled in submission to his will. The remainder of the clergy were also under his strict scrutiny. In all parts of his German, Italian and Burgundian territories, no spiritual dignitary dared to bestow any important office, or to appropriate the property of the church, without consulting him. The temporal lords he held not merely in dependence, but in actual subjection. The duchies and counties he filled or left vacant at his pleasure, and the whole empire was at length changed into a monarchy dependent upon the king alone. Henry now reigned despotically, but displayed, in every thing which he undertook, a steady and persevering spirit. All classes were at length dissatisfied with him; however, the priests and clergy, on account of his great show of piety, gave him their approbation, and the surname of the *pious*. Henry died in 1056, at Bothfeld, after he had, three years before, caused his son to be chosen his successor.

Henry IV, the son of the preceding, was born in 1050, and at the death of his father was only five years old.

At the age of 15, Henry assumed the government at the diet of Goslar. The pernicious counsels of Adelbert, archbishop of Bremen, soon produced troubles, especially in Saxony, where Henry committed many acts of violence. The Saxons joined with the inhabitants of Thuringia, who suffered under the same grievances, and drove Henry from Saxony (1073), destroyed many of the castles which he had built to overawe the inhabitants, and compelled him the same year to an accommodation, in which the destruction of the remaining castles was stipulated. But some churches having been destroyed by the populace, Henry accused the Saxons to the pope of sacrilege, and thus gave him an opportunity to interfere as umpire. The Saxons offered to make every satisfaction; but Henry suddenly invaded their territory with a powerful army, and attacked them, in 1075, at Langensalza on the Unstrut, where they suffered a total defeat. Henry took all their princes and nobles prisoners, sent them into other countries, and treated the people like an angry victor. The Saxons, in turn, now complained to the pope. Gregory VII (Hildebrand), who had been elevated to the papal chair some years before, without the consent of the imperial court, eagerly seized this opportunity to extend his power, and, in 1076, summoned Henry, under penalty of excommunication, to appear before him at Rome, and answer to the complaints of the Saxons. Henry regarded this threat so little, that he instigated the bishops, who were assembled by his order at Worms, to renounce their obedience to the pope. Gregory, however, pronounced the sentence of excommunication against him, and absolved his subjects from their allegiance, and Henry soon found himself deserted, and in danger of losing every thing. In this state of affairs, he was obliged to go to Italy and make his submission to the pope. He found Gregory at Canossa, not far from Reggio, a strong castle belonging to Matilda, countess of Tuscany, whither he had retired for security. Three days successively, Henry appeared in a penitential dress, in the court of the castle, before he could obtain an audience of the pope. He was released from the excommunication only under the most severe conditions, viz. to be obedient to the pope in all things, &c. The insolence with which the pope used his victory produced a reaction; the Italian princes, who had long been dissatisfied with Gregory, and were desirous of deposing him, gathered round Henry, who was not disposed to fulfil the hard conditions imposed on him, and offered him their assistance. The German princes, however, at the instigation of the pope, assembled at Forcheim in 1077, and elected Rodolph, duke of Suabia, king. Henry hastened back to Germany, and overcame his rival, who lost his life in battle, in 1080. Henry's next adversaries, Hermann of Luxemburg, and Egbert, margrave of Thuringia, were still less able to oppose him. Gregory again excommunicated Henry; but, at the council of Brixen, in 1080, he was deposed by the German and Italian bishops as a heretic and a sorcerer. In 1081, Henry marched into Italy, to take vengeance on Gregory, who had shut himself up in the castle of St. Angelo, and caused himself to be crowned at Rome, by the pope, Clement III, whom he had himself named. Gregory took refuge among the Normans in Calabria, and died at Salerno in 1085. The dissatisfaction against Henry in Germany had not subsided; his oldest son, Conrad, rebelled against him, but was overcome, and died at Florence in 1101, deserted by his partisans. Henry caused his second son, Henry, to be elected his successor (1097), and crowned. But the latter, regardless of his oath not to interfere in the government during the life of his father, suffered himself to be seduced into rebellion. He made himself master of his father's person in 1105, by stratagem, and compelled him to abdicate the throne at Ingelheim. Henry IV ended his life and his sorrows, in neglect, at Liege, in 1106, and, as he died under sentence of excommunication, was not buried till five years after, when the sentence was taken off, and his remains were interred at Spire. He had received from nature good talents, prudence and courage, but his defective education had rendered him in the highest degree stubborn. He was an able warrior, and was victorious in 62 battles.

Henry V, the son and successor of the preceding, emperor of Germany, was born in the year 1081. He made himself disgracefully notorious by his conspiracy against his father, and by his cruel treatment of him. Scarcely had Henry V ascended the throne, when he declared himself against the usurpations of the Romish court, and the unfortunate question of investiture anew distracted the empire. A war commenced by him against the Hungarians and Poles, was unfortunate. In 1111, he married Matilda, the daughter of Henry I, king of England; and the rich dowry of this princess gave

him the means of undertaking an expedition over the Alps, in order to receive the imperial crown from the pope in Rome. But, as Pascal would consent to confer it only upon the condition that those rights which had already been claimed by Gregory, should be formally conceded, and as the bishops continued to add fuel to the fire which was already kindled, Henry determined to put an end to the dispute by an act of violence. He caused the pope to be conveyed away from the altar, while at mass, and cut down, in the streets of Rome, all who opposed him. After an imprisonment of two months, Pascal yielded; Henry was crowned without any new conditions, and, upon his knees, received from the proud prelate the permission to inter, in consecrated ground, the remains of his unhappy father, whom he had himself conspired against. The disturbances in Germany soon brought Henry back from Italy. While he was engaged in fighting against Lothaire, duke of Saxony, the Roman bishop excited a rebellion in Italy, and among the princes of the German empire, against him, and declared that the peace which had been concluded with the emperor was compulsory. This war continued two years, and devastated Germany in a shocking manner; after which, Henry made a second expedition to Italy, and compelled Pascal to fly to Apulia. After his death, which soon took place, the cardinals elected Galatius II. Henry, dissatisfied with this, caused Bourdin, archbishop of Braga, under the name of Gregory VIII, to be chosen. Galatius went to Vienna, where he collected together a council, and excommunicated Henry. The successor of Galatius, Calixtus II, did the same at the council of Rheims. By this, and by the continual insurrections of the nobility of the kingdom, Henry was at length compelled to yield. He subscribed, in 1122, the concordat of Worms, in which he declared his renunciation of the right of investiture by the ring and staff, and confirmed to all the churches the free choice of their prelates; but the choice of the bishops and abbots of the German kingdom was to be made in the presence of the emperor, and the person elected was to receive investiture from the emperor, by the sceptre, in regard to his temporal possessions and privileges. In order to furnish occupation to his turbulent vassals, Henry sought a pretext for a war with France. But before this broke out, a contagious disease carried him off, at Utrecht, May 22, 1125. Henry was a disobedient son, a ruler without power, without fidelity, and without religion. During his reign, the vassals and feudal tenants of the crown made themselves independent princes, and the political and national division of Germany was, as it were, sanctioned for posterity. He was the last ruler of the imperial family of the Franks, which was succeeded by the Suabian house.

Henry VII, emperor of Germany, son of the duke of Luxembourg, was chosen emperor Nov. 29, 1308, after an interregnum of seven months from the death of Albert I. He was the first German emperor who was chosen solely by the electors, without the interference of the other estates of the empire. Charles of Valois was his competitor. Henry, however, obtained the preference, chiefly through the agency of Clement V, who, although a Frenchman by birth, declared himself secretly in favor of the prince of Lorraine. One of the first acts of his government was to punish the murderers of Albert I. (q. v.) By the marriage of his son John with the heiress of Bohemia, Henry secured to his family this important kingdom, to the exclusion of Henry, duke of Carinthia, who was the next heir. He then undertook an expedition to Italy, and compelled the Milanese to place upon his head the iron crown of Lombardy. Henry suppressed, by force, the revolt which then broke out in Upper Italy; took Cremona, Lodi, Brescia, by storm; caused his chancellor Turiani, the secret leader of this insurrection, to be burnt, and then went to Rome, of which Robert, king of Naples, had possession, and refused him entrance. Having captured the city, he was crowned Roman emperor by two cardinals, while, in the streets and different quarters of the city, the work of murder and pillage was still going on. He then marched to Florence, put Robert of Naples under the ban of the empire, and threatened the inhabitants of Florence and Lucca with death if they did not instantly surrender. Notwithstanding this, they defended themselves vigorously; and, as Henry was marching against Naples, he died suddenly at Buonconvento, Aug. 24, 1313, in the 51st year of his age. There is a story that he died of poison, administered by a Dominican named Montepulciano, in the consecrated wine of the eucharist. Clement V immediately excommunicated the body of the emperor, and absolved Robert of Naples from the ban. After the empire had remained without a head during 14 months, Louis of Bavaria was chosen emperor. John, king of

Bohemia, and son of Henry, 30 years after his father's death, formally acquitted the Dominicans from the suspicion of having poisoned him.

Henry the Lion, the most remarkable prince of Germany in the 12th century, was born in 1129. His father died in 1139, of poison. The son inherited, with the large possessions, the numerous feuds of his father. In 1146, Henry assumed the government of Saxony. At the diet of princes, in Frankfort (1147), he demanded restitution of Bavaria, which had been taken from his father, and given to an Austrian prince. The emperor refused, and a war ensued, which terminated to the advantage of Henry. The emperor Frederic I restored Bavaria to him in 1154, and Henry was then at the height of his power. His possessions extended from the Baltic and the North sea to the Adriatic. Henry soon became involved in disputes with the clergy, who formed a confederacy at Merseburg, in 1166; but Henry overcame them. About two years afterwards, he separated from his wife, and married Matilda, daughter of Henry II of England. He then went on an expedition to the Holy Land, and, during his absence, his enemies, and even the emperor, made encroachments on his dominions. In 1174, at the head of a large body of troops, he followed Frederic I on his fifth expedition to Italy, but left him at the siege of Alessandria. In consequence of his quarrel with the emperor, and his non-appearance after being summoned before three diets, he was put under the ban of the empire. His dominions were given to other princes. Henry defended himself, for a time, successfully; but he was at last obliged to flee to Lübeck. In 1182, he asked pardon of the emperor, on his knees, and Frederic promised him that he should retain his hereditary possessions; but he was obliged to leave Germany for three years, and went to England. He returned in 1184; but Frederic, suspicious of the proud and high-minded Henry, obliged him to go once more to England, for three years, or to follow him to Palestine. He preferred the first; but, as the promise to leave his hereditary possessions undisturbed was violated, he went back (1189), and conquered many cities. A reconciliation was at last effected between the contending parties. His eldest son had married Agnes, the niece of Frederic I, and this connexion of a descendant of the mightiest Guelf with the greatest Gibeline, seemed to be the signal for a termination of the old quarrel. The quarrel between the emperor and Henry was concluded, and he died in peace at Brunswick, 1195, 66 years old. His tomb is still to be seen there. Henry was noble-minded, brave and indefatigable, but stubborn, proud and passionate. Though constantly engaged in a struggle with the clergy, he was pious. He was much in advance of his age in fostering industry, science, commerce, and the arts. He always bore up manfully against misfortune.

Henry the Navigator, the fourth son of king John I of Portugal, was born in 1394. Portugal was then tranquil and prosperous, the people were active and enterprising, and the ambition of discovery and conquest almost universal. The Infant Henry especially distinguished himself by his zeal. The generous youth gave early and brilliant proofs of courage. His love of arms, however, was surpassed by his love of the sciences, particularly mathematics, astronomy and navigation. When the Portuguese conquered Ceuta, in 1415, Henry distinguished himself by his bravery, and was knighted by his father, after whose death he chose for his residence the city of Sagres, in Algarve, near cape St. Vincent, and vigorously prosecuted the war against the Moors in Africa. His vessels attacked their coasts, and, on these expeditions, his sailors visited parts of the ocean which the navigators of that age had long regarded as inaccessible. But Henry meditated the discovery of countries till then unknown. Familiar with the previous progress of geographical science, he neglected no opportunity, during his campaigns in Africa, to obtain from the Moors a knowledge of the regions bordering on Egypt and Arabia, and to inquire into the probability of a passage to the treasures of India by a voyage round the western coast of Africa. The Arabians alone, at this period, were acquainted with this portion of the earth. From this source, Henry derived circumstantial information concerning the interior of Africa; also of the coast of Guinea, and other maritime regions. He conversed with men of learning; and, finding their testimony agreeable to the reports he had collected, he resolved to execute his designs. He erected at Sagres an observatory and a school, where young noblemen were instructed in the sciences connected with navigation. Though the compass was already known in Europe, Henry was the first who applied it to navigation. To him, also, a principal part

is ascribed in the invention of the astrolabe. (q. v.) From time to time, he sent vessels on voyages of discovery to the coasts of Barbary and Guinea; these expeditions, however, produced at first no important results. In one of these voyages, two of the pupils formed in his school, Juan Gonzalez Zarco and Tristan Vaz, driven by storms, discovered Puerto Santo and Madeira (q. v.), the latter in 1418. The first object of Henry was now to settle the new islands, and to cultivate the fertile soil. The colonists in Madeira had burnt down the thick woods, to make room for cultivation. Henry foresaw that wood was an article that would be afterwards wanted, and ordered new forests to be planted. To obviate the necessity of purchasing sugar from the Arabs, he caused sugar-cane to be brought from the Sicilies, which flourished excellently in the moist soil of the island. After the discovery of Madeira, Henry directed his thoughts to the coast of Guinea. Nothing but his unfailing perseverance could overcome the difficulties of this bold undertaking. Cape Non, it was affirmed, was the limit put by God to the ambition of man. Henry heard all the objections of his short-sighted opposers with calmness and equanimity. Gilianez, one of his navigators, offered to sail round the formidable cape, and to explore the coast of Guinea. He set sail in 1433, safely doubled cape Bojador, and took possession of the coast by the erection of the cross. The bold adventurer was rewarded with honors and presents. The next year, a larger vessel was sent out, which proceeded 140 miles beyond Bojador. These successful enterprises put a stop to censure, and Henry found more support. His brother Pedro, who administered the government during the minority of Alfonso V, effectually assisted him, and confirmed him in the possession of the islands of Puerto Santo and Madeira, which Henry had before received from the late king Edward. Pope Martin V not only confirmed the gift of these two islands, but also granted to the Portuguese all the countries which they should discover along the coast of Africa, as far as to the Indies. In 1440, Antonio Gonzalez and Nunno Tristan reached cape Blanco; and this new success made a favorable impression upon the nation. Young men of enterprise were the more eager to engage in voyages of discovery, as they were tempted with the prospect of obtaining gold dust. Henry had, thus far, paid all expenses of the expeditions alone; but companies were now formed of enterprising men, who ventured upon these voyages under his guidance; and the whole people soon became animated with the love of discovery. In 1446, Nunno Tristan doubled cape Verde; and, two years later, Gonzalez Vallo discovered three of the Azores islands, about 1000 miles from the continent. Henry continued these efforts with vigor till his death in 1463, at the age of 67. He had the joy to survive the discovery of Sierra Leone, and to see upon the throne of his country John II, a prince who pursued with zeal the preparations commenced with such flattering prospects of success. The important consequences which the world has derived from the extension of navigation, and the discovery of a new path to India, which was the result of his enterprises, have secured for him an undying name in history.

Henry (surnamed the *Younger*), duke of Brunswick; born 1498; a man of an impetuous, restless and ambitious character, but of a manly mind, the declared enemy of the reformation. He was one of the combatants in the famous battle against the peasants (May 15, 1525.) His restless disposition led him to attack the city of Gosslar. With 1000 horsemen he aided Charles V in a war against Venice; but disease destroyed his troops almost entirely, and he hardly escaped the vigilance of his enemies. When the famous confederation of the Protestant princes at Smalkalden took place (1537), Henry was made chief commander of the Catholic forces. At Höckelem, he and his son were made prisoners. The battle at Mühlberg (1547), so fatal for the Protestants, delivered him from his imprisonment. He subsequently fought several battles; lost in one his two eldest sons, and died in 1568. Henry is also known in story through his love to Eva Trott, of whom a romantic tale is related, that Henry induced her to feign the appearance of death, after which a formal burial took place; but Eva herself was conveyed secretly to the castle of Staufenburg, where Henry lived with her, and had seven children by her. The spot is still shown where one of the brothers of Eva was killed when he came in search of her.

Henry III, king of France, the third son of Henry II and Catharine of Medici, was born in 1551, at Fontainebleau. The death of his elder brother, Charles IX, in 1574, left the throne vacant, and Henry was crowned at Rheims, February 12,

1575. While duke of Anjou, he distinguished himself against the Huguenots; and the victories of Jarnac and Montcontour gave him so much reputation, that the Poles, in 1573, elected him their king. When his brother's death called him to the throne of France, the Poles were unwilling to part with him, and Henry fled secretly from a country which would gladly have retained him, to take the sceptre of another, of which the greatest part of the inhabitants hated him. In Vienna and Venice, which Henry visited on his journey to Paris, he was advised to reconcile the contending parties of the Catholics and Huguenots by mild measures, and thus spare his country the horrors of a civil war. Unhappily, the weak and voluptuous prince did not follow this judicious advice, but gave himself up to the intrigues of his mother, Catharine of Medici, which involved France in a ruinous civil contest. Shut up in his palace, the victor of Jarnac and Montcontour exhibited only the melancholy spectacle of a miserable prince, who had forgotten all his duties, and while parties were raging around him, occupied himself with debauchery and intrigues. His marriage with the daughter of the count Vaudemont, of the house of Lorraine, afforded new matter for dissensions, by giving the generally hated Guises greater influence at court. Now began the civil wars in which Henry of Navarre (afterwards king Henry IV) obtained so much glory. (See *Henry IV*, *Guise* (Henry), *Condé*, and the *League*.) The weak instrument of the dissensions of his courtiers, of his mother and his mistresses, Henry took no personal share in the subsequent events; and while the reputation of this king was continually sinking in the eyes of the people, and even in those of his own adherents, the confusion became greater. The duke of Guise came with troops to Paris, contrary to the express command of the king; and, when the latter made a feeble attempt to resist this usurpation, and to calm the rebellious citizens, his troops were driven away by the populace (May 12, 1588, called *La Journée des Barricades*), and he himself was compelled to flee to Chartres. Too weak and too cowardly to resist his enemies openly, he had recourse to artifice and assassination. At a meeting of the states-general at Blois (October, 1588), where he was apparently reconciled to the Guises, and where he partook of the eucharist with the duke, he ordered their murder. Henry of Guise was assassinated December 23, while on his way to the royal cabinet, and his brother, the cardinal, was murdered the next day in prison. This murder decided the fate of Henry. Paris and several of the principal cities of the kingdom formally declared against him. Henry III now saw no other remedy than a union with Henry of Navarre. The two princes besieged the capital, which was defended by the duke of Mayenne (brother of Henry of Guise, and at that time the head of the league). 71 doctors of the Sorbonne there declared the war against Henry of Valois (for so they called the king) justifiable. The pope promised the support of the church, and in Paris the murder of the tyrant was publicly preached. Henry was stabbed Aug. 1, 1589, in the camp at St. Cloud, by a Dominican (James Clement by name), a raving fanatic, and died the next day, in the 16th year of his reign and the 39th of his age. His mother died in January of the same year. The first of the Bourbons, Henry IV, succeeded the last of the Valois. This prince restored peace to the kingdom, after a bloody religious and civil war of 30 years' duration; but that system of falsehood, intrigue and moral corruption, which was introduced by the administration of Catharine of Medici and her three sons, Francis II, Charles IX and Henry III, into the French court, afterwards brought many evils upon the country.—See Davila's *Istoria delle Guerre Civili di Francia*, 1559—1598 (History of the Civil Wars of France from 1559 till 1598), (Paris, 1644, in 4 volumes), and Charles Lacretelle's *History of France during the Religious Wars* (Paris, 1814, 5 volumes).

Henry IV, son of Anthony of Bourbon, duke of Vendôme, and of Jeanne d'Albert, daughter of Henry, king of Navarre. He was born 1553, at Pau, in Béarn (department of the Lower Pyrenees). In accordance with the wishes of his maternal grandfather, he received an education well suited to the time in which he lived. He was inured to every hardship, early accustomed to knightly exercises, and his mind was trained for the labors of his after life. On the death of her husband, his mother left the French court, where she could not be secure from the intrigues of Catharine of Medici; she retired to Béarn, her hereditary principality, and there publicly declared herself in favor of the Huguenots. When the prince was 11 years old, he was compelled to appear in person at the court. The Guises had formed a plot with Philip II of Spain, to conquer Lower Navarre, the in-

heritance of Henry, and to deliver him to the Spanish tyrant. But the penetrating Elizabeth of England discovered and frustrated the whole design. Before the young prince was 16 years old, his heroic mother placed him at the head of the Huguenot army, which was beaten in the engagement at Jarnac, in 1568. The youth now pledged himself for the defence of his religion and of freedom of conscience, to the last drop of his blood. The forces under the command of the admiral de Coligny, animated by this act, proclaimed the young Henry generalissimo; and, notwithstanding a new defeat at Montcontour, the Huguenots concluded an advantageous peace at St. Germain-en-Laye. Henry then travelled through his own kingdom, became acquainted with the wants of his subjects, saw their grievances, and resolved to exert all his powers to mitigate them. A mind heroic and noble, a temper elevated above little offences and revenge, a gentle and sympathizing heart, with a strong inclination for the fair sex, and an ardent though tractable temperament, marked the early character of the hero, which gradually acquired a firm and resolute tone in the school of misfortune. The horrid plan of exterminating the Huguenots in France at a single blow, was already conceived by the bloody Catharine, and her weak son, king Charles IX, was persuaded to consent to it. For this purpose, it was necessary that the chiefs of the Huguenot party should be assembled at Paris. Under the pretence of uniting both parties, a marriage was proposed to queen Jeanne, between Henry and Margaret of Valois, youngest sister of Charles IX. While preparations were making for the marriage festival, Henry's mother died at Paris, not without strong suspicions of poison. Henry now assumed the title of *king of Navarre*. His marriage took place Aug. 18, 1572. Then followed the horrible scenes of St. Bartholomew's, August 24. (See *Bartholomew's Day.*) Henry and Condé were obliged to make profession of the Catholic faith to save their lives; but Catharine of Medici endeavored to dissolve the marriage just celebrated. As she was unsuccessful in this, she adopted the plan of corrupting the noble youth by the pleasures of a licentious court; and Henry did not escape the snare. In 1576, however, he took advantage of a hunting excursion to escape from the court. He now put himself anew at the head of the Huguenots, and professed himself again of the Protestant church. Catharine, who, after the decease of Charles IX, administered the government in the name of his successor, Henry III, now thought it advisable to conclude a treaty of peace with the Huguenots (1576), securing to them religious freedom. Exasperated by this event, the jealous Catholics, in 1585, formed the celebrated league, which the king was obliged to confirm, and at the head of which was Henry, duke of Guise. Soon after, the religious war was again kindled with renewed violence. In 1587, Henry, with an inferior force, defeated the army of the league at Coutras. To the latter Henry III had now become an object of suspicion; and, at the assembly of the states-general at Blois, in 1588, the Guises used every effort to destroy the royal power. The Sorbonne absolved the subjects of Henry III from their allegiance, and pope Sixtus V threatened to excommunicate the king. The misguided monarch had now no hope but in a reconciliation with Henry of Navarre. After they had united at Tours, they obtained the ascendency over the league, and Henry III marched to Paris, but he was assassinated in the camp at St. Cloud; and his last commands to the assembled nobility were, that they should acknowledge Henry of Navarre as his lawful successor to the throne of France. Meanwhile Henry IV found innumerable difficulties in establishing his claims. His Protestant religion was brought forward by all the competitors to prejudice the Catholics against him. At the head of the opposite party stood the duke de Mayenne. Philip II of Spain also claimed the French throne, and sent aid to the league. Henry IV first defeated his enemies in the memorable battle of Arques, and completed their overthrow in the celebrated engagement of Ivri. In consequence of this victory, Paris was besieged, and Henry IV was upon the point of compelling the fanatical citizens to surrender by famine, when the Spanish general Alexander, duke of Parma, by a skilful manœuvre, obliged him to raise the blockade. Convinced that he should never enjoy quiet possession of the French throne without professing the Catholic faith, Henry at length yielded to the wishes of his friends, was instructed in the doctrines of the Roman church, and professed the Catholic faith July 25, 1593, in the church of St. Denys. He happily escaped an attempt to assassinate him; was solemnly anointed king at Chartres, in 1594; and entered the capital amid the acclamations of the people. The Spanish troops were compelled to a dis-

graceful retreat. After Henry had been acknowledged by the pope, all parties in France were reconciled. To humble the pride and break the power of Spain, Henry concluded an offensive alliance with England and Holland. The war against Spain was concluded in 1598, by the peace of Vervins, to the advantage of France. Henry made use of the tranquillity which followed, to restore the internal prosperity of his kingdom, and particularly the wasted finances. In this design he was so successful, with the aid of his prime minister Sully, that 330 millions of the national debt were paid, and 40 millions laid up in the treasury. At the instance of Sully, Henry dissolved his marriage with Margaret of Valois; the pope confirmed the divorce, and the king soon after married Maria de' Medici, niece of the grand-duke of Tuscany. But the crafty, domineering and ambitious Maria so imbittered the life of Henry by her constant jealousy, that he resolved more than once to dissolve his union with her; Sully, however, prevented him. The birth of an heir (Louis XIII) for a while reconciled him with his wife. But other troubles afflicted him, particularly the conspiracy of his former friend and companion in arms, marshal Biron, whom he would gladly have saved; but whom repeated acts of disobedience obliged him to surrender to the hand of the executioner. No less painful to the king were the conspiracies of the count of Auvergne, of the marshal de Bouillon, and his mistress, the artful Entragues. It became necessary to inflict punishments, though mercy would have been more congenial with his feelings. To his former brothers in faith, the Protestants, Henry granted entire religious freedom and political security, by the edict of Nantes, in 1598. (See *Huguenots.*) To humble Spain and Austria (against whom the Protestants in Germany had sought his aid), he conceived a perhaps impracticable plan of a great confederacy, and an entire alteration in the arrangement of the European states; the consequence of which was to be a perpetual peace. He made preparations to carry it into execution, and was on the point of entering upon a campaign. During his absence, Maria, his wife, was to be regent; and he therefore caused her to be crowned at St. Denys, in 1610. As Henry was riding through the streets of Paris, on the following day, to examine the preparations for the solemn entrance of the queen, his coach was obstructed in the street de la Feronnerie, by two wagons. A fanatic, named Ravaillac, took advantage of this moment to perpetrate a long-meditated deed: he mounted the step of the coach, plunged a long two-edged knife twice into the heart of Henry, and thus ended the career of the best king France ever had. (See *Ravaillac.*) By his first wife Henry had no heir; by Maria, two sons and three daughters. By his mistresses, Gabrielle d'Estrées, Henriette de Balzac (the countess d'Entragues), Jacqueline (countess of Moret), and Charlotte of Essarts, he had several children. The benevolent mind of Henry, his paternal love to his subjects, his great achievements, his heart, always open to truth, though it exposed his own faults, have preserved his memory in the hearts of the nation; and his royal expression, "I wish that every peasant might have a fowl in his pot on Sundays," still lives in the mouths of the people, while his defects are charged to the dissoluteness of the age.—See *Memoirs and Correspondence of Duplessis-Mornay: being a History of the Reformation and of the Civil and Religious Wars in France, under the Reigns of Charles IX, Henry III, Henry IV, and Louis XIII, from the Year* 1571 *to* 1623 (*Mém. et Correspond. de Duplessis-Mornay, pour servir à l'Hist. de la Réformation et les Guerres Civiles et Religieuses en France, sous le Règne de Charles IX, Henry III, Henry IV, et Louis XIII, depuis l'An* 1571 *jusqu' en* 1623), (Paris, 1825, 15 vols.); *Secret Amours of Henry IV, from the Original Manuscripts of* 1632; *written by Jean François, Marquis of Montgendré; collected in France, in* 1815, *with Notes by Count Alb. von Pappenheim* (Nuremberg, 1824, 2 vols.).

Henry I, king of England, surnamed *Beauclerc*, youngest son of William the Conqueror, was born in 1068. He was hunting with William Rufus, in the New Forest, when that prince received his mortal wound, in 1100. Henry instantly rode to London, and caused himself to be proclaimed king, to the prejudice of his brother Robert, then absent on the crusades. To reconcile the people to his usurpation, Henry issued a charter, containing concessions to public liberty, which, however, operated little in restraint of his own government. He also performed another popular act, by recalling Anselm, archbishop of Canterbury, whose authority was necessary to his projects of conciliating his English subjects by marrying Matilda, daughter of Malcolm III, king of Scotland. This union strengthened his party, when his

brother landed an army, in 1101, with a view of asserting his claim to the crown. Actual hostilities were prevented by Anselm, who induced Robert to accept a pension; and it was agreed that the brothers should succeed to each other's dominions, in the event of death without issue. This treaty did not prevent Henry from invading Normandy, a short time after; and, in 1106, he took Robert prisoner, and reduced the whole duchy. A contest with the papal court, on the subject of investitures, ended in a compromise, by which he merely retained the right of temporal homage. His usurpation of Normandy involved him in continual war, which was very oppressive to his English subjects; but, although William, son of Robert, escaped out of custody, and was assisted by the king of France, Henry maintained possession of the duchy. His public prosperity was, however, counterbalanced by several domestic misfortunes. One of these was the loss, at sea, of his only son, William, who was drowned, in 1120, in returning from Normandy, together with his natural sister, whose cries recalled him to the sinking ship, after he had got clear from it in the long-boat. Henry was never seen to smile afterwards. He had betrothed his only daughter, Matilda, to the emperor, Henry V, and, when she became a widow, married her a second time to Geoffry Plantagenet, son of the count of Anjou. He himself also married a second wife, Adelaide, daughter of the duke of Lorraine, by whom he had no issue. He died in Normandy, of a sudden illness, occasioned by eating lampreys, in the 67th year of his age and 36th of his reign. Henry was a prince of great accomplishments, both of mind and person, and his ready elocution and proficiency in the literature of the period obtained him his surname. He was much attached to women, and possessed all the Norman passion for the chase, which produced so many rigorous game-laws.

Henry II, king of England, the first of the line of the Plantagenets, born in Normandy, in 1132, was the son of Geoffry, count of Anjou, and the empress Matilda, daughter of Henry I. He early displayed an elevated character, and was invested with the duchy of Normandy, by the consent of his mother, at the age of 16. The year following, he succeeded his father in the possession of Anjou and Maine, and, by a marriage with Eleanor of Guienne, just divorced from Louis VII, king of France, on a suspicion of infidelity, annexed that province, with Poictou, to his other dominions. Rendered thus potent, he determined to pursue his claim to the crown of England, against the usurpation of Stephen. His expedition for that purpose ended in a compromise, by which Stephen was to retain the crown during his life, and Henry to succeed at his death, which took place in 1154. The commencement of his reign was marked by the dismissal of the foreign mercenaries; and, although involved with his brother Geoffry, who attempted to seize Anjou and Maine, and in a temporary dispute with France, he reigned prosperously, until his memorable contest with Thomas à Becket. Anxious to repress the usurpation of the clergy, Henry, in 1164, summoned a general council of nobility and prelates, at Clarendon, which assembly passed the famous constitutions named from that place. The consequences of the reluctant subscription of Becket to these articles, in the first instance, and his subsequent conduct, have been already related in the life of Becket. A prince of less power and policy than Henry, might have yielded to the storm which followed; but, although sufficiently submissive in the way of penance and expiation, he only gave up the article in the constitutions of Clarendon, which forbade appeals to the court of Rome in ecclesiastical cases, and, even in that case, reserved the right of exacting sufficient security from all clergy who should leave the country in prosecution of such appeals. Before this matter was terminated, Henry, in 1172, armed with a bull of pope Adrian, whose authority to give away kingdoms, in this instance, he did not dispute, undertook an expedition into Ireland,—a great part of which, owing to the disputes of its native chieftains, had been reduced by some private adventurers, conducted by Richard Strongbow, earl of Strigul. The king found little more to do than to make a progress through the island, to receive the submission of the Irish princes; and, having left earl Richard in the post of seneschal of Ireland, he returned to England,—proceedings so important to the future destinies of both countries having occupied only a few months. Being an indulgent father, Henry had assigned to each of his four sons a provision out of his extensive territories. The eldest son, Henry, was not only declared heir to England, Normandy, Anjou, Maine and Touraine, but actually crowned in his father's life-time. On paying a visit to the court of his father-in-law, Louis, the prince was induced by the French

monarch to demand of his father the immediate resignation either of the kingdom of England or of the dukedom of Normandy. This extraordinary request being refused, he withdrew from his father's court, and was openly supported in his claim by Louis. Henry's various gallantries, exemplified in the popular and not altogether unfounded legend of fair Rosamond, or Rosamond Clifford, also embroiled him with his queen, Eleanor, who excited her other sons, Richard and Geoffry, to make similar claims, and imitate the example of their elder brother. Many potent barons and nobles, in the respective provinces, were thus withdrawn from their allegiance, and Louis, king of France, William, king of Scotland, and other powers, lent spirit to the confederacy. A general invasion of Henry's dominions was in this way concerted, and began, in 1173, by an attack on the frontiers of Normandy, where he opposed the storm with vigor. In the mean time, the flame had broken out in England, which was overrun with malcontents, while the king of Scots made an incursion into the north. Henry, in consequence, hastened home, and, to conciliate the clergy, passed a day and night of penance at the tomb of Becket. His absolution was followed by the news of a complete victory, gained by his general, the justiciary Glanville, over the Scots, in which their king was made prisoner. The spirit of the English malcontents being thus broken, they rapidly submitted; and Henry, returning to Normandy, entered into an accommodation with his sons, on less favorable terms than they had previously rejected; nor did the king of Scotland gain his liberty but by stipulating to do homage, and yield up some fortresses. The pause obtained by these exertions of vigor and ability, Henry employed in regulations and improvements which equally manifest his capacity and love of justice. He checked the prevailing licentiousness by severe laws, partitioned England into four judiciary districts, and appointed itinerant justices, to make regular excursions through them. He revived trial by jury, discouraged that by combat, and demolished all the newly-erected castles, as shelters of violence and anarchy. The turbulence of his sons still disquieted him; but Henry, the eldest, who had engaged in a new conspiracy, was cut off by a fever, in 1183, after expressing great contrition for his disobedience; and, two years after, the death of the equally restless Geoffry also released the king from newly meditated hostilities. Philip Augustus, then king of France, however, continued to foment the differences between Henry and his sons, and Richard was again prompted to rebel. A war between the two crowns followed, the event of which was so unfavorable to Henry, that he was at length obliged to agree that Richard should receive an oath of fealty from all his subjects, and marry Alice, sister of the French king, for whom Henry himself, under whose care she had long resided, is charged, and not without grounds, of having indulged an unbecoming, if not a criminal passion. He also stipulated to pay a sum of money to the French king, and to grant a pardon to all Richard's adherents. The mortification of Henry, at these humiliating terms, was aggravated to despair when he saw the name of his favorite son, John, at the head of the list of delinquents whom he was required to pardon; and, cursing the day of his birth, he pronounced a malediction upon his undutiful sons, which he could never be persuaded to retract. The anguish of his mind threw him into a low fever, which put an end to his life, at the castle of Chinon, near Saumur, in the 58th year of his age, and 35th of his reign. Henry II ranks among the greatest kings of England, not only in extent of dominion, but in all the qualities which give lustre to authority, being equally fitted for public life and for cultivated leisure. He was manly in person, gifted with ready elocution, and possessed warm affections. His wisdom and love of justice were acknowledged by foreign potentates, who made him arbiter of their differences, and regarded him as the first prince of the age.

Henry III, king of England, surnamed *of Winchester*, son of John, was born in 1207, and succeeded his father, 1216. At the time of his accession, the country was in a state of lamentable distraction. The dauphin of France, Louis, at the head of a foreign army, supported by a faction of English nobles disgusted with the conduct and tyranny of John, had assumed the reins of government, but, being justly suspected of arbitrary intentions, was become odious to the body of the people. The cause of the young king, then only nine years of age, was espoused by the earl of Pembroke, whose prudent government, as regent, in a short time compelled Louis to sue for peace, and quit the country. As Henry approached to manhood, he displayed a character wholly unfit for his station. One of his first false steps was to discard his most faithful and able minister, Hubert de Burgh, and give his

entire confidence to rapacious and unprincipled foreigners,—an evil which was further augmented by his marriage, in 1236, with Eleanor of Provence. Many grievances were the consequence; and his foolish acceptance of the crown of Sicily, offered him by the pope, involved him in vast debts, which parliament refused to discharge. In his necessity, he had recourse to exactions, which increased the national discontent, and, finally, gave an opportunity to his brother-in-law, the ambitious Simon de Montfort, earl of Leicester, to make a total change in the constitution, and deprive him of royal authority. In 1258, conspiring with the principal barons, that earl appeared with them in arms at a parliament holden at Oxford, and obliged the king to sign a body of resolutions, which threw all the legislative and executive power into the hands of an aristocracy of 24 barons, assisted by a lower house, consisting of four knights, chosen from each county. The aristocracy, as usual, soon displayed a spirit which united both king and people against them, and the former was absolved by the pope from his oath to observe the provisions of Oxford. By the aid of his able and spirited son Edward, Henry was gradually restored to authority; on which Leicester, calling in Llewellyn, prince of Wales, involved the kingdom in a civil war. The power of the barons was by this means partially restored, but, great divisions prevailing, both parties agreed to abide by the award of Louis IX, king of France. The award of this monarch, given in 1264, being favorable to the king, Leicester and the confederate barons refused to submit to it; and a battle was fought near Lewes, in which Henry, and his brother Richard, king of the Romans, were taken prisoners, and the person of prince Edward also ultimately secured. A convention ensued, called *the Mise of Lewes*, which provided for the future settlement of the kingdom; but, in the mean time, Leicester ruled without control. To him, however, was owing the first example of a genuine house of commons in England; for, in a parliament summoned by him, in 1265, deputies from boroughs were sent, as well as knights of shires. Prince Edward at length escaped, and, assembling an army, defeated Leicester's son. The decisive battle of Evesham quickly followed, in which Leicester himself was slain; and the king, then in the hands of the rebels, being placed in the front of the battle, narrowly escaped with his life. Replaced upon the throne, he remained as insignificant as ever; and the departure of his son for the Holy Land was the signal for new commotions, which were, however, terminated by his death, in 1272, in the 64th year of his age and the 56th of his reign.

Henry IV, king of England, surnamed *of Bolingbroke*, the first king of the house of Lancaster, was born in 1367, being the eldest son of John of Gaunt, duke of Lancaster, third son of Edward III, by the heiress of Edmund, earl of Lancaster, second son of Henry III. In the reign of Richard II, he was made earl of Derby and duke of Hereford, and, while bearing the latter title, appeared in the parliament of 1398, and preferred an accusation of treason against Mowbray, duke of Norfolk. The latter denied the charge, and offered to prove his innocence by single combat, which challenge being accepted, the king appointed the lists at Coventry; but, on the appearance of the two champions, at the appointed time and place, Richard would not suffer them to proceed. Both were banished the kingdom, Norfolk for life, and Hereford for ten years, shortened by favor to four, with the further privilege of immediately entering upon any inheritance which might accrue to him. On the death of John of Gaunt, in 1399, he succeeded to the dukedom of Lancaster, and laid claim, according to agreement, to the great estates attached to it; but the fickle and imprudent Richard recalled his letters patent, and retained possession of the estates; soon after which, he departed for Ireland. The duke, disregarding the unfinished term of his exile, embarked, in July, 1399, at Nantes; and, landing, with a small retinue, at Ravenspur, in Yorkshire, made oath, on his landing, that he only came for the recovery of his duchy. He was quickly joined by the earls of Northumberland and Westmoreland, the most potent barons of the north, and soon found himself at the head of 60,000 men. The duke of York, acting as guardian in the king's absence, was unable to oppose him; and, marching to Bristol, he took upon himself to execute some of the most odious of Richard's ministers, without trial. The latter, on the report of these transactions, landed at Milford Haven with an army, which soon melted away by desertion; and, falling into the hands of his enemies, he was brought to London by the duke, who now began openly to aim at the crown. A resignation was first obtained from Richard, who was then solemnly deposed in parliament. (See *Richard II.*) On this abdication, the right of succession was clearly in the house of

Mortimer, descended from Lionel, duke of Clarence, the second son of Edward III; but the duke of Lancaster claimed the crown for himself, as being lineally descended from Henry III, alluding to an idle report that his maternal grandfather, Edmund, earl of Lancaster, was really that king's eldest son, although set aside for his brother, Edward I. A sort of right of conquest was also set up, together with a plea of having delivered the nation from tyranny; and, though it was obvious that none of these claims would bear discussion, Henry was unanimously declared lawful king, under the title of Henry IV. The death of Richard soon removed a dangerous rival; yet a short time only elapsed before the turbulent nobles rebelled against the king of their own creation. The first plot, in 1400, was discovered in time to prevent its success, and many executions of men of rank followed. In order to ingratiate himself with the clergy, Henry promoted a law for committing to the flames persons convicted of the heresy of the Lollards. The Gascons, who, for a time, refused submission to Henry, were soon awed by an army; but an insurrection in Wales, under Owen Glendower (see article *Glendower*), proved a more lasting source of disturbance. That chieftain, having captured Mortimer, earl of March, the lineal heir to the crown, Henry would not suffer his relation, the earl of Northumberland, to treat for his ransom. He thus offended that powerful nobleman; who, however, with his son, the famous Hotspur, subsequently served the king effectually against the Scots, whom they defeated at Homeldon, and captured their famous leader, the earl of Douglas. An order from Henry not to ransom that nobleman and the other Scottish prisoners, whom he wished to reserve as hostages, completed the disgust of the Percies; and the fiery temper of the younger Percy being especially roused by these indignities, he immediately set free his prisoner Douglas, after making an alliance with him, and marched, with all the partisans of his house, towards Wales, to join Glendower. The king met the insurgents at Shrewsbury, and a furious battle ensued, July 21, 1403, which ended in the death of Percy and the defeat of his party. The king, who fought in the foremost ranks, was several times in great danger, and his eldest son, afterwards the conqueror of France, here first distinguished himself. Henry was merciful in this instance. The earl of Northumberland, whom sickness had prevented from joining his son, was pardoned, and but few victims were executed. A new insurrection, headed by the earl of Nottingham and the archbishop of York, broke out in 1405, which was suppressed by the king's third son, prince John, who, by a pretended agreement, induced the leaders to disband their forces, and then apprehended them. The archbishop afforded the first example, in this kingdom, of a capital punishment inflicted upon a prelate, and the chief-justice, sir William Gascoigne, deeming it unlawful, a less scrupulous judge supplied his place. Northumberland, who had once more conspired with the revolters, fled into Scotland with lord Bardolf; and, in an attempt to raise a new rebellion, in 1407, both these leaders were slain at Bramham; and, the death of Glendower following soon after, Henry at length felt his crown sit firmly on his head. The casual capture, by sea, of James, son and heir to Robert, king of Scotland, added to his safety on the side of Scotland; and, although he had not the generosity to release the young prince, he had him admirably educated, and thereby laid the foundation of the distinction which he afterwards obtained, as a reformer of the laws and manners of his country. The continual disquiet of his life brought him, while yet in his prime, into a declining condition; and repeated fits, which rendered nugatory a resolution of taking the cross, and visiting the Holy Land, brought on his dissolution, March 20, 1413, in the 46th year of his age and 13th of his reign. He had four sons and two daughters. Henry IV showed himself capable of reigning, possessing courage, vigilance, prudence and great command of temper. The necessity under which he lay of courting popularity, rendered his reign beneficial to the nation, and particularly favorable to the rights of the commons.

Henry V, king of England, called, after his birth-place, *of Monmouth*, was born in 1388, and succeeded his father, Henry IV, in 1413. His dissipated youth, and fondness for joviality and low company, gave his father much uneasiness; but circumstances occurred, even in the midst of his wildness, which showed that better principles were latent in his mind. His conduct, when he ascended the throne, justified the best expectations. He caused the obsequies of the unhappy Richard to be performed with great solemnity, and was studious to obliterate every party distinction. He had the magnanimity to treat with confidence and kindness his superior in hereditary title, the earl of March, who

repaid his advances with undeviating fidelity. It is to be regretted that his other good qualities were sullied by a rigid execution of the laws against the Lollards, the severity of which proceedings produced a real or alleged conspiracy against his person and government. The circumstances of France, torn asunder by the opposing factions of the dukes of Orleans and Burgundy, afforded a tempting opportunity to an ambitious neighbor. Henry was easily induced to revive the claims of his predecessors upon that country. He accordingly assembled a great fleet and army at Southampton, and was on the point of embarkation, when discovery was made of a dangerous conspiracy against his person, headed by the earl of Cambridge, who had married a sister of the earl of March, and sought to assert the rights of that family. The conspirators were capitally punished, after an irregular trial; and the king, delaying no longer, landed near Harfleur, August 14, 1415. He took that town, after a siege, which so much reduced his army that he determined to return to England; and, finding a great force assembled to oppose him, he offered to resign his conquests for an unmolested retreat. The French rejected the proposal, and were totally defeated in the plain of Agincourt (q. v.), October 25, 1415. Henry did not alter his determination to return home, and the dread of his arms was the chief advantage which he reaped from his victory. A peace taking place for two years, France was left to her own dissensions; until, at length, in 1417, the liberal grants of the commons enabled Henry once more to invade Normandy with 25,000 men. To an application for peace, he made a reply, which showed that he sought nothing less than the crown of France; but, in a negotiation with queen Isabella, he offered to accept the provinces ceded to Edward III by the treaty of Bretigni. The negotiation was broken off by the assassination of the duke of Burgundy, which induced his successor to join Henry. This alliance was soon followed by the famous treaty of Troyes, made with the French king in a state of imbecility, or, rather, with his queen and the Burgundian faction. By this treaty, Henry engaged to marry the princess Catharine, and to leave Charles in possession of the crown, on condition that it should go to Henry and his heirs at his decease, and be inseparably united to the crown of England. Henry, after espousing Catharine, took possession of Paris, and then went over to England, to raise recruits for his army. He returned to France, in 1421, and pursued the dauphin with so much vigor as to drive him beyond the Loire. A son was at this time born to him, and all his great projects seemed in full progress to success, when he was attacked by a fistula, which carried him off, in August, 1422, at the age of 34, and in the 10th year of his reign. Henry V, as the gallant, youthful and successful conqueror of France, is a favorite name in English history; but he was inferior, in wisdom and solid policy, to many of his ancestors. His reign was consumed in ambitious pursuits, which, while they inflicted great misery on France, entailed much misfortune upon his own country.

Henry VI, king of England, born at Windsor in 1421. As he was an infant not nine months old at the death of his father, Henry V, the kingdom was placed under the protectorship of his uncle, the duke of Bedford. The infant Henry was solemnly invested with the crown of France, by ambassadors sent for that purpose, and crowned at Paris in 1430, when only nine years of age. The defection of the duke of Burgundy, and the death of the duke of Bedford, were severe blows to the English interest in France. A truce with France, in 1433, was followed by the marriage of Henry with the celebrated Margaret of Anjou, daughter of Regnier, titular sovereign of Sicily and other kingdoms, without the actual possession of a single province. A renewal of hostilities with France, deprived the English of Normandy, and of every other possession in that country, except Calais. In the unpopularity of the court, people now began to look to the claim of Richard, duke of York, whose mother, heiress of the house of Mortimer, transmitted to him the best title to the crown by inheritance. The insurrection of Cade followed, and the duke of York returning from Ireland, a great party was formed in his favor, headed by some of the principal nobility. He was thereby enabled to remove his enemies from the king's person, and was, by parliament, declared protector of the kingdom, the imbecile Henry being, by this time, unable even to personate majesty. The York and Lancaster parties were now in such a state, that the sword only could decide between them; and that course of civil contention commenced, the first bloodshed in which occurred at St. Alban's, in May, 1455, and, as far as the reign of Henry was concerned, the last in the battle of Tewkesbury, in 1471. When the latter took place, the

king was a prisoner in the Tower, where he soon after died; but whether by a natural or violent death is uncertain, although popular opinion assigned it to the violence of Richard, duke of Gloucester. Henry was gentle, pious and well-intentioned, but too weak to act for himself. Eton college reveres Henry as its founder, as does likewise King's college, Cambridge.

Henry VII, king of England, first sovereign of the race of Tudor, was born in 1457. He was the son of Edmund, earl of Richmond, son of Owen Tudor and Catharine of France, widow of Henry V. His mother, Margaret, was the only child of John, duke of Somerset, grandson of John of Gaunt. After the battle of Tewkesbury, he was carried by his uncle, the earl of Pembroke, to Brittany, to seek refuge, in that court, from the jealousy of the victorious house of York. On the usurpation of Richard, the young earl of Richmond was naturally adverted to as the representative of the house of Lancaster. In 1485, Richmond assembled a body of troops in Brittany, and landed at Milford Haven, with no more than 2000 hired foreign adventurers. He was immediately joined by some leaders of rank, but had only 6000 men when Richard met him at Bosworth, with an army twice as numerous in appearance; but the defection of lord Stanley with his forces, who joined Richmond during the battle, obtained for the latter a complete victory. Henry was proclaimed king on the field of battle, although it is not clear upon what ground; for had the title of the house of Lancaster been superior to that of York, the Somerset branch of it was originally illegitimate, not to mention that the claim of his mother, on this principle, was anterior to his own. Henry resolved, however, to stand upon this ground, and the recognition of his right by parliament; and his coronation was made to precede his marriage with Elizabeth of York, eldest daughter of Edward IV. That marriage, however, took place in 1486; but Henry, jealous of his authority, and strongly imbued with party prejudice, was a stern and ungracious husband, and regarded the Yorkists in general with great aversion. He gave his confidence, indeed, chiefly to Morton and Fox, both of the priesthood, and men of business and capacity, from whom he expected more obsequiousness than from the nobility. Discontent, on this and other accounts, soon arose, and an insurrection took place, headed by lord Lovel and the Staffords, which was soon suppressed. The imposture of Lambert Simnel, who, by the contrivance of Simon, a priest, was made to personate the earl of Warwick, son to the duke of Clarence, whom Henry kept confined in the Tower, followed. But Henry having publicly shown the true earl of Warwick in the streets of London, little credit was given to the impostor, and the king, collecting an army, met the rebels at Stoke, in Nottinghamshire, and totally defeated them. Henry spared the impostor Simnel, and displayed his insignificance, by making him a scullion in his kitchen. The project of France, for annexing the province of Brittany, by marriage with the heiress, induced Henry to declare war; but his measures were so tardy and parsimonious, that the annexation was effected. He then raised large sums on the plea of the necessity for hostilities, and landing a numerous army at Calais, in 1492, almost immediately accepted a large compensation for peace. The duchess dowager of Burgundy, governess of the Low Countries, had encouraged the imposture of Simnel, and now brought forward Perkin Warbeck, said to be the son of a converted Jew at Tournay, and a youth of parts and prepossessing figure. This young man gave himself out to be Richard Plantagenet, the younger of the two sons of Edward IV, supposed to have been murdered in the Tower of London, but one of whom, he alleged, had escaped. The duchess pretended to be satisfied with the proofs of his identity, and acknowledged him as her nephew. The circumstances of his progress in England need not be detailed here, any more than his confession of imposture, and execution by the halter. Soon after, the king fixed an indelible stain on his memory, by the execution of the simple and innocent earl of Warwick, for merely attempting to regain that liberty, of which he ought never to have been deprived. Firmly settled upon the throne, Henry now gained a high character among his brother monarchs, many of whom sought his friendship and alliance; and among these was Ferdinand, king of Arragon, a prince, in crafty and cautious policy, very much like himself. After a long negotiation, he brought about a match between the Infanta Catharine, daughter of this sovereign and of Isabella of Castile, and his eldest son Arthur; and on the death of the latter, in order to retain the dowry of this princess, he caused his remaining son, Henry, to marry the widow, by papal dispensation, an event which, in the sequel, led to a separation from the

see of Rome. He married his eldest daughter to James IV, king of Scotland, foreseeing the unity of sovereignty that would probably arise from it, and never omitted his favorite pursuit of filling his coffers, employing Empson and Dudley (q. v.), who practised all sorts of extortion and chicanery for this end. He, however, made some good use of this treasure, by the advance of sums of money to merchants, without interest, to enable them to carry on lucrative enterprises, and promote an extension of commerce. He employed Sebastian Cabot, who, under his auspices, discovered Newfoundland and part of the American continent. In the midst of these, and further projects of national and family aggrandizement, a decline of health began to inspire him with uneasy thoughts of another world, which he endeavored to appease by alms and religious foundations, and, as his end approached, even directed restitution to some of the parties oppressed by the exactions of Empson and Dudley. He died at his palace of Richmond, in April, 1509, in the 24th year of his reign, and 52d of his age. The reign of Henry VII was, upon the whole, beneficial to his country. Being conducted upon pacific principles, it put a period to many disorders, and gave an opportunity to the nation to flourish by its internal resources. His policy of depressing the feudal nobility, which proportionably exalted the middle ranks, was highly salutary; and it was especially advanced by the statute which allowed the breaking of entails and the alienation of landed estates. Many other beneficial provisions also date from this reign, which, however, was very arbitrary; and the power lost by the aristocracy for a time gave an undue preponderance to that of the crown.

Henry VIII, king of England, son of the preceding, was born in 1491, and succeeded his father in 1509. His education had been rather that of a scholar than of a prince; but a handsome person, and a frank and spirited manner, rendered him the object of popular attachment, especially as successor to a sovereign so little beloved as Henry VII. No prince could succeed to a throne under happier circumstances, possessing an undisputed title, a full treasury, and a kingdom flourishing in the bosom of peace. His disposition for show and magnificence soon squandered the hoards of his predecessor; and his vanity and unsuspicious openness of character made him an early object of foreign artifice. He was prevailed upon by pope Julius II and his father-in-law, Ferdinand, to join in a league formed against Louis XII of France. Some campaigns in France followed, but the success of the English at the Battle of the Spurs, so called from the flight of the French, being succeeded by no adequate result, the taking of Tournay was the only fruit of this expensive expedition. Meantime, more splendid success attended the English arms at home. James IV, king of Scotland, having made an incursion with a numerous body of troops into England, was completely defeated, and slain, at the battle of Flodden-field. Henry, however, granted peace to the queen of Scotland, his sister, and established an influence which rendered his kingdom long secure on that side. Finding himself amused by his allies, he soon after made peace with France, retaining Tournay, and receiving a large sum of money. The aggrandizement of Wolsey now began to give a leading feature to the conduct of Henry. The neglect of Wolsey by Francis I, produced hostilities from the emperor Maximilian, assisted by English gold; and when Charles V succeeded to the Spanish crown, Francis found it expedient to gain Wolsey, who, in consequence, induced his master to resign Tournay, and enter into an amicable correspondence with Francis. In order to cement this new friendship, the two monarchs had an interview near Calais, the magnificence of which gave the place of meeting the denomination of the *field of the cloth of gold.* Notwithstanding these indications, a prospect of the papacy being artfully held out to the cardinal by the young emperor Charles, his interest at length gained a preponderancy in the English councils. The principles of the reformation, propagated by Luther, were now making rapid strides, and Henry himself wrote a Latin book against the tenets of Luther, which he presented to pope Leo X, who favored him, in return, with the title of *defender of the faith.* Luther published a reply, in which he treats his opponent with little ceremony. Charles V paid a visit to England in 1522, and induced Wolsey and Henry to declare war against France, which was again invaded by an English and Flemish army, under the earl of Surrey. The defeat and capture of Francis, at the battle of Pavia, gave such a preponderancy to the power of the emperor, that the alarm produced thereby, added to a discovery, on the part of Wolsey, that Charles was only amusing him on the subject of the papacy, produced not only

a peace with France, but a declaration of war against the emperor, which prepared the way for the most important event in Henry's reign—his divorce from Catharine of Arragon. (For the proceedings which terminated in the divorce from Catharine, the fall of Wolsey which they involved, with the subversion of the papal claims, see *Catharine of Arragon*, *Wolsey*, and *Great Britain*.) In 1532, the king ventured privately to marry Anne Boleyn (q. v.), and, in the next year, an open avowal of the marriage followed. Henry was excommunicated by the pope, and proceeded to break off all allegiance to the Roman see, and to declare himself supreme head of the English church. Thus was effected the great revolution, by which, in ecclesiastical annals, this reign is so much distinguished. The birth of a daughter by the new queen, produced a bill for regulating the succession, which settled it on the issue of this marriage, and declared the king's daughter by Catharine illegitimate. But, although Henry discarded the authority of the Roman church, he adhered to its theological tenets. While, on the one hand, he executed bishop Fisher and sir Thomas More, for refusing the oath of supremacy, he displayed an aversion to the principles of the reformers, and brought many of them to the stake. His temper also grew more stern and arbitrary as he advanced in years, and his reign, from this period, was that of a despot who sacrificed every obstacle to his capricious will. Finding that the monks and friars in England were the most direct advocates of the papal authority, and that they operated most influentially to create dissatisfaction among the people, he suppressed the monasteries by act of parliament, and thereby inflicted an incurable wound upon the Catholic religion in England. The revenues of these opulent establishments were granted to the crown, which, however, was not proportionably enriched, as Henry lavished many grants of land upon his courtiers, and, besides settling pensions upon the retained abbots, friars and monks, erected six new bishoprics. Another step which promoted the reformation, was the translation of the Scriptures into the vernacular tongue. The fall of Anne Boleyn (q. v.) was, however, unfavorable, for a time, to the reformers. Henry married Jane Seymour; and the birth of prince Edward, in 1537, fulfilled his wish for a male heir, although his joy was abated by the death of the queen. It was not until 1538, that the dissolution of all the religious houses took place; and the peculiar indignation of Henry fell upon Thomas à Becket, as the oppugner of royal authority. He cited the saint into court, had him condemned as a traitor, his name expunged from the calendar, and his bones burnt to ashes. The fate of Lambert, a poor schoolmaster, who, being condemned for heresy, appealed to the king, was more deserving of compassion. Henry, seated on his throne, attended by the lords spiritual and temporal, interrogated him concerning the real presence, and undertook to refute his errors from the Scriptures and the schoolmen. Six bishops followed; and in conclusion, Lambert was asked whether he would recant or die. He chose death, and was executed with circumstances of unusual cruelty. Henry now resolved to marry again, and Cromwell (q. v.), a favorer of the reformation, recommended Anne of Cleves. The marriage took place in 1540, and Henry created Cromwell earl of Essex; but his dislike to his new wife hastened the fall of that minister, who was condemned and executed upon a charge of treason. At the same time, Henry procured, from the convocation and parliament, a divorce from Anne of Cleves. He then married Catharine Howard, niece to the duke of Norfolk—a union which brought him more under the influence of the Catholic party; and a rigorous persecution of the Protestants followed. Papists who denied his supremacy were treated with equal severity. Henry now found that his new queen, of whom he was very fond, had proved false to his bed, and, on further inquiry, her conduct before marriage was discovered to have been loose and criminal. The king burst into tears when informed of these facts, but his grief quickly turned into fury, and she was accused, and brought to the block in 1542. His obsequious parliament further gratified him, by an act, making it high treason for any woman whom the king might thereafter marry, to pass herself off for a virgin, if otherwise. The preference shown by the king's nephew, James V, to the French alliance, brought on a war with Scotland, in 1542, the principal event of which was the rout of the Scottish army at Solway Frith. A war with France followed, and the king passed over to Calais, in July, 1544, at the head of 30,000 troops, and, being joined by 14,000 men from the Low Countries, took Boulogne; but in the winter returned to England. The war lasted until 1546. Henry, in 1543, married his sixth wife, Catha-

rine Parr, widow of lord Latimer, a lady of merit, secretly inclined to the reformation. This queen fell into great danger, through the intrigues of the Catholic party, but found means to avert the consequences. (See *Catharine Parr.*) Disease now so much aggravated the natural violence of Henry, that his oldest friends fell victims to his tyranny. The duke of Norfolk, his most trusted and successful general, and the accomplished earl of Surrey, his son, were committed to the Tower. The latter was tried for an alleged correspondence with cardinal Pole, and on an absurd accusation of treasonably quartering a portion of the royal arms, and executed. The duke of Norfolk was proceeded against by attainder, without trial or evidence; and so little was Henry's ferocity mitigated by his own approaching end, that nothing seemed so much to concern him as the fear that Norfolk might escape; which he did, by the decease of the king the day before that appointed for his execution. It was long before any one would venture to tell Henry of his approaching dissolution; but the communication was at length made by sir Anthony Denny, and the king heard him with resignation. He desired that archbishop Cranmer might be sent for, but was speechless before he came, and could only, by a pressure of his hand, give a token of his dying faith. He expired January 28, 1547, in the 38th year of his reign, and the 56th of his age. As impressively depicted by the dying words of Wolsey, his chief characteristic was love of sway. This passion, which was at first compatible with generosity and feeling, at length produced an excess of pride, impatience and intolerance, which extinguished the sentiments of humanity, and rendered him violent and sanguinary in the extreme. He made himself so much feared, that no English king had fewer checks to his power; and liberty and constitutional equipoise were out of the question during the whole of his reign, or, what is worse, the forms of them were rendered purely subservient to his passions. No hand less strong than his could have so suddenly snapped the chain which bound the nation to the papacy. The complete union of Wales with England, and the conversion of Ireland into a kingdom, date from the reign of Henry.

Henry, prince of Prussia (Frederic Henry Louis), brother of Frederic II, was born at Berlin, 1726. (On the severe and absurd education which he received for 15 years, till his father's death, see the articles *Frederic William I*, and *Frederic II.*) In 1742, he served his first campaign as colonel in the army which entered Moravia, under the command of the king and of marshal Schwerin, and was present at the battle of Czaslau. In 1744, he defended, with obstinacy and success, the city of Tabor, in Bohemia, surrounded only by a single wall. He distinguished himself still more (June 4, 1745) in the battle of Strigau or Hohenfriedberg, where the Prussians, under their king, defeated the Austrian army, commanded by prince Charles of Lorraine, and began to develope those great improvements in military tactics, which afterwards procured them so much honor. After the peace of Dresden, Frederic II invited the prince and his brother Ferdinand to Potsdam. Prince Henry devoted his leisure hours to study. With a glowing imagination, a penetrating and reflecting mind, a firm will, always directed by good purposes, and a happy memory, he made great progress in his studies. Notwithstanding his severer studies, he found time to cultivate music and painting. His residence at Potsdam, where Frederic had collected many of the men of his time distinguished for genius and boldness of thought, contributed essentially to give an independent and lofty tone to the character of the prince. In 1752, his brother married him to the princess Wilhelmine of Hesse-Cassel, and built a palace for him in Berlin. A few years after, the seven years' war broke out, and the prince now found an opportunity to apply the theories he had studied in peace. In the battle of Prague, the unshaken courage of Henry, his firmness and coolness, decided the success of this splendid day. In the battle of Rossbach, he received an honorable wound. After this victory, the king gave him the command of the army of Leipsic. Soon after, he placed him at the head of a second army. During the whole seven years' war, Henry distinguished himself. After the peace concluded at Hubertsburg, prince Henry hastened back to tranquillity. The castle of Rheinsberg became the seat of philosophy and the muses; but his confiding trust in unworthy men excited domestic broils, which destroyed his peace, and compelled him to separate from his wife. In 1771, he paid a visit to the empress Catharine, in Petersburg, where they deliberated respecting the division of Poland, to which he gained the consent of the king his brother. In the war of the Bavarian succession, the prince commanded an army, which marched to

Dresden in July, 1778, formed a league there with Saxony, and then attacked Bohemia. The want of provisions compelled him to retreat, and the peace at Teschen, in 1779, put an end to the war. In 1784, the prince went to Paris, under the pretence of visiting the most splendid court in Europe, but, in reality, to propose a connexion which should put a stop to the aggrandizement of Austria. The irresolution of the cabinet of Versailles frustrated this plan; the prince returned, and every thing assumed a new aspect, in consequence of the death of the great king. Frederic William removed his uncle from public business, and prince Henry was about to return to France, but was prevented by the troubles in that country. He forgot the ingratitude of his nephew in the conversation of philosophers, artists and men of learning. The war which Prussia undertook against France, was not approved of by the prince. Overcome by the infirmities of age, he awaited in tranquillity the end of a life devoted to the welfare of the state. He died at Rheinsberg, Aug. 3, 1802. In 1809, there appeared at Paris a life of prince Henry (*Vié privée, polit. et milit. du Prince Henri de Pr. Frère de Frederic II*).

Henry, Patrick, the second son of John and Sarah Henry, and one of nine children, was born May 29, 1736, in the county of Hanover and colony of Virginia. Until ten years of age, Patrick Henry was sent to a school in the neighborhood, where he learned to read and write, and made some small progress in arithmetic. He was then taken home, and, under the direction of his father, who had opened a grammar school in his own house, he acquired a superficial knowledge of the Latin language. At the same time, he made a considerable proficiency in the mathematics, the only branch of education for which, it seems, he discovered, in his youth, the slightest predilection. He was passionately addicted to the sports of the field, and could not brook the confinement and toil which education required. His father, unable to sustain the expense of his large and increasing family, found it necessary to qualify his sons, at a very early age, to support themselves. With this view, Patrick was placed, at the age of fifteen, behind the counter of a trader in the country. In the next year, his father purchased a small adventure of goods for his two sons, William and Patrick, and "set them up in trade." William's habits of idleness were such, that the chief management of their concerns devolved on the younger brother, and that management was most wretched. One year put an end to this experiment, and Patrick was engaged, for the two or three following years, in settling the accounts of the firm as well as he could. At the early age of eighteen, he married a Miss Shelton, the daughter of a respectable farmer in the neighborhood; and, by the joint assistance of their parents, the young couple were settled on a small farm, where, with one or two slaves, Mr. Henry had to dig the earth for subsistence. His want of agricultural skill, and his unconquerable aversion to every species of systematic labor, caused him, after a trial of two years, to abandon this pursuit. His next step seems to have been dictated by absolute despair; for, selling off his little possessions at a sacrifice for cash, he entered a second time into the inauspicious business of merchandise. But the same want of method, the same facility of temper, soon became apparent. He resumed his violin, his flute, his books, his inspection of human nature, and not unfrequently shut up his shop to indulge himself in the favorite sports of his youth. His reading, however, began to assume a more serious character. He studied geography, read the charters and history of the colony, and became fond of historical works generally, particularly those of Greece and Rome, and, from the tenacity of his memory and the strength of his judgment, soon made himself master of their contents. Livy was his favorite; and, having procured a translation, he made it a rule to read it through, once, at least, in every year, during the earlier part of his life. The second mercantile experiment in a few years left him a bankrupt; every remnant of his property was gone, and his friends were unable to assist him any further. As a last effort, he determined to make trial of the law. No one expected him to succeed; his unfortunate habits were by no means suited to so laborious a profession, and the situation of his affairs forbade an extensive course of reading. After a six weeks' preparation, he obtained a license to practise the law, being at this time of the age of four and twenty. He was, at the time of his admission to the practice, not only unable to draw a declaration or a plea, but incapable, it is said, of the most common and simple business of his profession, even the mode of ordering a suit, giving a notice, or making a motion in court. For three years, the wants and distresses of his family were extreme. The profits of his

practice could not have supplied them even with the necessaries of life; and he seems to have spent the greatest part of his time, both during his study of the law and the practice of the first two or three years, with his father-in-law, Mr. Shelton, who then kept a tavern at Hanover court-house. Whenever Mr. Shelton was from home, Mr. Henry supplied his place in the tavern. The controversy between the clergy on the one hand, and the legislature and people of the colony on the other, touching the stipend claimed by the former, which had created a great excitement in Virginia, was the occasion on which his genius first broke forth. The display which he made in *the parson's cause*, as it was popularly called, placed him, at once, at the head of his profession, in that quarter of the colony in which he practised. In the year 1764, he removed to the county of Louisa, and resided at a place called the Roundabout. In the autumn of the same year, a contest having occurred in the house of burgesses, in the case of Mr. James Littlepage, the returned member of the county of Hanover, who was charged with bribery and corruption, the parties were heard by counsel, before the committee of privileges and elections, and Henry was on this occasion employed by Mr. Dandridge, the rival candidate. Henry distinguished himself by a brilliant display on the subject of the rights of suffrage. Such a burst of eloquence, from a man so very plain and humble in his appearance, struck the committee with amazement; a deep silence took place during the speech, and not a sound but from his lips was to be heard in the room.

In 1765, he was elected member of the house of burgesses, with express reference to an opposition to the British stamp-act. After having waited in vain for some step to be taken by another, and when the session was within three days of its expected close, he introduced his celebrated resolutions on the stamp-act. After his death, there was found among his papers one sealed, and thus endorsed:—"Enclosed are the resolutions of the Virginia assembly, in 1765, concerning the stamp-act. Let my executors open this paper."—Within was found a copy of the resolutions in his hand-writing. On the back of the paper containing the resolutions, is the following endorsement, also in his hand-writing:—"The within resolutions passed the house of burgesses in May, 1765. They formed the first opposition to the stamp-act, and the scheme of taxing America by the British parliament. All the colonies, either through fear, or want of opportunity to form an opposition, or from influence of some kind or other, had remained silent. I had been for the first time elected a burgess a few days before, was young, inexperienced, unacquainted with the forms of the house, and the members that composed it. Finding the men of weight averse to opposition, and the commencement of the tax at hand, and that no person was likely to step forth, I determined to venture, and alone, unadvised, and unassisted, on a blank leaf of an old law book, wrote the within. Upon offering them to the house, violent debates ensued. Many threats were uttered, and much abuse cast on me, by the party for submission. After a long and warm contest, the resolutions passed by a very small majority, perhaps of one or two only. The alarm spread throughout America with astonishing quickness, and the ministerial party were overwhelmed. The great point of resistance to British taxation was universally established in the colonies. This brought on the war, which finally separated the two countries, and gave independence to ours. Whether this will prove a blessing or a curse, will depend upon the use our people make of the blessings which a gracious God hath bestowed on us. If they are wise, they will be great and happy. If they are of a contrary character, they will be miserable. Righteousness alone can exalt them as a nation. Reader, whoever thou art, remember this; and in thy sphere, practise virtue thyself, and encourage it in others. P. Henry."

It was in the midst of the debate abovementioned, that he exclaimed, "Cæsar had his Brutus, Charles the First his Cromwell, and George the Third—"Treason!" cried the speaker—"Treason, treason!" echoed from every part of the house. Henry faltered not for an instant; but taking a loftier attitude, and fixing on the speaker an eye of fire, he finished his sentence with the firmest emphasis—"*may profit by their example.* If *this* be treason, make the most of it." From this period, Mr. Henry became the idol of the people of Virginia; nor was his name confined to his native state. His influence was felt throughout the continent, and he was every where regarded as one of the great champions of colonial liberty. In the year 1769, he was admitted to the bar of the general court. He wanted that learning, whose place no genius can supply to the lawyer; and he wanted those habits of steady and persevering application,

without which that learning is not to be acquired. But on questions before a jury, his knowledge of human nature, and the rapidity as well as justness of his inferences, from the flitting expressions of the countenance, as to what was passing in the hearts of his hearers, availed him fully. The defence of criminal cases was his great professional forte. The house of burgesses of Virginia, which had led the opposition to the stamp-act, kept their high ground during the whole of the ensuing contest. Mr. Henry having removed again from Louisa to his native county, in the year 1767 or 1768, continued a member of that house till the close of the revolution; and there could be no want of boldness in any body of which he was a member. He was one of the standing committee of correspondence and inquiry concerning the pretensions of the British, which was appointed by the house, March 12, 1773. He was also of the number of delegates sent by Virginia to the first general congress of the colonies, which assembled in Philadelphia, September 4, 1774. When the congress rose, he returned home, and entered the legislature of Virginia again, determined upon prosecuting the work of national independence. In this career, he became, by his zeal and efficiency, obnoxious to the royal governor, and to all who were disposed to maintain the royal cause, or who dreaded the resort to force.

When intelligence was received of the battles of Lexington and Concord in Massachusetts, Henry summoned volunteers to meet him, in order to compel the governor of Virginia (lord Dunmore) to restore a quantity of powder which the latter had caused to be taken from the public magazine at Williamsburg. This was the first military movement in Virginia. The governor issued a proclamation, calling upon the people to resist it; but Henry, at the head of a considerable corps, obliged his lordship to consent to the payment of a pecuniary compensation for the powder withdrawn. The volunteers returned in triumph to their homes. As soon, however, as all seemed again quiet, the governor sent forth, though without any effect, a violent manifesto against "a certain Patrick Henry, and a number of deluded followers," &c.

Henry took a leading part in all the subsequent measures which ended in the prostration of the royal authority, and the erection of an independent government in Virginia. The colonial convention of 1775 elected him the colonel of the first regiment, and the commander of "all the forces raised and to be raised for the defence of the colony." He soon resigned this command, from a belief that he could serve the cause of his country more effectually in the public councils than in the field. Immediately upon his resignation, he was elected a delegate to the convention, and, not long after, *the first governor of the commonwealth*—a post in which he proved signally serviceable, by sustaining the public spirit during the revolutionary struggle, providing recruits and supplies for the continental army, and crushing the intrigues of the tories who infested Virginia. His administration was prolonged by reëlections until 1779, when he retired from the office, being no longer eligible without intermission, according to the constitution. As a member of the legislature, to which he at once returned, he continued to serve the great cause until the end of the war, when he was again elected governor of Virginia. The state of his affairs obliged him to resign the station in the autumn of 1786. In December of that year, he was appointed by the legislature one of the deputies to the convention, held at Philadelphia, for the purpose of revising the federal constitution. This appointment he declined, it being necessary for him to resume the practice of the law, in order to make some provision for his family. During the six following years, he regularly attended the courts, and his great reputation obtained for him lucrative business. His next appearance in political life was as a member of the convention, which was to decide the fate of the federal constitution in Virginia. Some of the features of that instrument inspired him with fears for the liberties of the country. All his great powers of eloquence and his personal influence were exerted to procure the rejection of it. The amendments proposed by Virginia originated in the objections so vehemently and plausibly urged by him and his associates. He became, nevertheless, a convert to the excellence of the system, and an earnest *federalist*, in the twofold acceptation of the term. In the spring of 1791, he bade a final adieu to public life, and, in 1794, to the bar, at which he had gained some brilliant triumphs, which are commemorated by his distinguished biographer William Wirt (Life of P. Henry, Philadelphia, 1817). In 1796, the post of governor of the state was once more tendered to him and refused. In the following year, his health began to decline, and continued to sink gradually until the

moment of his death, which took place on the 6th of June. Mr. Henry, by his two marriages, was the father of fifteen children. By his first wife, he had six, of whom two only survived him; by his last, he had six sons and three daughters, all of whom, together with their mother, were living at his death. He had been fortunate during the latter part of his life; and, chiefly by the means of judicious purchases of lands, left his family, large as it was, not only independent, but rich. In his habits of living he was remarkably temperate and frugal. He seldom drank any thing but water; and his table was furnished in the most simple manner. His morals were strict. As a husband, a father, a master, he had no superior. He was kind and hospitable to the stranger, and most friendly and accommodating to his neighbors. He was nearly six feet high; spare, and what may be called raw-boned, with a slight stoop of the shoulders; his complexion was dark, sun-burnt, and sallow, without any appearance of blood in his cheeks; his countenance grave, thoughtful and penetrating, and strongly marked with the lineaments of deep reflection: the earnestness of his manner, united with an habitual contraction or knitting of his brows, and those lines of thought with which his face was profusely furrowed, gave to his countenance, at some times, the appearance of severity. Henry was gifted with a strong and musical voice, and a most expressive countenance, and he acquired particular skill in the use of them. His style of speaking, to judge from the representations of his hearers, was altogether more successful than that of any of his contemporaries. He could be vehement, insinuating, humorous and sarcastic by turns, and always with the utmost effect. He was a natural orator, of the highest order, combining imagination, acuteness, dexterity and ingenuity, with the most forcible action and extraordinary powers of face and utterance. As a statesman, his principal merits were sagacity and boldness. His name is brilliantly and lastingly connected with the history of his country's emancipation.

Henry Christophe, emperor of Hayti. (See *Christophe*, and *Hayti*.)

Hepatitis. (See *Liver Complaint*.)

Hephæstion, the friend of Alexander the Great, was a noble Macedonian of Pella. He accompanied the king in his campaigns, and died at Ecbatana (B. C. 325). Alexander, who was inconsolable for his death, intended to erect a monument to him, but died himself soon after.

Heptachord (from the *Greek*); a term which with the ancients implied a conjunct tetrachord, or a system of seven sounds. It was also the name given to a lyre, or *cithara*, with seven chords. In the ancient poetry, the word *heptachord* signified certain verses that were sung to the sound of seven chords; that is, to seven different notes or tones. The interval of the *heptachord* was equivalent to our seventh.

Heptarchy; the seven kingdoms into which England was divided under the Saxons. It terminated in 827 or 828, when king Egbert united the seven kingdoms into one, and assumed the title of king of England. (See *Great Britain*.)

Heptateuch; a name sometimes given to the five books of Moses, or Pentateuch, together with the books of Joshua and the Judges.

Heraclidæ; the descendants of Hercules, who, assisted by the Dorians, asserted the claims which they had inherited to the Peloponnesus by arms. Their attacks had already been twice repulsed, when, 80 years after the capture of Troy, they appeared a third time. But Aristodemus, one of their leaders, perished while making preparations for the expedition, and the greater part of the army was destroyed by famine. In their distress, they consulted the oracle of Delphi, and received the answer, that they should follow a three-eyed general, whom they found in the Ætolian Oxylus, riding on a mule with one eye. Conducted by him, they penetrated by several points into the Peloponnesus, conquered almost the whole peninsula, and distributed the country among their commanders. Temenus received Argos with Mycene and Sicyon; Cresphontes, Messenia; and the sons of Aristodemus, Procles and Eurysthenes, Lacedæmon, where they reigned in common. The recovery of the Peloponnesus by the Heraclidæ forms an important epoch in Grecian history.

Heraclitus, a Greek philosopher, born at Ephesus, in Asia Minor, surnamed the *obscure*, flourished in the 69th Olympiad, about 500 B. C. Instead of accepting the highest official dignities in his native city, he devoted himself to philosophy. He travelled in different countries, particularly in Africa. His disposition, gloomy and melancholy by nature, as appears also in his philosophy, early impelled him to avoid all intercourse with men, on account of their vices. He repaired to solitary mountains, to live on roots and herbs, but, being attacked by a fatal disease, was obliged to return to

the city, where he died soon afterwards, in his 60th year. He left a work on the nature of things, in which he treats also of religion and politics. It was written in an obscure and figurative style, and therefore excited but little attention, and was finally lost. From the little of his philosophy which has come down to us, it appears that he considered fire as the element of all things; probably understanding not the common fire, but an ethereal fiery substance; which supposition is reconcilable with the account that he considered the pure air, or vapor, to be the primitive element. From this originates the world, and it is in turn reproduced by the world. Every thing is in a constant state of change. The act of originating is separation from the primitive existence and substance, and is founded on opposition, enmity; extinction is the solution into the primitive substance, is union, love. Both together form the harmony of the primitive substance, and operate according to the law of necessity. We think through the divine reason, which we draw in by breathing while we are awake. In reason alone is truth, that is, in the universal human reason. The soul after death passes over into the soul of the world.

Herald. The etymology of this word is very uncertain. Some derive it from the German *Heer* (army), and *Ald* (a servant); Leibnitz, from the Welsh *Herod* (a messenger), which, with the insertion of *l*, gives the German *Herold*. Others explain it by the German *Heer* and *alt* (in Low German, *old*), (one grown old in war), because the office of *herald*, at tournaments, was given to persons of this description. Other derivations have also been proposed. The origin of heralds is as ancient as that of priests. They are found among all nations, the *parlementaires* of the moderns being the same as the *heralds* of the ancients. Their persons are inviolable, otherwise they could not accomplish the object of their institution. The Romans had three sorts of heralds—the *caduceatores* (the same as the Grecian κηρυκες), heralds of peace; *feciales* (heralds of war and peace), and *præcones* (criers or messengers of the superior magistrates). The *caduceator* carried certain plants (*verbena*, as myrtle, olive-branches, rosemary, &c.) in his hand, as a symbol of his office, and for his security. Among the Grecians, he carried a wand of laurel or olive (*caduceus*, q. v.). The Athenian herald carried a wand bound round with wool, and ornamented with various kinds of fruits (the ειρεσιωνη). He often united other employments with his office of herald, as that of cook and cup-bearer. The Greek appellation κηρυκες was derived from *Ceryx* (son of Mercury and Pandrosos, daughter of Cecrops), from whom the Athenian heralds originated. The Spartan heralds must have been derived from *Talthybius*, the herald of Agamemnon, who was worshipped in a temple in Sparta. The *feciales*, forming a college of 20 members, established by Numa, had also a diplomatic character, as their department embraced every thing connected with the declaration of war and the making of treaties. If a war was determined upon, they solemnly proclaimed it. If Rome considered herself injured, a *fecialis* demanded satisfaction. If this demand was not complied with within 33 days, the *fecialis* went again to the hostile frontiers, threw a bloody spear, and declared war by a solemn formula (*clarigatio*). As the frontiers of the Roman territory extended farther and farther from the capital, this ceremony was performed upon a field without the city (*ager hostilis*). The *feciales* wore the sacred *verbena* as a wreath round their temples; and, if they were sent to conclude a treaty, they carried a flint. The *præcones* were employed to proclaim matters of public interest to the people, at religious ceremonies, in the *comitia*, at public sales, judicial trials, in the senate, on the publication of the laws (which they read), at funerals, at games, in the army (if a general wished to address his men), at executions, and at all public meetings. In the middle ages, indigent knights, grown old in battle, were appointed heralds. Their duty was to be arbiters at the tournaments, to pass judgment on coats of arms and the right of knighthood. The study of armories was therefore indispensable to them; hence the name *heraldry*. They were also the chroniclers of those times, and present on all occasions of public ceremony. In France, the first herald (*roi-d'armes*) was crowned and consecrated with religious ceremonies. There were 30 heralds of the realm; the second in rank was called *Montjoye St. Denis*, from the war-cry of king Dagobert. The heralds were united in associations, and their duties formed a branch of science, which was communicated only to the members. If any person pretended to the character of a herald, who, on examination, was found not to belong to the corporation, he was driven away with insults, and sometimes treated with violence.

Most of the European orders have their heralds, who are masters of ceremonies. There are three kings at arms in England. The highest is the garter king at arms (*garder principal*); the second for the southern provinces (*Clarencieux*); the third for the northern provinces (*Norroy*). These three kings at arms, with six subordinate heralds and four pursuivants, form, under the presidency of the earl marshal, duke of Norfolk, the herald's college or herald's office, established in 1340. (*See the next article.*)

Heraldry. Arms may belong to individuals, to families, or to countries. Badges and emblems on shields and helms occurred in the earliest times. In Numbers (*chap.* i, 52), the children of Israel are enjoined to pitch their tents, "every man by his own camp, and every man by his own standard," with the ensigns of his father's house. The poets of the Greeks and Romans speak of paintings and devices on shields and helmets. These symbols were, moreover, hereditary. Thus Xenophon relates that the kings of the Medes bore a golden eagle on their shields. Suetonius asserts that Domitian had a golden beard for his coat of arms; and Tacitus says of the ancient Germans, that they marked their shields with brilliant colors, and that certain standards were borne before them in battle. Notwithstanding these traces of armorial bearings in the ancient world, our heraldry is no older than the tournaments. That armory first became common and regulated by certain rules at these solemn festivals, is corroborated by the following reasons. In the first place, we find no tomb or monument, with escutcheons, older than the 11th century. The most ancient monument of this kind is said to be the bearings of a certain Varmond, count of Vasserburg, in the church of St. Emmeran, at Ratisbon. The shield is *coupé* of argent and sable; over it is a lion, with the words "*Anno Domini MX.*" On most of the other tombs, even of the 11th century, no arms are found; and the use of them seems to have first become common in the 12th century. The first pope, who can be proved to have had a coat of arms, is Boniface VIII, who filled the papal see from 1294 to 1303. All the earlier papal arms are the fanciful inventions of later flatterers. On coins, also, no armorial ensigns are found till the 13th century. A second proof of our assumed origin of coats of arms is the word *blason*, which denotes the science of heraldry in French, English, Italian and Spanish. This word has most probably its origin in the German word *blasen* (to blow the horn); for, whenever a new knight appeared at a tournament, the herald had to sound the trumpet, and, because all appeared with close visors, to proclaim and explain the bearing of the shield or coat of arms belonging to each. Because this was performed by the herald, this knowledge was called *heraldry;* and because, in doing so, he blew the trumpet, it was called *blazoning the arms.* That this was a prevailing practice at tournaments, may be proved from the poetry of the Troubadours of the 12th and 13th centuries. Thence it came, that those knights, whose right to appear at tournaments had already been announced by blazoning their arms, bore two trumpets on their crest. From the Germans, this custom was transmitted to the French; for there is no doubt, that tournaments were usual in Germany much earlier than in France. But the French carried to far greater perfection the tournament, and the blazon or heraldry connected with it, as they did the whole system of chivalry. Since, moreover, the French language prevailed at the court of the Norman kings in England, pure French expressions have been preserved in British heraldry. Thus the green tincture (color), in a coat of arms, is termed *vert* (though in French *sinople*, which originally denoted a *reddish brown;* bright red is termed *gueules*, probably with an allusion to the bloody revenge of wild animals, which play so conspicuous a part in heraldy); the divided shield is, moreover, called *coupé;* and *passant*, *regardant*, *dormant*, *couchant*, &c., are used. German heraldry, on the contrary, contains almost pure German expressions. In a coat of arms, the helm is placed upon the shield, and the latter is surrounded by the wreath. At a tournament, the mantle of the knight, with the helm and shield, was suspended in the lists. The colors or tinctures of the shields had their foundation in the custom of the most ancient Germans, of giving their shields various colors—a custom which received a tender meaning in the tournaments of the middle ages, the knight, bound to defend the honor of dames, and devote himself to their protection, wearing their colors on his shield. By degrees, the partitions or sections on shields came into use; for when, as often occurred, a knight was the champion of several ladies, he bore several colors on his shield, which had therefore to be divided into fields. When the martial youth of almost

all Europe left their homes, about the end of the 11th century, inspired with religious enthusiasm, to conquer the Holy Land, the use of arms became still more general and necessary. In order to distinguish the nations, armies and families, the princes and commanders chose their symbols, sometimes in commemoration of the exploits and events of the campaign, or of the dignity of the commander, and sometimes from mere fancy or passing humor.—The practical functions of the herald consist in blazoning, historifying, passing judgment on, and marshalling, coats of arms. Blazoning is the methodical description of a bearing. In the first place, the shield is described according to its tinctures, figures and partitions. The inferior parts of an escutcheon are then blazoned,—the helm, with its insignia, which are trumpet, wings and plumes, men and animals, or their members; then the wreath and its tinctures; after which the coronet, cap, &c.; finally the supporters, the mantle, the device and other secondary things. To historify, in heraldry, is to explain the history of a coat of arms, its origin, and the changes it has undergone. If the herald is to explain a bearing historically, he must show that this figure is the proper emblem of the family or country. He derives, for instance, from historical sources, the proof that the double-headed eagle of the Roman king was first introduced in the beginning of the 14th century, under Albert I, and that previously, from the time of Otho II, the royal eagle had but one head; that the three leopards in the English arms were first derived in 1127, under Henry I, from the Norman house. The marshalling of arms consists in the preparation of new escutcheons. In this matter, the herald either follows the orders of a sovereign, or he invents the idea, and makes the plan of the escutcheon according to his own judgment, or he composes a new escutcheon from several coats of arms. In heraldic science, arms are distinguished by different names, to denote the causes of their being borne, such as *arms of dominion*, of *pretension*, of *concession*, of *community*, of *patronage*, of *family*, of *alliance*, of *succession*, of *assumption*. Those of *dominion* and *sovereignty* are those which emperors, kings and sovereign states constantly bear, being, as it were, annexed to the territories, kingdoms and provinces they possess. Thus there are the arms of England, of France, &c. Arms of *pretension* are those of kingdoms, provinces or territories, to which a prince or lord has some claim, and which he adds to his own, although such kingdoms or territories are possessed by another prince or lord. Arms of *concession*, or *augmentation of honor*, are entire arms, as the fortress of Gibraltar on the escutcheon of lord Heathfield. Arms of *community* belong to bishoprics, cities, companies, &c.; of *patronage*, to governors of provinces, lords of manors, &c. Arms of *family* are the property of individuals; and it is criminal in any persons not of the family to assume them. Arms of *alliance* show the union of families and individuals. Arms of *succession* are taken up by those who inherit certain estates, manors, &c., either by will, entail or donation, and which they impale or quarter with their own. This multiplies the titles of some families from necessity, and not from ostentation. Arms of *assumption*, or *assumptive arms*, are taken up by the caprice or fancy of persons who assume them without a legal title. They are also such as a man of his proper right may assume, with the approbation of his sovereign and of the king of arms. The parts of arms are the escutcheon, the tinctures, charges and ornaments. Heralds distinguish nine different points in escutcheons, in order to determine exactly the positions of the bearing they are charged with, as in the figure. A, the dexter chief; B, precise middle chief; C, sinister chief; D, honor point; E, fess point; F, nombril point; G, dexter base; H, precise middle base; I, sinister base. The



tinctures mean the variable hue common both to the shields and their bearings; and there are seven tinctures—yellow or gold, expressed by dots, white or argent; red, by perpendicular lines; blue or azure, by horizontal lines; purple, by diagonal lines from right to left; green, by the same from left to right; black, by horizontal and perpendicular lines crossing; and orange and blood colors are expressed by diagonal lines crossing each other. The *charges* are the emblems occupying the field of the escutcheon, or any part of it. All charges are distinguished by the name of *honorable ordinaries*, *sub-ordinaries* and *common charges*. Honorable ordinaries, the principal charges in heraldry, are made of lines only, which, according to their disposition and form, receive different names. Sub-ordinaries are ancient

heraldic figures frequently used in coats of arms, and which are distinguished by terms appropriated to each of them. Common charges are composed of natural, artificial, and even imaginary things, such as stars, animals, trees, ships, &c. The ornaments that accompany or surround escutcheons, were introduced to denote the birth, dignity or office of the person to whom the arms appertain. They are used both by clergy and laity. Those most in use are of ten sorts, viz., crowns, coronets, mitres, helmets, mantlings, *chapeaux*, wreaths, crests, scrolls and supporters. The crest is the highest part of the ornaments of a coat of arms. It is called *crest* from the Latin word *crista*, which signifies a comb or tuft, such as many birds have upon their heads, as the peacock, &c. Crests were anciently marks of great honor, because they were worn only by heroes of great valor and high rank, that they might be the better distinguished in an engagement, and thereby rally their men if dispersed. They are at present considered as mere ornaments. The scroll is an ornament usually placed below the shield and supporters, containing a motto or short sentence, alluding thereto, or to the bearing, or to the bearer's name.

Hérault de Séchelles, Marie Jean, advocate-general in the parliament of Paris, and, after the revolution, royal commissary, member of the tribunal of cassation, deputy from the department of Paris to the legislative assembly, and, at length, a member of the national convention, was born at Paris, in 1760. He conducted before the revolution as an upright and able magistrate. At the sessions of the legislative assembly, he presented several reports, particularly relative to the responsibility of ministers. In July, 1792, he joined in the declaration that the country was in danger; and he subsequently advocated vindictive measures against the royalists. He presided in the national assembly in September, and, becoming a member of the convention, he warmly engaged in the schemes of the revolutionary party. About this time, he was charged with the management of some negotiations with foreign powers, but they proved unsuccessful. He was then sent on a mission to Alsace, and, at Colmar, he ran great risk of being assassinated in a popular insurrection. In November, 1792, he was again employed as a commissioner from the convention to the army in the department of Mont Blanc, and he was thus absent from Paris during the trial of the king. He, however, in conjunction with his colleagues, Jagot and Simond, wrote a letter to the convention, charging Louis XVI with an uninterrupted series of treasons, and recommending his condemnation, without mentioning the punishment to be inflicted. But he chiefly distinguished himself in the contest between the Mountain and Gironde parties, and he powerfully co-operated in the destruction of the latter. He was also a member of the committee of public safety. But all his services to the terrorists did not save him from the scaffold. He was denounced, March 17, 1794, for having, as he was accused, concealed an emigrant, and as belonging to the faction of Danton, with whom he was executed on the 5th of April following. He displayed great courage, or rather levity of conduct, in his last moments, bidding adieu to his companions with as much *sang-froid* as if he had been going to a party of pleasure.*

Herbarium, or Hortus Siccus; a dry garden; an appellation given to a collection of specimens of plants, carefully dried and preserved. The value of such a collection is very evident, since a thousand minutiæ may be preserved in the well-dried specimens of plants, which the most accurate engraver would have omitted. Specimens ought to be collected when dry, and carried home in a tin box. Plants may be dried by pressing in a box of sand, or with a hot smoothing iron. Each of these has its advantages. If pressure be employed, a botanical press may be procured. The press is made of two smooth boards of hard wood, 18 inches long, 12 broad, and 2 thick. Screws must be fixed in each corner with nuts. If a press cannot easily be had, books may be employed. Next, some quires of unsized blotting paper must be provided. The specimens, when taken out of the tin box, must be carefully spread on a piece of pasteboard, covered with a single sheet of the paper, quite dry; then three or four sheets of the same paper must be placed above the plant, to imbibe the moisture as it is press-

* The words of Camille Desmoulins and Hérault, at their trial, and of Danton, at his execution, are strongly marked with the stamp of the men and the time. When Desmoulins was asked his age, he answered, "33 *ans, l'âge du sans-culotte Jésus-Christ.*" Hérault de Séchelles answered, when asked for his name, "*Je m'appelle Marie-Jean, noms peu saillans, même parmi les saints.*" At the foot of the scaffold, he offered to embrace Danton, who repulsed him bluntly, with the words, "*Montez donc, nos têtes auront le temps de se baiser dans le panier.*"

ed out. It is then to be put into the press. As many plants as the press will hold may be piled up in this manner. At first, they ought to be pressed gently. After being pressed for about twenty-four hours, the plants ought to be examined, that any leaves or petals which have been folded may be spread out, and dry sheets of paper laid over them. They may now be replaced in the press, and a greater degree of pressure applied. The press ought to stand near a fire, or in the sunshine. After remaining two days in this situation, they should be again examined, and dry sheets of paper be laid over them. The pressure then ought to be considerably increased. After remaining three days longer in the press, the plants may be taken out, and such as are sufficiently dry may be put in a dry sheet of writing paper. Those plants which are succulent may require more pressure, and the blotting paper to be again renewed. Plants which dry very quickly ought to be pressed with considerable force when first put into the press; and, if delicate, the blotting paper should be changed every day. When the stem is woody, it may be thinned with a knife, and, if the flower be thick or globular, as the thistle, one side of it may be cut away, as all that is necessary, in a specimen, is to preserve the character of the class, order, genus and species. Plants may be dried in a box of sand in a more expeditious manner; and this method preserves the color of some plants better. The specimens, after being pressed for 10 or 12 hours, must be laid within a sheet of blotting paper. The box must contain an inch deep of fine dry sand, on which the sheet is to be placed, and then covered with sand an inch thick; another sheet may then be deposited in the same manner, and so on, till the box be full. The box must be placed near a fire for two or three days. Then the sand must be carefully removed, and the plants examined. If not sufficiently dried, they may again be replaced in the same manner for a day or two. In drying plants with a hot smoothing iron, they must be placed within several sheets of blotting paper, and ironed till they become sufficiently dry. This method answers best for drying succulent and mucilaginous plants. When properly dried, the specimens should be placed in sheets of writing paper, and may be slightly fastened by making the top and bottom of the stalk pass through a slip of the paper, cut for the purpose. The name of the genus and species should be written down, the place where it was found, nature of the soil, and the season of the year. These specimens may be collected into genera, orders and classes, and titled and preserved in a port-folio or cabinet. The method of preserving many of the cryptogamous plants is more difficult, on account of the greater quantity of moisture which they contain, and the greater delicacy of their texture.

HERBELOT, Bartholomew d'; a celebrated Orientalist, born of a good family, at Paris, in 1625. After having gone through a course of study in the university of his native city, he applied himself particularly to the Eastern languages, with a view to the elucidation of the Hebrew Scriptures. He visited Italy for improvement, and formed an acquaintance, at Rome, with Lucas Holstenius and Leo Allatius, two of the most learned men of the age. He was patronized by cardinal Grimaldi, who, in 1656, sent him to Marseilles to meet Christina, queen of Sweden, then on her way to Rome; and that princess was much pleased with his society. On his return to France, the minister of state, Foucquet, received him into his family, and gave him a pension of 1500 livres. On the disgrace of his patron, D'Herbelot was fortunate enough to escape the general ruin which involved the dependants of the fallen statesman, and his merit procured him the office of Oriental interpreter to the king of France. After some years, he again travelled into Italy. At Leghorn, he was introduced to the grand-duke of Tuscany, Ferdinand II, who invited him to Florence, where he arrived in July, 1666. He was magnificently entertained by the duke, and was also gratified with a present of a valuable collection of Eastern manuscripts. While in Italy, he commenced his great work, the Oriental Library; and, being recalled to Paris by Colbert, a pension was given him, that he might be at liberty to proceed with his undertaking. It was his first design to have published his collection in the Arabic language, and types were cast for the purpose of printing it. But the death of Colbert having interrupted this plan, he recomposed his work in the French language, as likely to prove more generally useful. On the recommendation of the chancellor, M. de Pontchartrain, he was afterwards appointed to the royal professorship of Syriac, vacant by the death of M. d'Auvergne. He died at Paris, December 8, 1695. His book was published in 1697, under the title of

La Bibliothèque Orientale (folio). Besides this, he left a collection on the same subject, entitled *Anthologia*, and a dictionary in the Turkish, Persian, Arabic, and Latin languages, neither of which has been printed. The best edition of the Oriental Library is that of the Hague, (1777, four volumes, 4to.), with the Supplements of Galland and Visdelou.

Herberstein, Sigismund, baron of, a distinguished politician and historiographer, was born in 1486, at Vippach, in Carniola. He studied law, but afterwards became a soldier, and fought against the Turks. The emperor of Germany intrusted him with important missions. In 1516, he was sent to Christian II, king of Denmark, to induce him to give up his foolish and unhappy passion for Dyveke. (See *Christian II.*) Soon after his return, he was sent to Russia, and, at a later period, to Constantinople. In fact, he travelled over almost all Europe. He was made privy-counsellor and president of the college of finances. In 1553, he retired from public life, and died in 1566. His name has been handed down to posterity by a work which is still highly esteemed—*Rerum Moscoviticarum Commentarii, quibus Russiæ ac Metropolis ejus Moscoviæ Descriptio, chorographicæ Tabulæ, Religionis Indicatio, Modus excipiendi et tractandi Oratores, Itineraria in Moscoviam duo et alia quædam continentur.* It has been often published and translated. The writers on Russia call it the best of the early works on that country. An autobiography of Herberstein, to the year 1545, remained unpublished till 1805, when it appeared at Buda, in the collection of Kovachich. From this Adelung chiefly took his biography of Herberstein (Petersburg, 1818).

Herbert, Edward, lord Herbert of Cherbury, in Shropshire, was born at Montgomery castle, in Wales, in 1581. At the age of 12, he was entered as a gentleman commoner at University college, Oxford. In 1600, he went to London, and, shortly after the accession of James I, became a knight of the Bath, having previously married the heiress of sir William Herbert, another branch of the family. He then visited the continent, carrying with him those chivalrous ideas with which the oath and ceremonies of the investiture of the order of the Bath seem to have impressed him. He returned to England in 1607, and, in 1609, quitted it again, in order to join the English forces serving in aid of the prince of Orange, at the siege of Juliers, where he distinguished himself by his rash and romantic bravery. On the conclusion of the siege, he returned to London, where he was one of the most conspicuous characters of the period. His gallantry towards a court lady, which, however, he asserts to have been without criminality, produced an attempt by her husband to assassinate him in the streets of London, which he foiled by an extraordinary effort of courage and dexterity. In 1614, he served again in the Low Countries, under the prince of Orange, and, in 1616, was sent ambassador to the court of France, where he resented some high language on the part of the constable Luynes, the favorite of Louis XIII, with so much spirit, that a complaint was sent to the English court, which produced his recall. He cleared himself, however, so well to king James, that, on the death of Luynes, he was sent back to France as resident ambassador. At Paris, in 1624, he printed his famous book, *De Veritate prout distinguitur a Revelatione*, the object of which was to assert the sufficiency, universality and perfection of natural religion, with a view to prove the uselessness of revelation. An incident which he has mentioned as occurring previously to its publication, affords a remarkable proof of the power of imagination over an enthusiastic mind. Being in his chamber, doubtful as to the propriety of publishing his book, on one fair day in summer, his casement opened to the south, the sun shining clear, and no wind stirring, "I took," says he, "my book *De Veritate* in my hand, and, kneeling devoutly on my knees, said these words—'O thou eternal God, author of the light which now shines upon me, and giver of all inward illuminations, I do beseech thee, of thy infinite goodness, to pardon a greater request than a sinner ought to make. I am not satisfied enough whether I shall publish this book *De Veritate*. If it be for thy glory, I beseech thee give me some sign from heaven; if not, I shall suppress it.' I had no sooner spoken these words, but a loud, though yet gentle noise came from the heavens (for it was like nothing on earth), which did so comfort and cheer me, that I took my petition as granted, and that I had the sign demanded." He makes the most solemn assertions of the truth of this narrative, and there is no reason to doubt that he fully believed it—an extraordinary instance of vanity and self-delusion in one whose chief argument against revealed religion is founded on the improbability that Heaven would communicate its

will to a part of the world only. In 1625, he returned from France, and was created an Irish peer, and afterwards an English baron, by the title of *lord Herbert of Cherbury*. Little more is heard of him in public life, except that he joined the parliamentary party in the first instance, but subsequently quitted it, and was a great sufferer in his fortune in consequence. He died in London, 1648. The character of lord Herbert is strongly marked in his memoirs, which show him to be vain, punctilious and fanciful, but open, generous, brave and disinterested. The *De Veritate* was followed by a work entitled *De Religione Gentilium, Errorumque apud eos Causis* (or an Inquiry into those Causes which misled the Priests and Sages of Antiquity). Soon after his death, was published his Life and Reign of Henry VIII, which is rather a panegyric on that prince, than a fair representation. The English style of lord Herbert is strong, manly, and free from the quaint pedantry of the age. A collection of his poems, published by his son, in 1665, displays little poetical merit. His entertaining memoirs, written by himself, remained in manuscript until first printed by lord Orford, at Strawberry-hill, in 1764.

Herbert, George, younger brother of the subject of the last article, was born at Montgomery castle, April 3, 1593, and received his education at Westminster school, and Trinity college, Cambridge. His talents attracted the notice of James I, but the death of his majesty, in 1625, put an end to his prospects of promotion, and, in conjunction with other motives, induced him to take orders in the church of England. In 1630, he took priest's orders, and was presented to the rectory of Bemerton, near Salisbury, in Wiltshire. He died in 1633. His friend, Nicholas Ferrar, published, from Herbert's manuscript, The Temple: sacred Poems and private Ejaculations (Cambridge, 1663). The poetry of Herbert, in common with that of Donne and Cowley, is deformed by point and antithesis, and obscured by metaphysical allusion; but some of his minor pieces, in spite of their defects, are extremely beautiful, and may be said to bear the stamp of genius. His life, by Isaac Walton, has been often published.

Herculaneum, or Herculanum, a city, 11,000 paces distant from Naples, was so completely buried by a stream of lava and a shower of ashes, in an eruption of mount Vesuvius, during the reign of Titus, A. D. 79, that the site of the city was no longer visible. The neighboring Pompeii, on the river Sarno, one of the most populous and commercial cities of this coast, and Stabiæ, which stood on the site of the modern Gragnano, together with Oplontia and Teglanum, experienced the same fate. Earlier excavations were already forgotten, when three female statues (now in the Dresden museum) were found in digging a well, by the direction of prince Elbeuf, at Portici, a village situated on the spot of the ancient Herculaneum. After this discovery, farther excavation was prohibited by the government, and nothing more was thought of the matter till Charles, king of Spain, father of Ferdinand IV, having taken possession of the conquered Naples, chose Portici for his spring residence. Now (1738) the well was dug deeper, and traces of buildings were found. The theatre of Herculaneum was the first discovery. It is to be regretted that the ignorance of the superintendent, the Spanish engineer, Rocco Gioachino Alcubierre, was the cause of the loss of many fine remains. A Swiss engineer, Charles Weber, having received the superintendence of the work, a better method was adopted, and to this intelligent man, who was succeeded by the equally skilful La Vega, we are indebted for the arrangements which were afterwards made. In 1750, Stabiæ and Pompeii were explored. The latter place, being covered with ashes rather than lava, was more easily examined. Here were discovered the extensive ruins of an amphitheatre. In the cellar of a villa, 27 female skeletons were found near a door, and the impression of the breast of one of these unfortunate persons in a once soft and subsequently hardened mass of ashes. Ornaments for the neck and arms were lying around. Here, also, near the lower door of a villa, were found two skeletons, one of which held a key in one hand, and, in the other, a bag with coins and cameos. Near them were silver and bronze vessels. It was supposed that one was the master and the other the slave, and that they were suffocated, under the mass of ashes, while endeavoring to find the passage out. It is probable, however, that most of the inhabitants of this city had time to save themselves by flight. For the antiquary and archæologist, antiquity seems here to revive, and awakens sensations which Schiller has so beautifully described in the poem Pompeii and Herculaneum. The ancient streets and buildings are again thrown open, and in them we see, as it were, the domestic life of the an-

cients. We had never before had such an opportunity of becoming acquainted with the disposition of the houses of the ancients, and with their utensils. These discoveries are especially important to literature and art, since a great treasure of manuscripts and works of art has been found. In 1759, 1696 papyrus rolls were discovered in a villa of the ancient Herculaneum. The expectations of the learned world from these literary treasures have not yet been fulfilled, since the work of examining the manuscripts has been carried on very slowly; but still it is of some importance that we have become better acquainted with the material of the ancient manuscripts, and perhaps the difficult business of unrolling these remains of ancient times will at length be rewarded with the discovery of some work of importance. The rolls were of a cylindrical form, and so much charred as to have the appearance of tobacco rolls. Antonio Piaggio invented a simple, but ingenious machine, to unroll the manuscripts, previously strengthened by gold-beater's skin, by means of silk threads attached to their exterior edge. The uses of this machine were, however, very limited; and various other experiments on the manuscripts, which were for the most part not only reduced to a coal, but almost entirely dissolved by the moisture which had penetrated them, afforded no satisfactory results. According to an examination instituted by sir Humphrey Davy, in Naples, in 1819, 407 of the 1696 rolls had been unrolled, of which only 88 were found legible; 24 had been sent as presents to foreign princes, and, of the remaining 1265, only from 80 to 120 were in a state which promised any chance of success, according to the chemical method invented by him. (See *Journal of the Royal Institution*, April, 1819.) The authors of the works hitherto discovered are Epicurus, Philodemos, Demetrius, Polystratus, Colotes, Phædrus, Phanas. There have been published *Herculanensium Voluminum quæ supersunt* (*tom.* i. and ii, Naples, 1793—1809, folio); *Dissertationes Isagogicæ ad Herculan. Voll. Explanationem* (*pars* i, Naples, 1797). In 1824, the university of Oxford published *Herculanensium Voll. Partes duæ*, containing fragments from the papyri at Oxford. It is to be regretted that the fourth book of Philodemos, upon music, which is printed, is only a worthless declamation on its uses. The second volume of the work first mentioned contains the natural philosophy of Epicurus. Scotti and Carlo Rossini have been engaged in the interpretation and publication of these works. The knowledge of ancient art has gained more by the discoveries made here than literature. How many statues, bass-reliefs and other works of sculpture have been found in these buried cities! The paintings on the walls discovered here, among which are Andromeda and Perseus, Diana and Endymion, the education of Bacchus, and the celebrated Aldobrandine wedding (see *Aldobrandini*), are of particular importance, whether we consider their subjects or composition, the drawing or coloring. The portions of the wall which contained them have been cut out, and are preserved in the museum of Portici, in 16 apartments, under glass frames, and marked *P.*, *E.*, or *St.*, to indicate whether they were found in Pompeii, Herculaneum (called by the Italians *Ercolano*), or Stabiæ. The antiques discovered in these buried cities are represented in the great work, *Le Antichità d'Ercolano* (Naples, 1757), which, with the not very critical *Catalogo degli Antichi Monumenti d'Ercolano*, by Bayardi (1755), comprises 10 folio volumes. These paintings, and some discovered later, are represented in the six first volumes of this costly work (*Con qualche Spiegazioni di Pasquale Carcani*), of which there is also a cheaper edition, by David, in France. During the reign of Murat, the excavations were carried on with greater activity, and on a more systematic plan. Rossini, Scotti and Pasetti, at Naples, were engaged in unrolling and deciphering the Herculanean manuscripts, and some valuable literary remains of Grecian and Roman antiquity were more or less completely restored. The attempt of the German, Sickler, at London, in 1818, to unroll the manuscripts had not the expected success, the rolls being too much injured. The attempts of sir Humphrey, in 1820, were also unsuccessful. The excavations took place particularly in the ruins of Pompeii, and in the consular way leading from Pompeii to Naples. A part of the beautiful ceilings and floors of marble has been deposited in the galleries of the museum, others in the saloons of the drawing academy, for the study of the artists. The political events of the year 1815 interrupted the excavations. In February, 1816, king Ferdinand I ordered a continuation of the labor. The ruins were subsequently almost closed up.*

* Since the commencement of 1828, the government of Naples have caused excavations to be made. They have discovered the most splen-

HERCULES (called by the Greeks *Heracles* and *Alcides*); the most celebrated hero of the mythological age of Greece, in whom poetry has presented a model of human perfection, according to the ideas of the heroic age, the highest bodily vigor, united with the finest qualities of mind and heart which entered into the conceptions of that period, and all devoted to the welfare of mankind. The hero is, indeed, a man, but the godlike portion of his nature is of divine origin. He is, therefore, the son of the king of the gods, by a mortal mother. His nature strives perpetually after divine excellence, but under the common conditions of humanity; that is, amid a ceaseless succession of labors and sacrifices. His indomitable perseverance gives him the victory. This victory shows us the triumph of the divine part of man's nature over the earthly. His death secures him immortality, and a seat among the gods. What story can be more interesting and instructive than that of Hercules, throughout of a moral tendency, under an allegorical veil, and presenting so clear a picture of human life, its alternations of fortunes, its struggles, its hopes and its prospects! No wonder, therefore, that it has afforded a favorite subject for poets and artists, and that his achievements have been multiplied without number or consistency. The birth of Hercules was attended with many miraculous and supernatural events. Hercules was brought up at Tirynthus, or, according to Diodorus, at Thebes; and, before he had completed his eighth month, the jealousy of Juno, intent upon his destruction, sent two snakes to devour him. The child, not terrified at the sight of the serpents, boldly seized them in both his hands, and squeezed them to death, while his brother, Iphiclus, alarmed the house with his frightful shrieks. Jupiter sought to protect his favorite in every manner, and to make him worthy of immortality. Once, while Juno was slumbering, he laid the infant on her breast, that he might suck the milk of the goddess. She awoke, and cast from her the hated babe. Some drops of milk that fell from her formed the milky way. With the milk of the goddess, he imbibed immortality. He was early instructed in the liberal arts, and Castor, the son of Tyndarus, taught him how to fight, Eurytus how to shoot with a bow and arrows, Autolycus to drive a chariot, Linus to play on the lyre, and Eumolpus to sing. He, like the rest of his illustrious contemporaries, soon after, became the pupil of the Centaur Chiron, and under him he perfected himself, and became the most valiant and accomplished hero of the age. When he had completed the years of boyhood, he retired into a solitary district, and stood at the meeting of two ways, reflecting on his fate. Two lovely female figures approached, and one (Pleasure) invited him to follow her flowery path; the other (Virtue) invited him to choose a course full of labor and self-control, but crowned with honor and immortality. The suit of Virtue prevailed, and Hercules resolved to pursue her guidance without shrinking. In the 18th year of his age, he resolved to deliver the neighborhood of mount Cithæron from a huge lion, which preyed on the flocks of Amphitryon, his supposed father, and which laid waste the adjacent country. He went to the court of Thespius, king of Thespis, who shared in the general calamity, and was entertained there during 50 days. The 50 daughters of the king became mothers by Hercules, during his stay at Thespis. After he had destroyed the lion of mount Cithæron, he delivered his country from the annual tribute of a hundred oxen, which it paid to Erginus. Such public services became universally known, and Creon, who then sat on the throne of Thebes, rewarded the patriotic deeds of Hercules by giving him his daughter in marriage, and intrusting him with the government of his kingdom.

did private house of the ancients that has ever been seen by modern eyes. The house has a suite of chambers, with a court in the centre. There is a separate part of the mansion allotted to the females, a garden, surrounded by arcades and columns, and also a grand saloon, which probably served for the meeting of the whole family. Another house, also discovered, was very remarkable, from the quantity and nature of the provisions in it, none of which have been disturbed for 18 centuries, for the doors remained fastened, in the same state as they were at the period of the catastrophe which buried Herculaneum. The family which occupied this mansion was, in all likelihood, when the disaster took place, laying in provisions for the winter. The provisions found in the store-rooms consist of dates, chestnuts, large walnuts, dried figs, almonds, prunes, corn, oil, peas, lentils, pies and hams. The internal arrangement of the house, the manner in which it was ornamented, all, in fact, announced that it had belonged to a very rich family, and to admirers of the arts; for there were discovered many pictures, representing Polyphemus and Galatea, Hercules and the three Hesperides, Cupid and a Bacchante, Mercury and Io, Perseus killing Medusa. There were also in the same house vases, articles in glass, bronze and *terra cotta*, as well as medallions in silver, representing in relief Apollo and Diana. The persons who direct the excavations have caused them to be continued in the same street, and they will, in regular order, search the shops and houses which border on each side, and also the lanes which branch off from it.

As Hercules, by the will of Jupiter, was subjected to the power of Eurystheus, and obliged to obey him in every respect, Eurystheus, acquainted with his successes and rising power, ordered him to appear at Mycenæ, and perform the labors which, by priority of birth, he was empowered to impose upon him. Hercules refused, and Juno, to punish his disobedience, rendered him so delirious that he killed his own children by Megara, supposing them to be the offspring of Eurystheus. (See *Megara.*) When he recovered the use of his senses, he was so struck with the misfortunes which had proceeded from his insanity, that he concealed himself, and retired from the society of men for some time. He afterwards consulted the oracle of Apollo, and was told that he must be subservient, for twelve years, to the will of Eurystheus, in compliance to the commands of Jupiter; and that, after he had achieved the most celebrated labors, he should be reckoned in the number of the gods. So plain and expressive an answer determined him to go to Mycenæ, and to bear with fortitude whatever gods or men imposed upon him. Eurystheus, seeing so great a man totally subjected to him, and apprehensive of so powerful an enemy, commanded him to achieve a number of enterprises the most difficult and arduous ever known, generally called the *twelve labors of Hercules.* The favors of the gods had completely armed him when he undertook his labors. He had received a coat of arms and helmet from Minerva, a sword from Mercury, a horse from Neptune, a shield from Jupiter, a bow and arrows from Apollo, and from Vulcan a golden cuirass and brazen buskin, with a celebrated club of brass, according to the opinion of some writers. The first labor imposed upon Hercules by Eurystheus was to kill the lion of Nemæa, which ravaged the country near Mycenæ. The hero, unable to destroy him with his arrows, boldly attacked him with his club, pursued him to his den, and, after a close and sharp engagement, he choked him to death. He carried the dead beast on his shoulders to Mycenæ, and ever after clothed himself with the skin. Eurystheus was so astonished at the sight of the beast, and at the courage of Hercules, that he ordered him never to enter the gates of the city when he returned from his expeditions, but to wait for his orders without the walls. He even made himself a brazen vessel, into which he retired whenever Hercules returned. The second labor of Hercules was to destroy the Lernæan hydra, which had seven heads, according to Apollodorus, 50 according to Simonides, and 100 according to Diodorus. This celebrated monster he attacked with his arrows; and soon after he came to a close engagement, and, by means of his heavy club, he destroyed the heads of his enemy; but this was productive of no advantage, for, as soon as one head was beaten to pieces by the club, immediately two sprang up; and the labor of Hercules would have remained unfinished, had not he commanded his friend, Iolas, to burn with a hot iron the root of the head which he had crushed to pieces. This succeeded (see *Hydra*), and Hercules became victorious, opened the belly of the monster, and dipped his arrows in the gall, to render the wounds which he gave fatal and incurable. He was ordered, in his third labor, to bring, alive and unhurt, into the presence of Eurystheus, a stag famous for its incredible swiftness, its golden horns and brazen feet. This celebrated animal frequented the neighborhood of Œnoe, and Hercules was employed, for a whole year, in continually pursuing it, and at last caught it in a trap, or when tired, or, according to others, by slightly wounding it and lessening its swiftness. As he returned victorious, Diana snatched the goat from him, and severely reprimanded him for molesting an animal which was sacred to her. Hercules pleaded necessity, and, by representing the commands of Eurystheus, he appeased the goddess, and obtained the beast. The fourth labor was to bring alive to Eurystheus a wild boar, which ravaged the neighborhood of Erymanthus. In this expedition he destroyed the Centaurs (see *Centaur*), and caught the boar by closely pursuing him through the deep snow. Eurystheus was so frightened at the sight of the boar, that, according to Diodorus, he hid himself in his brazen vessel for some days. In his fifth labor, Hercules was ordered to clean the stables of Augeas, where 3000 oxen had been confined for many years. (See *Augeas.*) For his sixth labor, he was ordered to kill the carnivorous birds which ravaged the country near the lake Stymphalis, in Arcadia. (See *Stymphalis.*) In his seventh labor, he brought alive into Peloponnesus a prodigious wild bull, which laid waste the island of Crete. In his eighth labor, he was employed in obtaining the mares of Diomedes, which fed upon human flesh. He killed Diomedes, and gave him to be eaten by his mares, which he brought to Eurystheus. They were sent to mount Olympus by the king of Mycenæ, where

they were devoured by the wild beasts; or, according to others, they were consecrated to Jupiter, and their breed still existed in the age of Alexander the Great. For his ninth labor, he was commanded to obtain the girdle of the queen of the Amazons. (See *Hippolyte.*) In his tenth labor, he killed the monster Geryon, king of Gades, and brought to Argos his numerous flocks, which fed upon human flesh. (See *Geryon.*) The eleventh labor was to obtain apples from the garden of the Hesperides. (See *Hesperides.*) The twelfth and last, and most dangerous of his labors, was to bring upon earth the three-headed dog Cerberus. This was cheerfully undertaken by Hercules, and he descended into hell by a cave on mount Tænarus. He was permitted by Pluto to carry away his friends, Theseus and Pirithoüs, who were condemned to punishment in hell; and Cerberus also was granted to his prayers, provided he made use of no arms, but only force to drag him away. Hercules, as some report, carried him back to hell, after he had brought him before Eurystheus. Besides these arduous labors, which the jealousy of Eurystheus imposed upon him, he also achieved others, of his own accord, equally great and celebrated. (See *Cacus, Antæus.*) He accompanied the Argonauts to Colchis, before he delivered himself up to the king of Mycenæ. He assisted the gods in their wars against the giants, and it was through him alone that Jupiter obtained a victory. He conquered Laomedon, and pillaged Troy. When Iole, the daughter of Eurytus, king of Œchalia, of whom he was deeply enamored, was refused to his entreaties, he became the prey of a second fit of insanity, and he murdered Iphitus, the only one of the sons of Eurytus who favored his addresses to Iole. He was, some time after, purified of the murder, and his insanity ceased; but the gods persecuted him more, and he was visited by a disorder which obliged him to apply to the oracle of Delphi for relief. The coldness with which the Pythia received him irritated him, and he resolved to plunder Apollo's temple, and carry away the sacred tripod. Apollo opposed him, and a severe conflict was begun, which nothing but the interference of Jupiter with his thunderbolts could have prevented. He was, upon this, told by the oracle that he must be sold as a slave, and remain three years in the most abject servitude, to recover from his disorder. He complied, and Mercury, by order of Jupiter, conducted him to Omphale, queen of Lydia, to whom he was sold as a slave. Here he cleared all the country from robbers, and Omphale, who was astonished at the greatness of his exploits, restored him to liberty, and married him. Hercules had Agelaus and Lamon, according to some, by Omphale, from whom Crœsus, king of Lydia, was descended. He became also enamored of one of Omphale's female servants, by whom he had Alceus. After he had completed the years of his slavery, he returned to Peloponnesus, where he reëstablished on the throne of Sparta Tyndarus, who had been expelled by Hippocoon. He became one of Dejanira's suitors, and married her, after he had overcome all his rivals. (See *Achelous.*) He was obliged to leave Calydon, his father-in-law's kingdom, because he had inadvertently killed a man with a blow of his fist; and it was on account of this expulsion that he was not present at the hunting of the Calydonian bear. From Calydon, he retired to the court of Ceyx, king of Trachinia. In his way, he was stopped by the swollen streams of the Evenus, where the Centaur Nessus attempted to offer violence to Dejanira, under the perfidious pretence of conveying her over the river. Hercules perceived the distress of Dejanira, and killed the Centaur, who, as he expired, gave her a tunic, which, as he observed, had the power of recalling a husband from unlawful love. (See *Dejanira.*) Ceyx, king of Trachinia, received him and his wife with great marks of friendship, and purified him of the murder which he had committed at Calydon. Hercules was still mindful that he had once been refused the hand of Iole; he therefore made war against her father, Eurytus, and killed him, with three of his sons. Iole fell into the hands of her father's murderer, and found that she was loved by Hercules as much as before. She accompanied him on mount Œta, where he was going to raise an altar and offer a solemn sacrifice to Jupiter. As he had not then the tunic in which he arrayed himself to offer a sacrifice, he sent Lichas to Dejanira, in order to provide himself a proper dress. Dejanira, informed of her husband's tender attachment to Iole, sent him a filter, or, more probably, the tunic which she had received from Nessus; and Hercules, as soon as he had put it on, fell into a desperate distemper, and found the poison of the Lernæan hydra penetrate through his bones. He attempted to pull off the fatal dress, but it was too late; and, in the midst of his pains and tortures, he inveighed, in the most bitter imprecations, against the

credulous Dejanira, the cruelty of Eurystheus, and the jealousy and hatred of Juno. As the distemper was incurable, he implored the protection of Jupiter, and gave his bow and arrows to Philoctetes, and erected a large burning pile on the top of mount Œta. He spread on the pile the skin of the Nemæan lion, and laid himself down upon it as on a bed, leaning his head on his club. Philoctetes, or, according to some, Pæan or Hyllus, was ordered to set fire to the pile; and the hero saw himself, on a sudden, surrounded with the flames, without betraying any marks of fear or astonishment. Jupiter saw him from heaven, and told to the surrounding gods that he would raise to the skies the immortal parts of a hero who had cleared the earth from so many monsters and tyrants. The gods applauded Jupiter's resolution. The burning pile was suddenly surrounded with a dark smoke, and, after the mortal parts of Hercules were consumed, he was carried up to heaven in a chariot drawn by four horses. Some loud claps of thunder accompanied his elevation, and his friends, unable to find either his bones or ashes, showed their gratitude to his memory by raising an altar where the burning pile had stood. Menœtius, the son of Actor, offered him a sacrifice of a bull, a wild boar and a goat, and enjoined the people of Opus yearly to observe the same religious ceremonies. His worship soon became as universal as his fame, and Juno, who had once persecuted him with such inveterate fury, forgot her resentment, and gave him her daughter, Hebe, in marriage. Hercules has received many surnames and epithets, either from the place where his worship was established, or from the labors which he achieved. His temples were numerous and magnificent, and his divinity revered. No dogs or flies ever entered his temple at Rome, and that of Gades, according to Strabo, was always forbidden to women and pigs. The Phœnicians offered quails on his altars, and, as it was supposed that he presided over dreams, the sick and infirm were sent to sleep in his temples, that they might receive in their dreams the agreeable presages of their approaching recovery. The white poplar was particularly dedicated to his service. Hercules is generally represented naked, with strong and well proportioned limbs; he is sometimes covered with the skin of the Nemæan lion, and holds a knotted club in his hand, on which he often leans. Sometimes he appears crowned with the leaves of the poplar, and holding the horn of plenty under his arm. At other times, he is represented standing with Cupid, who insolently breaks to pieces his arrows and his club, to intimate the passion of love in the hero, who suffered himself to be beaten and ridiculed by Omphale, who dressed herself in his armor, while he was sitting to spin with her female servants. The children of Hercules are as numerous as the labors and difficulties which he underwent; and, indeed, they became so powerful, soon after his death, that they had the courage to invade alone all Peloponnesus. (See *Heraclidæ*.) Such are the most striking characteristics of the life of Hercules, who is said to have supported, for a while, the weight of the heavens upon his shoulders (see *Atlas*), and to have separated, by the force of his arm, the celebrated mountains which were afterwards called the boundaries of his labors. (See *Abyla*.) He is held out by the ancients as a true pattern of virtue and piety; and, as his whole life had been employed for the benefit of mankind, he was deservedly rewarded with immortality.—As to the origin of his story, many writers believe that the Oriental deities, called by the Greeks *Hercules*, are merely astronomical symbols. The Egyptian Hercules (properly *Chom*, or *Dson*) belongs, according to Herodotus and Diodorus, to the 12 great heavenly deities, who, 17,000 years before Amasis, sprung from the eight gods. As these eight gods, as well as the twelve, are to be understood in an astronomical sense, it is believed that Hercules is merely the symbol of the course of the sun through the 12 signs, or of a year; and the fable that he lived 17,000 years before Amasis, means that astronomical calculations had existed from that time. The Phœnician Hercules, whose proper name is *Melcarthus*, points to a similar origin, by the name of his mother, *Asteria* (the starry heavens). And it is believed that, even in the Theban or Grecian Hercules, many traces of the original Oriental idea are to be found. According to this notion, the 12 labors are only the passage of the sun through the 12 signs. His marriage with Hebe was explained, even by the ancients, as symbolic of his renewing his course, after its completion. We must not forget that the Greek Hercules is of Phœnician origin, his native city, Thebes, being a Phœnician colony. The Phœnician Hercules, as the patron and symbol of the nation, accompanied them wherever they went and settled, and thus the travels of Hercules appear as a symbol of the extension of this nation by commerce and navigation,

and of the civilization which was a consequence of it. It is possible that no Hercules ever existed, in which case we must consider the Heraclides as merely descendants of the Græco-Phœnician colony of Thebes. A Theban Hercules, however, may have existed, and this is rendered probable by the circumstance that an old tradition says that his name was not originally *Hercules*, but *Alcæus*, and that he received the former name from the god Hercules. (Sext. Empir., *Adv. Phys.* 557 *ed. Fabric.*) However that may be, every thing reported of any other Hercules was transferred to this Alcæus, or Theban Hercules, and these traditions became the foundation of the tales of the fabulous hero. After this fusion of different traditions, the Greek Hercules became the symbol of the history of Grecian civilization. This was accomplished in three different ways:—first, physically, as by the draining of morasses and lakes, the digging of canals, and the extirpation of forests, and the wild beasts which infested them, &c.; secondly, commercially, by navigation and intercourse with distant countries; thirdly, in a politico-religious way, by the institution of sacred games, laws, &c. All this was effected by the Phœnico-Theban Hercules, to whom a great number of cities, Phœnician colonies, traced back their origin. They celebrated feasts in honor of him, at which they sang of his exploits. The original astronomical ideas were blended with wonderful tales of the maritime expeditions and the deeds of one or of several Greek heroes. In this way the *Heraclea*, that is, long poems on the life and adventures of Hercules, were formed. There were, doubtless, poems of this kind, in a simpler form, before the time of Homer. Then came the dramatic poets, who, in the *drama satyricon*, used to exhibit a sort of burlesque Hercules, which gave rise to a number of comic stories of Hercules, as his having been a great eater and drinker, having labored at the spinning-wheel of Omphale (a satire on men under petticoat government), &c. There seems, then, to be little doubt that Hercules, as a hero, owes his origin to poetry only; and the plastic art seized with eagerness upon the poetical ideal of strength and virtue. Hercules is represented, in the series of Grecian ideal figures, brawny and muscular, with strong, broad shoulders, a short, thick neck, a high chest and a small head. The expression of the face is spirited and good natured, occasionally with a tinge of fierceness. His beard is curly his hair short. He is generally naked, with a lion's skin and a club. The principal statue of this hero, which remains to us, is the Farnese Hercules, at Rome, a work of the Athenian Glycon. His various adventures and exploits enabled the artists to represent him under a variety of forms, as a child, a youth, and a man, struggling, suffering and enjoying, in repose, and in full action. The *Torso di Michelangelo* (in the Vatican), so called because that great artist studied this fragment of a statue of Hercules seven years, is a remarkable figure. From the anatomy of this *torso*, the figure appears to have been sitting in a stooping posture, leaning on the club, with the head raised. The lion's skin is spread over the seat. The breast and shoulders, the parts particularly characteristic of Hercules, are remarkably fine; but the muscles are not expressed so forcibly as in other representations, the artist (Apollonius of Athens, son of Nestor) intending to represent, not the struggling hero, but the god reflecting on the deeds which gave him immortality. Another singular representation of Hercules is as the leader of the muses, *Hercules Musagetes*, which honor he can hardly have attained by his own acquirements; yet he was sometimes represented in this character, with the lyre. The idea is Roman. Fulvius Nobilior erected a temple to Hercules, in which he placed the muses, which he had brought from Ambracia, as if he intended to remind his countrymen, that warlike virtue and valor were not inconsistent with intellectual accomplishments.

Hercules, Pillars of; two pillars, which Hercules is said to have erected, on each side of the strait named after him, or the strait of Gades (Gibraltar), between Europe and Africa, upon the mountains Calpe and Abyla, as the limits of his wanderings towards the West. (See *Gibraltar.*)

Hercynia; a celebrated forest of Germany, which, according to Cæsar, required nine days' journey to cross it, and which, in some parts, was found without any boundaries, though travelled over for 60 days successively. It contained the modern countries of Switzerland, Basil, Spires, Transylvania, and a great part of Russia. In process of time, the trees were removed, and the greatest part of it was made habitable.

Herder, John Godfrey von, a classical German author, was born, August 25, 1744, at Mohrungen, a small place in Eastern Prussia, where his father taught a school for girls. His early education was not fa-

vorable to the developement of his faculties. His father permitted him to read only the Bible and the hymn-book, but an insatiable thirst for learning led him to prosecute his studies in secret. The clergyman of the place employed the boy as a copyist, and soon discovered his talents, and allowed him to participate in the lessons which he gave his own children in Latin and Greek. At this time, young Herder suffered from a serious disease of the eyes, which was the occasion of his becoming better known to a Russian surgeon, who lived in the clergyman's house, and who was struck with the engaging manners and pleasing appearance of the youth. He offered to take Herder with him to Königsberg and to Petersburg, and to teach him surgery gratuitously. Herder, who had no hope of being able to follow his inclinations, left his native city, in 1762; but, in Königsberg, he fainted at the first dissection at which he was present. He now resolved to study theology. Some gentlemen to whom he became known, and who immediately interested themselves in his favor, procured him an appointment in Frederic's college, where he was at first tutor to some scholars, and, at a later period, instructer in the first philosophical and second Latin class, which left him time to study. During this period, he became known to Kant, who permitted him to hear all his lectures gratis. He formed a more intimate acquaintance with Hamann. (q. v.) His unrelaxing zeal and diligence penetrated the most various branches of science, theology, philosophy, philology, natural and civil history, and politics. In 1764, he was appointed an assistant teacher at the cathedral school of Riga, with which office that of a preacher was connected. His pupils in school, as well as his hearers at church, were enthusiastically attached to him, so much that it was thought necessary to give him a more spacious church. His sermons were distinguished by simplicity, united with a sincere devotion to evangelical truth and original investigation. In 1767, he received from Petersburg the offer of the superintendence of St. Peter's school, in that city; but he declined this offer, and even gave up his place at Riga, because he could not resist his inclination to study the arts in their sources, and men on the stage of life. He had already arrived in France, when he was appointed travelling tutor to the prince of Holstein-Oldenburg, who was on a tour through France and Italy. But in Strasburg, he was prevented from proceeding by the disease of his eyes, which had returned, with more severity than before; and here he became acquainted with Göthe, on whom he had a very decided influence. Herder had already published his Fragments on German Literature, his Critical Wolds, and other productions, which had gained him a considerable reputation, though he had not, at this time, published any thing of importance in theology; yet, while in Strasburg, he was invited to become court preacher, superintendent and consistorial counsellor, at Bückeburg, whither he proceeded in 1771. He soon made himself known as a distinguished theologian, and, in 1775, was offered a professorship at Göttingen, which he, however, did not accept immediately, because the king had not confirmed his appointment unconditionally, and, contrary to custom, he was expected to undergo a kind of examination. But, being married, Herder did not feel at liberty to decline the appointment. On the very day when he had resolved to go to Göttingen, he received an invitation to become court preacher, general superintendent and consistorial counsellor at Weimar. This appointment was through the influence of Göthe. He arrived in Weimar in October, 1776. It was at the time when the duke Augustus and the princess Amalia had collected many of the most distinguished German literati at their court. Weimar was greatly benefited by Herder's labors, as a pulpit orator, inspector of the schools of the country, the patron of merit, and founder of many excellent institutions. In 1801, he was made president of the high consistory, a place never before given to a person not a nobleman. Herder was subsequently made a noble by the elector of Bavaria. He says himself that he accepted the rank for the sake of his children; of course, it could be of little consequence to him personally. He died December 18, 1803. His widow wrote Reminiscences of Herder's Life, which J. G. Müller published, in two volumes (Stuttgard, 1820.) Herder was a model of virtue, and ready to do all the good in his power, yet his mind was often overcast with melancholy, on which occasions he would exclaim, *O mein verfehltes Leben!* (O my profitless life!) Germany is deeply indebted to him for his valuable works in almost every branch of literature, and few authors have had a greater influence upon the public taste in that country. A good idea of Herder's character may be obtained from reading Jean Paul Richter's enthusiastic remarks concerning him, in the *Wahrheit aus Jean Paul's Leben*, publish-

ed after the author's death, and the article, by the same, on Herder, in the *Heidelberger Jahrbücher* of 1812. His works were published, in 45 octavo volumes, by Cotta, in Tübingen, in 1806; and an edition, in 60 small 12mo. volumes, is now publishing by the same. It is divided into several parts; that comprising his writings on belles-lettres and literature, that on religion and theology, and that on philosophy and history. As a theologian, Herder contributed to a better understanding of the historical and antiquarian part of the Old Testament. His *Geist der Hebräischen Poesie* (1782; third edition by Justi, Leipsic, 1825, 2 vols., with additions) is highly valued. He did much for the better understanding of the classical authors, and his philosophical views of human character are full of instruction. He contributed much to a more active study of nature, brought before the public the poetry of past times of Europe and Asia, and awakened a taste for national songs. His greatest work is his *Ideen zur Philosophie der Geschichte der Menschheit* (Riga, 1785 et seq.; a new edition, with an introduction, by professor Luden, Leipsic, 1821), in which all the light of his great mind is concentrated. "In early years," says Herder, "when the fields of knowledge lay before me, with all the glow of a morning sun, from which the meridian sun of life takes away so much of the charm, the idea often occurred to my mind, whether, like other great subjects of thought, each of which has its philosophy and science, that subject also, which lies nearest to our hearts,—the history of mankind, viewed as a whole,—might not also have its philosophy and science. Every thing reminded me of this idea—metaphysics and morals, natural philosophy and natural history, lastly and most powerfully, religion." This is the key to all Herder's life. The object of his investigations was to find the point from which he might calmly survey every thing, and see how all things converge. He did not attempt to arrive at this point by metaphysical speculations, but by observation, by the constant study of nature and the mind, in all its works, in the arts, law, language, religion, medicine, poetry, &c. Whatever may be said against parts of his work above mentioned, it is one of the noblest productions of modern literature. The style of Herder is pure and correct. In poetry, Herder effected more by his various accomplishments, his vast knowledge and fine taste, than by creative power; yet he has produced some charming songs; and his *Cid*, a collection of Spanish romances into a kind of epic, is one of the most popular poems of Germany. In 1819, the grand-duke of Weimar ordered a tablet of cast iron to be put on his grave, with the words *Licht*, *Liebe*, *Leben* (Light, Love, Life).

Here. (See *Juno*.)

Hereditaments; all such things, immovable, whether corporeal or incorporeal, as a man may leave to his heirs, by way of inheritance, or which, not being otherwise devised, naturally descend. Corporeal hereditaments consist wholly of substantial and permanent objects; incorporeal hereditaments are not the objects of sensation, are creatures of the mind, and exist only in contemplation. They are principally of 10 sorts, viz., advowsons, tithes, commons, ways, offices, dignities, franchises, presents and rents.

Hereditary Diseases. (See *Diseases, Hereditary*.)

Hereditary Offices. The few traces of such in antiquity are found mostly in the family offices of the priesthood. In the ancient German courts, it became a custom to assign, as marks of distinction, to the most eminent and loyal, those personal and domestic services towards the prince, which the Greeks and Romans imposed on slaves and freedmen. Thus arose the great court and crown offices:—1. of the household (*major domus*, high-steward; *camerarius*, chamberlain); 2. of the kitchen (seneschal, *dapifer*, sewer); 3. of the cellar (cup-bearer, *cellarius; buticularius*, *pincerna*, butler); 4. of the stable (marshal, *comes stabuli*, *connétable*); all, at the same time, united with a high post in the army. The highest court officers of the German empire were the secular prince-electors, who, in later times, appointed hereditary deputies, to discharge the duties incumbent on them on solemn occasions, such as the crowning of the emperor, for instance. This remnant of feudalism has been justly abolished, in modern times, in many countries, whilst we are sorry to see that, in some countries, they have been even lately established. Thus George IV, as king of Hanover, within a few years, created count Münster, his favorite, hereditary marshal of Hanover. The only rational defence of hereditary monarchies is, that they are sometimes necessary to prevent greater evils; but this reason does not apply to hereditary succession in inferior offices, which is altogether a barbarous remnant of feudal times, when privileges were extorted, and the true objects of government little understood.

Heretic; one who embraces a heresy; from the Greek αἵρεσις, which originally only meant a *sect*, from αἱρέομαι (I choose), without implying praise or dispraise. Thus we hear of the Peripatetic *heresy*, or sect of philosophers; and the heathens spoke of the Christian *heresy*, meaning merely their doctrine. When the idea of a Catholic church, its dogmas and exclusive claims to salvation, became more fully developed, the word *heretic* was used in a narrower sense, to indicate one who differs from the Catholic, that is, universal church, and who, at the same time, calls himself a Christian. Hence neither Jews nor Mohammedans, nor even apostates from Christianity, except very rarely, are called *heretics*. Augustin gives the following definition of a heretic:—*Hereticus est qui alicujus temporalis commodi, et maxime gloriæ principatusque causa, novas opiniones vel gignit, vel sequitur;* and *qui sub vocabulo Christiano doctrinæ Christianæ contumaciter resistit.* The definition of a later distinguished Catholic writer, Bossuet, is:—*Un hérétique est celui qui a une opinion à lui, qui suit sa propre pensée, et son sentiment particulier; un Catholique, au contraire, suit sans hésiter le sentiment de l'église universelle.* It is plain that the idea of a heretic presupposes the idea of a universal or general church, and an established faith. Thus Christ was crucified, and Stephen stoned by the Jews for heresy, or for deviating from their established church. The origin of heretics is to be referred to the time when a Christian church was publicly established, and began to acknowledge certain dogmas as orthodox, and to designate opinions at variance with them as false. Yet a diversity of opinions always existed on certain points, because the Bible is a book of faith, treating of divine subjects in the imperfect language of men, and, therefore, admitting, in many passages, different explanations, according to different preconceived views. Many of the early Christians preserved their Jewish or Greek philosophical notions, and mingled them with the doctrines of Christianity. This was another source of difference. Even in the time of the apostles, we find traces of the Gnostics. (q. v.) From them sprang the Simonians (who opposed to the Supreme God a principle of evil), the Nicolaitans and the Cerinthians, who introduced Jewish Gnostic ideas into Christianity. In the second century, we must mention particularly the Basilidians, who taught the generation of the Æons from God, and denied the divinity of Christ; the Carpocratians, who considered Christ a mere man, and maintained that the most wicked had the greatest chance of salvation; the Nazaræans, following the Mosaic law with great strictness; the Ophites, worshipping Christ under the image of a serpent; the Patropassians, denying the distinction of three persons in the Godhead; the Artemonians, believing in a union of a part of the Godhead with Christ at his birth; the Hermogenians, asserting the production of the human soul from an eternal but corrupt matter; the Montanists, who held their founder for the Comforter; the Sethites, who declared Seth to be the Messiah; the Quartodecimans, who celebrated Easter like the Jews; the Cerdonians, who denied the resurrection; the Manichæans (q. v.), who adopted two divine principles, and mixed the wildest theories with the doctrines of Christianity; the Alogians, who denied the divinity of Christ; the Encratites, who condemned matrimony; the Artotyrites, who used bread and cheese in the Lord's supper. In the third century, there were the Monarchists, denying three persons in the Godhead; the Samosatensians and Paulinians, declaring Christ a mere man, and the Holy Ghost a divine power; the Arabici, denying immortality; the Hieracites, belonging to the Manichæans; the Noëtians, teaching that God the Father had become a man, and suffered; the Sabellians, denying the distinction of persons in the Trinity; the Novatians, who refused to reädmit those who had fallen off during the times of persecution; the Origenians, believing in the final salvation of the devil and the damned; the Chiliasts, or Millenarians, believing in a millennium; the Aquarians, using water, instead of wine, in the Lord's supper. In the fourth century, the principal heretical sects were the Arians, ascribing to the Son a nature and essence inferior to that of the Father; the Apollinarians, denying the human nature of Christ; the Photinians, maintaining that Christ was born of the Holy Ghost and Mary; the Macedonians, denying the divinity of the Holy Ghost; the Priscillianists, reviving the Gnostic errors; the Donatists, who held peculiar opinions respecting the church; the Euchites, ascribing to each individual an evil spirit, which could only be driven out by prayer; the Collyridians, who made offerings to Mary; the Seleucians, ascribing a bodily form to God; the Anthropomorphites, ascribing a human body to God; the Jovinians, denying the virginity of Mary; the Bonosians or Adoptianists, considering Christ as merely the adoptive son of God.

In the fifth century arose the Nestorians, who attributed the two natures of Christ to two persons; the Eutychians, Monophysites and Jacobites, allowing but one person in Christ; the Theopaschites, teaching the incarnation and crucifixion of the three persons of the Godhead; the Pelagians, denying the depravity of human nature, and its salvation by grace alone; the Predestinarians, teaching the fore-ordination of salvation and damnation. In the sixth century were the Agnoëtæ, teaching that Christ, in his human nature, did not know all things; the Tritheists, making three distinct Gods of the three persons of the Deity; the Monothelites, allowing only one will in Christ; the Aphthardocetes, teaching that the body of Christ was not subjected to any suffering. In the ninth century were the Paulicians, adhering to some doctrines of the Manichæans: in the 12th century, the Bogomili, teaching the creation of the world by a fallen angel, driven from heaven; the Catharists, reviving Gnostical doctrines; the Petrobusians, rejecting the baptism of children; the Waldenses, demanding a reformation of the church; the Mystics, the Wicliffites, Hussites, and, at a later period, the Lutherans, Calvinists, with all the variety of Protestant sects and churches. It is evident that, for the historian, the word *heretic* can have only the relative meaning of *heterodox* (q. v.), because, as soon as a church or sect declares itself in possession of the true and sole doctrine of salvation and religious truth, it declares, by this circumstance, all other doctrines of faith heretical. Thus the Greek Catholic church declares Roman Catholicism a heresy, and *vice versa*, whilst the Calvinist declares popery a heresy. We shall not here speak of all the persecutions which different sects have directed against those whom they considered heretics, but will only mention that the Roman Catholic church, as such, has always made a distinction between heretics who obstinately persist in their heresy, and heretics merely through error, or who have been born in heresy. The fathers of the church declare themselves ignorant of the final condition of the latter. Again, the church distinguishes peaceable heretics from those whose doctrines produce public confusion and disorder. However, it generally considers that all heresies lead, sooner or later, to disturbances and bloodshed. The doctrines considered heretical by the Roman church may be found in the *Dictionnaire des Hérésies*, by the abbé Pluquet, with the history, progress, nature, and also the Catholic refutations of their errors. It is well known that the Catholic church prohibits priests from shedding blood (they were not even allowed to perform surgical operations); and hence, according to the Catholic representation, death has never been inflicted upon heretics by the church, which merely declared them, after due admonition, to be heretics, excommunicated them, and gave them up to the secular government, to be treated according to the laws, a view of religious persecutions which has been adopted by other sects also; but, for the impartial historian, this argument can have no other weight, than that the church, as such, has not ordered the execution of heretics, whilst its members were often affected by the spirit of the age, and, by giving up a heretic to the secular government, aware that a painful torture and cruel death awaited him, in fact, devoted him to destruction. It must be remembered, however, that secular princes were often active in the prosecution of heretics, considering them as disturbers of the peace; and several instances are on record, in which the pope requested sovereigns to avoid cruelty towards heretics. Before Christianity was made the religion of the Roman state, nothing but excommunication (q. v.) was inflicted upon the heretic; but severe laws were passed soon after the conversion of the emperors. When the bishop excommunicated a heretic, the secular authority banished him; he lost his civil rights, and was even punished with death; he could not be an accuser, witness nor judge; could not make a will; and even his family were subjected to some penalties. The code of Justinian contains many ordinances against heretics, and the canon law made it a duty to denounce them, under pain of excommunication, even if the party were a wife or husband, parent or child, and to assist their judges, without remuneration, &c. They were not permitted to be acquainted with the witnesses against them, nor with their testimony; they were not allowed to have counsel, nor to appeal. As early as 385, Priscillian was condemned to death, as a heretic, by the Spanish bishops at the council of Treves; and the punishment of death, which the emperors ordered to be inflicted on the Arians, after the Nicene council, was more commonly inflicted on heretics. But the *persecutions of heretics*, properly so called, began in the pontificate of Gregory VII, in the 11th century. The emperor Frederic II authorized them, against the Albigenses and Waldenses, by an edict,

issued at Padua, in 1222. From that time, persecutions of heretics took place in almost all Christian countries. Spain, Italy and France, from the 13th to the 16th century, suffered much from these persecutions, which were often conducted with more fury, as political considerations were mingled with them; and the massacre of St. Bartholomew, and the acts of the Spanish inquisition, are foul blots on the history of man. The states of Germany, collectively, have never shown that spirit of persecution which has stained other countries. The *Carolina* (q. v.) does not mention heresy at all; and, by the peace of Westphalia, it was settled that neither of the three confessions (Catholics, Lutherans and Calvinists), should accuse the other of heresy. As the unity of the church is considered, by the Catholics, one of its three essential qualities, heresy, or a deviation from the dogmas of the church, must appear to them much more alarming than to other Christian sects. (See Semler's *Introduction to Baumgarten's Polemics*; C. M. F. Walch's *Sketch of a Complete History of Heresy*; Baumgarten's *History of Religious Divisions*, and J. G. Walch's *Biblio. Theol.*)

Heriot. (See *Hariot.*)

Hermandad (Spanish, *brotherhood*). The cities of Castile, as they advanced in consideration, and obtained, by the grants of the kings, who made use of their services against the arrogant nobility, a feeling of their own importance, frequently formed connexions to defend themselves against the usurpations and the rapaciousness of the feudal nobility. This object was most clearly apparent in the brotherhood (Hermandad), formed in 1295, by the cities of the kingdoms of Castile and Leon, which threatened with the destruction of his houses, vineyards and gardens, every nobleman who should rob or injure a member of the association, and who would not make satisfaction, or give security for the observance of the law. Even if a nobleman had only challenged a member of the association, and refused to give security, the challenged person had the right of putting him to death. These fraternities were the model of the later Hermandad of the municipal communities, which was formed in Castile, under the reign of Ferdinand and Isabella. It was established in 1486, with the approbation of the king, at a time when the nobles paid no attention to the royal commands to keep the peace, robbed the defenceless villagers and industrious citizens, and made the highways unsafe. The city authorities raised a military force, and appointed judges in different parts of the kingdom. The disturbers of the public peace were sought out by the armed bands, carried before the judges, and punished. Neither rank nor station protected the offender against the tranquillity of the country, nor could he find safety even in the churches. The nobility, who saw their turbulence restrained, and their judicial power limited, by this institution, opposed it in vain; for the king protected the Hermandad, as a powerful means of preserving public peace, and, at the same time, an effectual means of strengthening and extending the royal power; since the forces of the city authorities composed a part of the standing army, without needing to be paid by the court. The Hermandad was also introduced into Arragon, in 1488. The Santa Hermandad (holy brotherhood) (a name which has occasioned some to confound this institution with the inquisition, or to consider it as depending upon that establishment) had, like the earlier institution, of which it was a continuation, the object of securing internal safety, and seizing disturbers of the peace and highway robbers, but did not act except in case of offences actually committed. It consisted only of a company of armed police officers, who were distributed in the different provinces of the kingdom of Castile, and whose duty it was to provide for the security of the roads outside of the cities. One of their strictest regulations was, not to use their power within the cities. They were subject to the council of Castile. The principal divisions of the company had fixed stations at Toledo, at Ciudad-Rodrigo, and at Talavera.

Hermann, John Godfrey James; one of the greatest living philologists. He was born in 1772, at Leipsic, where his father was senior of the bench of magistrates. His taste for classical literature was early developed by a good education. His instructer, Reiz, thoroughly initiated him in the Greek and Latin languages, and, at Leipsic and Jena, he exercised his intellect by the study of philosophy and mathematics, and extended his knowledge by that of history. Hermann was destined for the law, which, with the exception of the natural law, he pursued without pleasure. His fondness for literary studies became constantly stronger. In 1794, he obtained the privilege of delivering lectures, by the defence of his dissertation *De Poeseos Generibus*. Upon enter-

ing on an extraordinary professorship of philosophy, in 1798, he wrote *Observationes Criticæ in quosdam Locos Æschyli et Euripidis*. In 1803, he received the regular professorship of eloquence in the university of Leipsic, with which that of poetry was, in 1809, connected. Meantime, by his System of the Ancient Metres (*De Metris Poetarum Græcorum et Romanorum, Libri II*, Leipsic, 1796; enlarged under the title *Elementa Doctrinæ Metricæ*, Leipsic, 1816, republished abridged in 1818; and Manual of Metre, Leipsic, 1798), by several critical editions of ancient authors (some pieces of Æschylus, Euripides and Plautus, and the Poetics of Aristotle), and by some learned treatises (*De Emendenda Ratione Græcæ grammaticæ*, Leipsic, 1801; *Epistola de Dramate comico-satyrico*), he had attracted the attention of the learned. His philological lectures, and his Grecian Society, which became a distinguished seminary of grammatical critics and philologists, have contributed greatly to the flourishing state of the university of Leipsic, as his personal qualities have gained him the love and regard of all those whom zeal for knowledge, or other circumstances, brought into contact with him. Of his numerous and various writings, we may mention his editions of *Vigerus de præcipuis Græcæ Dictionis Idiotismis; Orphica* (Leipsic, 1805); the Homeric Hymns (Leipsic, 1806); his *Observationes de Linguæ Græcæ Dialectis* (1807); his academical programs, *De Dialecto Pindari* (1809); *De Usu Antistrophicorum in Græcorum Tragœdiis* (1810); *De Mythologia Græcorum antiquissima* (1817), a treatise which gave rise to a correspondence between Hermann and Creuzer, the celebrated mythologist, &c. Editions of separate tragedies of Sophocles, Euripides and Æschylus have also been published by Hermann, which furnish honorable proof of his untiring diligence and critical spirit. He has been received into many foreign learned societies. The celebrated Sam. Parr (q. v.) left him, as "the greatest amongst the very great critics of the present age," a gold ring.

HERMANN, or ARMINIUS. (See *Arminius*.)

HERMANSTADT, or, in Hungarian, SZEBEN (anciently *Cibinium*, or *Hermanopolis*); a city of Transylvania, capital of the division settled by Saxons, on the Szeben; 147 miles N. E. Belgrade, 300 S. E. Vienna; lon. 23° 50′ E.; lat. 46° 0′ N.; population, 13,300. It contains four Lutheran churches, three Catholic, one Calvinist, one Greek; a university with the national archives; a gymnasium with a library of 5000 vols.; another library of 15,000 vols.; and some other seminaries. The streets are narrow and crooked. Its chief manufacture is soap and candles. It is fortified with a double wall and a deep moat. It is situated on the side of the Szeben, which soon after runs into the Aluta. In the neighborhood is the pass of Rothethurm.

HERMAPHRODITE; a term formerly applied exclusively to signify a human creature possessed of the organs of both sexes. The term is now applied to other animals, and to plants. It is now well known there is no such thing as an hermaphrodite in the human species. In many of the inferior tribes of animals, the male and female parts of generation are found to be united in the same animal. There are both natural and unnatural or monstrous hermaphrodites. The natural kind belongs to the inferior and more simple orders of animals; but, as animals become more complicated, and each part is more confined to a particular use, a separation of the sexual characteristics takes place, and they are found united only in some particular cases. In the horse, ass, sheep and cattle, such instances sometimes occur. In the case of cattle, when a cow brings forth two calves, one a bull, and the other a cow to appearance, the cow is unfit for propagation, but the bull-calf becomes a proper bull. Such cows do not breed; they do not show the least inclination for the bull, nor does the bull ever take notice of them. Among the country people in England, this kind of calf is called a *free-martin*, and is as well known among the farmers as either cow or bull. When they are preserved, it is to yoke with the oxen, or fatten for the table. They are much larger than either the bull or the cow, and the horns grow longer and bigger, being very similar to those of an ox. The bellow of a free-martin is also similar to that of the ox, and the meat is similar to that of the ox or spayed heifer—viz., much finer in the fibre than that of either the bull or cow—and they are more susceptible of growing fat with good food. Among the invertebral animals, such as worms, snails, leeches, &c., hermaphrodites are frequent. In the memoirs of the French academy, we have an account of this very extraordinary kind of hermaphrodites, which not only have both sexes, but do the office of both at the same time. Such are earth-worms, round-tailed worms, found in the intestines of men and horses, land-snails, and those

of fresh waters, and all the sorts of leeches. Among the animals of this sort, however, there are great numbers which are so far from being hermaphrodites, that they are of no sex at all. Of this kind are all the caterpillars, maggots and worms produced of the eggs of flies of all kinds. But the reason of this is plain: these are not animals in a perfect state, but disguises under which animals lurk. They have no business with the propagating of their species, but are to be transformed into animals of another kind, by the putting off their several coverings; and then only they are in their perfect state, and therefore then only show the differences of sex. When they have reached this state, they unite, and their eggs produce those creatures which show no sex till they arrive at that perfect state again.

Hermaphroditus (called also *Atlantius*, from his grandfather *Atlas*) was the son of Mercury (Hermes) and Venus (Aphrodite), and united in himself the beauty and the names of both his parents. He was educated by the nymphs of mount Ida, and, at the age of 15, he abandoned his home, and wandered in the neighboring regions. As he stood by the transparent fountain of the nymph Salmacis, in Caria, she was captivated with his charms. The modest youth rejected her entreaties; but, as he was bathing in the fountain, she ardently embraced him. Still, however, he refused to return her love. The nymph entreated the gods, that they might never more be separated. Her prayer was heard, and they were immediately united into one body, retaining the characteristics of both sexes. The youth begged of his parents, that whoever might bathe in the fountain, should undergo the same change. There is a celebrated statue of Hermaphroditus in the gallery of the grand-duke at Florence. Another has lately been found among the ruins of Pompeii. (See Böttiger's *Amalthea*, vol. i.) This work contains some remarks on the Hermaphrodite statues, and their connexion with Bacchus. Böttiger is of opinion that the fable of Hermaphroditus sprung from the old Asiatic doctrine of a union of the generating and conceiving power in the same principle. Others think Hermaphroditus a composition of Mercury and Venus, exhibiting the union of eloquence, or of commerce, represented by Mercury, with pleasure, or Venus.

Hermbstædt, Sigismund Frederic, member of the royal academy at Berlin, professor of chemistry and technology at the university of the same city, &c., was born, April 14, 1760, at Erfurt, where he studied chemistry. He was afterwards an apothecary in Hamburg and Berlin, and, in 1787, delivered private lectures in the latter city on chemistry and natural philosophy. In 1791, he was appointed professor of chemistry and pharmacy, at the *collegium medicum chirurgicum* of Berlin, and royal apothecary of the court. He received many appointments, titles and orders, and, when the university of Berlin was erected, was made a professor. Hermbstädt is one of the most practical chemists of Germany, and, on this account, has been of more service to his country than many of her men of distinguished learning, who manifest a distaste for the practical application of knowledge. Hermbstädt is, moreover, one of the happiest experimenters. He has written largely on chemistry, technology, pharmacy, &c., and translated several foreign works on these subjects.

Hermelin, Samuel Gustavus, baron, a Swedish nobleman, eminent for his literary and scientific attainments, a native of Stockholm, was born in 1744. Having early in life travelled for improvement over a great part of the European continent, he was afterwards intrusted with the conduct of a diplomatic mission from his own government to that of the U. States of America. On his return, in 1784, he visited England, of which he made the tour, directing his attention there, as well as in the other countries through which he passed, principally to the study of geology and statistics. In the pursuit of his favorite sciences, no small portion of his property, and more than 15 years of his life, were devoted to a most laborious geographical undertaking, which, commencing with the survey of Westro-Bothnia and Lapland, finally ripened, through the assistance of a company, which he formed on the failure of his own pecuniary resources, into the completion of an entire Swedish atlas. Through his exertions, also, and principally at his own expense, great improvements were introduced among the mining establishments of the country, especially in Bothnia, where three new forges were erected by him, and the iron mines, of which he was now appointed superintendent, were worked under his direction. After fifty-four years spent in active service, he retired from public life in 1815, retaining his salary, with an additional pension of 1000 rix dollars. Besides a great variety of tracts printed among the Transactions of the Academy of Stockholm, of which

society he had been a member since the year 1771, the following treatises were published by him in a separate form: a Mineralogical Description of Lapland and Westro-Bothnia, with Tables of the Population and Industry of the latter Province; Mineralogical Charts of the Southern Provinces of Sweden; On the Melting and Casting of Copper Minerals; On the Use of Stones found in the Swedish Quarries; and an Essay on the Resources of the Swedish Provinces. Mr. Hermelin closed a long and useful life at the age of 74, May 4, 1820.

Hermeneutics (formed from a Greek word, which signifies to *explain* or *interpret*) is the science which fixes the principles of interpretation. The word is commonly used only of the interpretation of the sacred writings. *Hermeneutics* bears the same relation to *exegesis*, as *theory* to *practice*. (See *Exegesis*.)

Hermes. (See *Mercury*.)

Hermes, in statuary, are heads placed on a quadrangular stone. They probably received their name from *Hermes* (the Greek for *Mercury*), whose statues were most frequently made in this way, and erected by the side of the road. *Hermathene*, compounded of Ἑρμῆς and Ἀθήνη (Minerva), is a Hermes head of Minerva; *Hermeracles* is one of Heracles or Hercules; and *Hermeros*, that of Eros or Cupid, &c. Statues of this kind were the first attempts of Greek statuary; but this form was retained even in the most flourishing period of Greek art. In Athens, they were placed before every house, and it was considered an act of sacrilege to violate them. With the Romans, they were called *Termini*, from the god of boundaries, *Terminus*, because they were used as landmarks and mile-stones. Not only gods and demigods were represented under the form of *hermes*, but also philosophers, politicians, orators, &c., according to the circumstances of the place. Sometimes the head merely, sometimes the breast also, and sometimes even a larger part of the body, was represented.

Hermes Trismegistus; an historical name, of which no certain account can be given. It was applied, by the Egyptians and Phœnicians, to the inventor of letters, and of all the useful arts and sciences. The Egyptians called him also *Thot*, *Taaut*, *Thoyt* or *Theut*, and placed his image, as that of a benevolent god, by the side of the images of Osiris and Isis, his contemporaries. According to Diodorus, he was the friend and counsellor of the great Osiris. He formed the Egyptian language, and invented the first written characters; he was, moreover, the inventor of grammar, astronomy, arithmetic, geometry, music, medicine; he was the first lawgiver, the founder of the religious ceremonies of the Egyptians, the first cultivator of the olive-tree, the first instructer in gymnastics and the joyous dance. Sanchoniathon, Manetho and Plutarch give a similar account of his wisdom. But every thing relating to the subject is so uncertain and obscure, that even the time when and the place where he lived, cannot be assigned with any certainty. It is even doubtful whether there ever was such an individual. To transmit his knowledge to posterity, Hermes engraved it upon pillars of stone; and to these pillars Plato and Pythagoras were supposed to have been indebted for much of their science. These inscriptions were afterwards copied into books, and a great number of books were ascribed to Hermes. The Alexandrian school, in particular, attributed to him all their mystic sciences, magic, theosophy, alchymy, and the like. Some of the works ascribed to Hermes are extant, while of others we have only the titles. Among the first are *Poemander* and *Asclepius* (London, 1628). Modern enthusiasts have viewed the books which bear the name of Hermes as a fountain of secret wisdom.

Hermetic Art. (See *Alchemy*.)

Hermetical Philosophy is that which professes to explain all the phenomena of nature, from the three chemical principles of salt, sulphur and mercury.

Hermetical Sealing is used to denote a peculiar manner of stopping or closing glass vessels for chemical and other operations, so that not the rarest medium can either escape or enter. This is usually done by heating the neck of the vessel in the flame of a lamp with a blow-pipe, till it be ready to melt, and then, with a pair of hot pincers, twisting it close together.

Hermione; a daughter of Mars and Venus, who married Cadmus. The gods, except Juno, honored her nuptials with their presence, and she received as a present, a rich veil and splendid necklace, which had been made by Vulcan. She was changed into a serpent with her husband Cadmus, and placed in the Elysian fields.—A daughter of Menelaus and Helen. She was privately promised in marriage to Orestes, the son of Agamemnon; but her father, ignorant of this pre-engagement, gave her hand to Pyrrhus, the son of Achilles, whose services he had experienced in the Trojan war. Pyr-

rhus, at his return from Troy, carried home Hermione, and married her. Hermione, tenderly attached to her cousin Orestes, looked upon Pyrrhus with horror and indignation. According to some, however, Hermione received the addresses of Pyrrhus with pleasure, and even reproached Andromache, his concubine, with stealing his affections from her. Her jealousy of Andromache, according to some, induced her to unite herself to Orestes, and to destroy Pyrrhus. She gave herself to Orestes after this murder, and received the kingdom of Sparta as a dowry.—A town of Argolis, where Ceres had a famous temple.

Hermit. (See *Anachorets.)*

Hermitage; one of the finest French wines, which is produced along the Rhone, between Valence and Valière, in the *ci-devant* Dauphiny. It is of two kinds, red and white; the former is preferred. It takes its name from Mount Hermitage, lying opposite the village of Tain. Much is exported by the way of Cette, or carried into the country to mix with inferior wines.

Hermit Crab (*pagurus*). This genus of *crustacea* belongs to the second family (*decapoda macroura*), or those having ten legs and a long tail. The generic characters are, intermediate antennæ, curved, having a very long peduncle; body oblong, thorax crustaceous; abdomen vesicular, naked, soft, and furnished at tip with hooks or holders. These crabs inhabit univalve shells, carrying this habitation about with them, and changing it for a larger one as they increase in size. We have several species on our coast, one of the most remarkable of which is the *P. pollicaris*, inhabiting the large *naticas* and *pyrulas*, so common on the shores of New Jersey, &c. Another species, the *P. longicarpus*, occurs in great numbers in all our estuaries, and is generally to be observed near the edge of the water, either in search of food or of a more commodious shell. Mr. Say, who first described this and the former species, states that they are exceedingly quarrelsome. When two of them unexpectedly meet, they immediately recede from each other to a safe distance: sometimes, however, a combat ensues, which consists of a variety of movements, the object of which is to drag the adversary out of his dwelling. They inhabit almost any univalve, regardless of the species.

Hernia (*Latin*, a rupture, a burst, a descent); a tumor formed by the displacement of a soft part, which protrudes by a natural or accidental opening, from the cavity in which it is contained. The three great cavities of the body are subject to these displacements. The brain, the heart, the lungs, and most of the abdominal viscera may become totally or partially displaced, and thus give rise to the formation of herniary tumors: displacements of the brain, and of the organs of the chest, are, however, extremely rare, and are, in general, the result or symptom of some other disease. Every part of the abdomen may become the seat of hernias; but they most commonly appear in the anterior and inferior region, which, being destitute, in a great measure, of fleshy fibres, and containing the natural openings, offers less resistance to the displacement of the viscera. They are most common in the groin, at the navel, more rarely in the vagina, at the interior and upper part of the thigh, and at its lower and posterior part. They have received different names, from their positions. All the abdominal viscera, with the exception of the duodenum, the pancreas and the kidneys, may form a hernia, but they are not all displaced with the same facility. The omentum and intestinal canal escape easily; but the stomach, the liver and the spleen form hernias more rarely. Most of the viscera, when displaced, push the peritoneum forward before them: this membrane thus forms an envelope of the hernia, which is called the *hernial sack*. If the hernia, with its sack, can be entirely replaced, it is said to be reducible; if, from its size or other cause, it cannot be replaced, it is irreducible. Among the predisposing causes of hernia, may be ranked any circumstances which diminish the resistance of the abdominal walls, whether natural or accidental; such as the defect of fleshy fibres, the weakening of the walls of the stomach by a forced distention, as in pregnancy or the dropsy, or by an accident, as a wound. Any circumstance which tends to increase or relax the openings through which the vessels pass, as a violent extension of the body, long standing, &c., may have the same effect. Any prolongation of the viscera, which tends to bring them in contact with points at which they may protrude, and articles of dress which push the organs towards the weaker parts of the abdominal wall (as corsets), may also produce the hernia. The efficient causes of the hernia are all circumstances which may break the equilibrium existing between the abdominal walls and the viscera, which reäct, and mutually press upon

each other. The simultaneous contraction of the abdominal muscles and of the diaphragm, which takes place on every violent effort, is one of the chief of these cases. Hence sneezing, coughing, leaping, playing on wind instruments, &c., may be the occasions of a hernia. The symptoms of a hernia are the existence of a tumor or swelling at any point of the abdomen, but particularly towards the opening of the vessels. A reducible hernia is not a very troublesome disease, but may become so by acquiring an increase of size, and the strangulation to which it is liable. A hernia is said to be strangulated, when it is not only irreducible, but also subjected to a continual constriction, which may become fatal; this constriction may be produced by different causes, but it is generally produced by the opening through which the hernia protrudes. As soon as a patient perceives that he is affected with a hernia, he should have recourse to medical advice, for the disease is then in its most favorable state for treatment. The hernia is immediately reduced, and must then be subjected to a constant compression. This is done by means of the truss. (See *Truss.*) An irreducible hernia must be supported with great care. All violent exercises, and excess in diet, must be avoided. The strangulated hernia, presenting greater danger, requires more prompt relief. The object of treatment is to relieve the constriction. If the reduction cannot be effected by other means, an operation will be necessary. This consists in dividing the parts which produce the constriction. The longer this operation is delayed, the more dangerous it will become. After the parts are healed, the opening must be subject to compression, as in the case of a simple hernia.

Hero; a priestess of Venus at Sestos, on the coast of Thrace. The loves of Hero and Leander, a youth of Abydos, situated on the other side of the Hellespont, are related in a poem which bears the name of *Musæus.* Hero and Leander saw each other at a festival in honor of Venus and Adonis, at Sestos, at which many of the people of Abydos were present, and immediately became enamored of each other. Favored by the darkness of the approaching night, Leander stole into the temple, and confessed his flame to the blushing maid. But the relations of Hero, and her sacred office, opposed the union of the lovers. No difficulties, however, could discourage Leander. He swam every night across the Hellespont to his mistress, guided by a torch which shone across the strait from the tower of Hero. Leander continued his visits during the stormy season of winter. On one occasion, however, his strength failed him, and the waves carried his lifeless body to the foot of the tower, where Hero anxiously awaited him. Overcome with anguish at the sight, she threw herself from the tower on the corpse of her lover, and perished.

Herod the Great (so called from his power and talents), king of the Jews. He was a native of Ascalon, in Judea, where he was born B. C. 71, being the second son of Antipater, the Idumean, who appointed him to the government of Galilee. He at first embraced the party of Brutus and Cassius, but, after their death, reconciled himself to Antony, by whose interest he was first named tetrarch, and afterwards king of Judea. After the battle of Actium, he so successfully paid his court to the victor, that Augustus confirmed him in his kingdom; and, on all occasions, his abilities as a politician and commander were conspicuous; but his passions were fierce and ungovernable. Although married to the celebrated Mariamne, a princess of the Asmonean family, her brother Aristobulus and venerable grandfather Hyrcanus fell victims to his jealousy of the ancient pretensions of their race. His very love of Mariamne herself, mingled as it was with the most fearful jealousy, terminated in her execution; and his repentance and keen remorse at her death, only exasperated him to further outrages against her surviving relations, her mother, Alexandria, and many more falling victims to his savage cruelty. His own sons by Mariamne, Alexander and Aristobulus, whose indignation at the treatment of their mother seems to have led them into some intrigues against his authority, were also sacrificed in his anger; and their deaths crowned the domestic barbarity of Herod. It was the latter event which induced Augustus to observe, that it was better to be Herod's hog than his son. He rebuilt the temple at Jerusalem with great magnificence, and erected a stately theatre and amphitheatre in that city, in which he celebrated games in honor of Augustus, to the great displeasure of the more zealous of the Jews. He also rebuilt Samaria, which he called *Sebaste*, and adorned it with very sumptuous edifices. He likewise, for his security, constructed many strong fortresses throughout Judea, the principal of which he termed *Cæsarea*, after the emperor. On his palace, near the temple of Jerusalem, he lavished the most

costly materials, and his residence of Herodium, at some distance from the capital, by the beauty of its situation, drew around it the population of a great city. Such indeed was his magnificence, that Augustus said his soul was too great for his kingdom. The birth of Jesus Christ took place in the 33d year of the reign of Herod, which important event was followed in a year or two by his death, of a languishing and loathsome disease, at the age of 68. According to Josephus, he planned a scene of posthumous cruelty, which could have been conceived only by the hardest and most depraved heart. Having summoned the chief persons among the Jews to Jericho, he caused them to be shut up in the circus, and gave strict orders to his sister Salome, to have them massacred at his death, that every great family might weep for him; which savage order was not executed. Herod was the first who shook the foundation of the Jewish government, by dissolving the national council, and appointing the high priests, and removing them at pleasure, without regard to the laws of succession. His policy, ability, and influence with Augustus, however, gave a great temporary splendor to the Jewish nation.

Herod Antipas, son of Herod the Great, by his fifth wife, Cleopatra, was appointed tetrarch of Galilee on his death. This was the Herod who put to death St. John the Baptist, in compliment to his wife Herodias, in revenge for his reproaches of their incestuous union; Herodias having been united to, and forcibly taken away from, his brother Aretas. The ambition of Herodias stimulated her husband to a measure which proved his ruin. His nephew Agrippa, having obtained royal honors from Caligula, she induced Herod to visit Rome to request the same favor, where he was met by an accusation, on the part of Agrippa, of having been concerned in the conspiracy of Sejanus, and of being in secret league with the king of Parthia. This accusation being credited, he was stripped of his dominions, and sent with his wife into exile at Lyons, or, as some say, to Spain, where he died, after possessing his tetrarchy for 43 years.

Herod Agrippa, son of Aristobulus by Berenice, daughter of Herod the Great, and nephew to the preceding, was partly educated at Rome with Drusus, the son of Tiberius, on whose death he left Rome with a dilapidated fortune; but he returned some years after, and, being suspected of an attachment to Caligula, was imprisoned by Tiberius. This apparent misfortune proved the source of his future prosperity; for, on the accession of Caligula, he was not only rewarded with a golden chain, as heavy as the iron one which had bound him, but was honored with the title of king, and received the tetrarchy of his disgraced uncle, and all the dominions of Herod the Great. It was this Herod who, to please the Jews, caused St. James to be put to death, and St. Peter to be imprisoned. His power and opulence acquired him a great reputation, and, in a grand audience at Cæsarea, having made an oration to some deputies from Tyre and Sidon, he was hailed by his obsequious train as one who spoke like a god. His satisfaction at this flattery was soon after reproved by a violent disorder in his bowels, which carried him off in the 44th year of his age, and seventh of his reign.

Herod Agrippa II, son of the preceding, being too young to govern, Judea was, on his father's death, reduced to a Roman province. He subsequently received the kingdom of Chalcis, and obtained the superintendency of the temple and sacred utensils at Jerusalem, together with the nomination of the high priests. He resided much at Jerusalem, and here, together with his sister Berenice, heard the defence of Paul, addressed to the Roman governor Festus. Being driven from Jerusalem in the revolt which proved so fatal to the Jews, he joined Cestius, the Roman commander, and, when Vespasian was sent into the province, met him with a considerable reinforcement. During the siege of Jerusalem, he was very serviceable to Titus, and, after its reduction, he and Berenice (with whom he was suspected to have an incestuous intercourse) returned to Rome. He is supposed to have died there, A. D. 94, and in him terminated the Herodian line and family.

Herodes Atticus, Tiberius Claudius (from Marathon, his birthplace, frequently called *Marathonius*), was descended from Cecrops, and distinguished for his wealth and brilliant accomplishments. He was born in the reign of Adrian, and held several public offices under the Antonines. A. D. 143, he was appointed *eponymos* of Athens, and died, probably, after the year 180. The ruins of an *odæon* at Athens, which Pausanias preferred to every other, on account of its size and beauty (*Paus. VII*, 20), is the only remnant of all the public buildings, baths, canals, statues, &c., with which Herodes Atticus beautified Italy, Greece and Asia. This *odæon*, of which the ruins prove the taste of its founder, was consecrated to the

memory of Annia Regilla, a Roman lady, and the wife of Herodes, whose death he was accused of having hastened by unkindness. Another place, a short distance from Rome, in the Appian Way, he dedicated to the same object. It was an extensive garden, containing several temples and the sepulchre of his family; which, to give it a more sacred character, Herodes called *Triopium*, from Triopas, the father of Eresicthon. A statue of Regilla contains an inscription, which has excited the attention of the learned, particularly, in recent times, of Visconti, Eichstädt and Fr. Jacobs. It was probably written by Marcellus Sidetes, and an excellent translation is given by Fr. Jacobs, in his *Leben und Kunst der Alten*, 1st vol. The mourning of Herodes for Regilla, which must have been mingled with self-reproach, was remarkable. Even his house seemed to share his grief. To cherish his melancholy, he overlaid all the bright colors with dark Lesbian marble. Of the oratorical talents of Herodes, which procured for him the flattering titles of the *tongue of the Greeks* and the *king of eloquence*, only one monument remains to us. It is a sophistical declamation On the State, last printed by Fiorillo. It by no means equals his fame. In the market-place of Tenedos, some modern travellers found the marble coffin of Herodes' mother, used as the cover of a spring; the inscription was given by Clarke. This is omitted in the work of Fiorillo, *Herodis Attici, quæ supersunt, adnotat. illust.* (Remains of Herodes Atticus, illustrated with Notes), Leipsic, 1801.

Herodian; a Greek historian, who held several public offices at Rome, and lived till some time after the year A. D. 238. His history is written in Greek, and comprises the period from the death of Marcus Aurelius to the year above-mentioned. It is in eight books, without chronological data, but written in a pure and dignified style, in a spirit of independence and impartiality. A valuable critical edition was published by Irmisch (Leipsic, 1789–1805); and a manual edition, by Wolf (Halle, 1792). He has often been confounded with Herodian of Alexandria, who died A. D. 180.

Herodotus, the oldest Greek historian, whose works have come down to us, was born at Halicarnassus in Caria, in the 4th year of the 73d Olympiad, B. C. 484. If by the title *father of history*, which has been bestowed upon him by the general consent, be meant that he was the first who wrote history in a more elevated manner (or, according to Cicero, *historiam ornavit*), he fully deserves that title. Many authors, some of them with success, had entered this difficult career before him. Hellanicus of Lesbos, Charon of Lampsacus, and Dionysius of Miletus, had even, in a great measure, anticipated Herodotus in the subject of his work. His love of learning was early enkindled by his youthful studies, and by examples in his own family. The celebrated epic poet, Panyasis, who was regarded by several ancient critics as inferior only to Homer, was his uncle. His genius was animated by the works of the writers just mentioned: they excited in him the desire to visit the countries which were described in such glowing colors, and his circumstances permitted him to gratify his inclinations. Whether he had conceived the plan of his history, in which the results of his travels are preserved, before his long journey, is uncertain. Egypt, so celebrated for the wisdom of its institutions, seems to have been one of the most constant subjects of his attention. This country had long been rendered inaccessible to the rest of the world, by the jealousy of its rulers, and the prejudices of its inhabitants against foreigners. But a short time before Herodotus commenced his travels, it had been opened to the Greeks; and, although it was then almost entirely unknown, and every part of it has since been examined by crowds of travellers, and described in almost every language, yet no author, ancient or modern, has given so accurate and instructive an account of it as Herodotus. He did not content himself with a knowledge of places; he investigated, likewise, the productions of the soil, the manners, customs and religion of the people, the history of the last princes who reigned before the conquest of the country by the Persians, and many interesting particulars concerning the conquest itself. The second book of his history, which is devoted to the description of Egypt, is still our richest store of information, concerning its ancient history and geography. From Egypt he proceeded to Libya, concerning which he collected a mass of information, equally new to his contemporaries, and valuable to us. His description of the country, from the frontiers of Egypt to the straits of Gibraltar, is so consonant with the accounts of the most intelligent travellers, in particular of doctor Shaw, that we cannot for a moment believe it founded on the relations of others. He asserts himself, that he resided some time in Tyre. He visited the coasts of Palestine, and thence continued his

route to Babylon, then opulent and flourishing. His visit to Assyria has been doubted; but if we consider the different passages of his description of Babylon, we must be convinced that none but an eye-witness could have given so exact an account of that great city and of the manners of the inhabitants. Having arrived in Scythia, then little known to the Greeks, although the primitive inhabitants of Greece were from that country, he penetrated into its immense wilds by the routes which had recently been opened by the Grecian colonies on the Euxine, and thence passing through the Getæ into Thrace and Macedonia, he reached Greece by the way of Epirus. Herodotus expected to find at home that honor which was due to his labors, and leisure to arrange the information which he had collected. But Lygdamis, who had usurped the supreme authority in Halicarnassus, and put to death the noblest citizens, among others, Panyasis, forced him to seek an asylum in the island of Samos. Here, in quiet retirement, he wrote the first books of his history; in which, abandoning the Doric dialect of his own country, he employed the Ionic, which was spoken in the island of Samos. This labor, however, did not so entirely occupy him, as to prevent him from concerting plans for the relief of his oppressed country and the expulsion of the tyrant. Having formed a conspiracy with several exiles who entertained similar sentiments with himself, he returned to Halicarnassus, and drove out the usurper, but without much advantage to his country. The nobles who had acted with him, immediately formed an aristocracy, more oppressive to Halicarnassus than the arbitrary government of the banished tyrant. Herodotus became odious to the people, who regarded him as the author of their aggravated sufferings, and to the nobles, whose proceedings he opposed, so that, bidding an eternal farewell to his unhappy country, he embarked for Greece. He arrived at the time of the celebration of the 81st Olympiad, when the noblest spirits, from every corner of Greece, were collected at Olympia. In the presence of the assembled multitudes, he read the beginning of his history, and such extracts as were peculiarly calculated to kindle the enthusiasm and to flatter the pride of his countrymen. His success was complete. His animated description of the contest of the Greeks with the Persians, and of the triumph of liberty over despotism, was received with universal applause. But the influence of his recitation was not limited to this deep impression upon a whole nation. Thucydides, then scarcely 15 years of age, was present at the Olympian games. He shed tears of admiration, as he looked upon him to whom all eyes were directed. Herodotus perceived it, and ventured to foretell to his father the brilliant destiny which awaited him. Encouraged by the applause which he received, Herodotus devoted the 12 following years to the completion of his work: he travelled over all the countries of Greece: he collected accounts of the most important affairs from the archives of every nation, and corrected from the original documents the genealogies of the most distinguished families. While travelling through Greece, he probably read, in the public assemblies of each people, those portions of his history which most nearly concerned it, not merely to elicit their applause, but to obtain useful information. The assertion of Dio Chrysostom, that Herodotus, having read before the Corinthians a description of the battle of Salamis, highly flattering to their pride, and having been refused the reward he had demanded, wrote another account, representing things in a wholly different light, is unworthy of credit. 12 years after his first recitation at Olympia, he read his work, then probably just completed, at the festival of the Panathenæa, B. C. 444. The Athenians did not limit their gratitude to empty praise; they bestowed on the author, who had so well described the achievements of their countrymen, the sum of 10 talents (about 10,000 dollars). Herodotus, however, did not remain in Athens; he attached himself to a colony, which the Athenians founded some years after at Thurium, in Italy, near the ruins of the ancient Sybaris. His long residence there led several ancient writers to suppose this was his native city. He devoted his leisure to the revision and extension of his history, and probably died at Thurium, at an advanced age. Herodotus, in ancient times, was attacked by jealous critics, who impeached the credibility of his work. But time and the most careful investigation have completely refuted their attacks. The history of Herodotus is one of the most valuable monuments of antiquity which has come down to us. It consists of nine books, which were early distinguished by the names of the *nine muses*. From the travels of Herodotus, before he commenced his work, from the laborious researches in which he engaged, for the purpose of col-

lecting materials, we may infer that he conceived an elevated idea of the duty of a historian, and how much more important he considered it to be impartial and correct, than interesting and eloquent. When he relates any occurrence of which he doubts the truth, he honestly expresses his doubts. He has been accused of credulity; but we ought to be thankful to him for having preserved a crowd of traditions, which, however marvellous they may be, are characteristic of the genius of antiquity. We are indebted to him alone for the history of the origin and growth of the Persian monarchy, and of those of the earlier Medes and Assyrians. The origin of the kingdom of Lydia; its destruction by Cyrus, and the different expeditions of that celebrated conqueror; the conquest of Egypt by Cambyses, and the most minute and exact description of that country and its inhabitants; the constant wars of the successors of Cyrus; and, particularly, the expedition of Darius against the Scythians, which leads the author to a highly instructive and faithful account of all the people then known in the north of Europe and Asia;—these are the principal topics of his introduction to the history of the war between the Greeks and Persians. This war, so rich in great events and great characters, in the course of which the powers and defects of the most illustrious nations of antiquity were strongly developed—all this is united in one of the most magnificent and masterly pictures which the human mind has ever conceived. The style and execution of the work excited the admiration of the ablest critics of antiquity; and we also, although to us so many charms are necessarily lost, are powerfully struck with a style so full of nobleness and grace, of energy and simplicity. Besides this history, there is also a life of Homer, attributed to Herodotus, which is valuable, and which was generally regarded as genuine, by the ancients. Most modern critics, however, agree that he was not the author of it. The best editions of the history of Herodotus, are by Wesseling (Amst. 1763, folio), and Schweighäuser (Strasburg, 1816, 6 vols.). The work has been translated into German, by Degen, Jacobi and Lange. The works of Larcher, Volney, Böttiger, Heyne, and Creuzer (*Commentat. Herod.* Leipsic, 1819), on Herodotus, are very valuable; translated into French by Larcher, into English by Beloe. Rennell's Geography of Herodotus (London, 1800) is a very important work.

Heroes; a name applied by the Greeks to persons of the earlier periods, who were distinguished for wisdom, strength or courage. They formed an intermediate link between men and gods. They were demigods, whose mortal nature only was destroyed by death, while the immortal ascended to the gods. In mythology, these demigods are styled *heroes* in a peculiar sense. The heroic age of Greece terminated with the return of the Heraclidæ into the Peloponnesus (B. C. 1100), and forms the transition from the brazen to the iron age. We find the following heroic races:—1. the *Prometheides*, from Prometheus, called also the *Deucalionides*, from Deucalion; 2. the *Inachides*, from Inachus; 3. the *Agenorides*, from Agenor; 4. the *Danaides*, from Danaus; 5. the *Pelopides*, or *Tantalides*, from Pelops or Tantalus; 6. the *Cecropides*, from Cecrops. Individual families, as, for instance, the *Æacidæ*, *Persidæ*, *Atridæ*, *Heraclidæ*, belong to one or another of these races. The heroic age is the age of romantic courage, of adventure and wonders. The heroes are distinguished into those who flourished before the Argonautic expedition, and those who flourished after it. The most distinguished among the latter are the heroes of the Trojan war. Those of the former class are more illustrious than those of the latter; for the remoter events afforded greater scope for the embellishments of the imagination. The heroic age, therefore, properly ends where the poetical traditions of history cease. But the later heroes, removed by time to a greater distance, survived in poetry, and became clothed with godlike attributes; yet hardly any of them received the same homage which was paid to the earlier race. Great sacrifices were not offered to the heroes, as they were to the Olympian deities; but groves were consecrated to them, and libations poured out on their sepulchres. According to Plutarch, the Greeks worshipped the gods on the day of the new-moon, and the heroes on the day after, and the second cup was always mingled in honor of them. The residence assigned to them after death is different. Bacchus, Hercules, Pollux and some others entered the abodes of the eternal gods; others inhabited the islands of the blest; and others were placed among the constellations. The ideas relative to this part of the heroic history, however, have continually varied. The *heroes* of the Greeks corresponded to the *lares* of the Romans.

Heroical Epistle, or Heroid; a lyric poem in the epistolary form, supposed to contain the sentiments of some hero or

heroine of history or fable, on some interesting occasion. Ovid is considered as the author of this kind of poetry, and, from his productions, some critics have asserted that the heroid belongs to the elegy. But though it may breathe elegiac feeling, it may also adopt the high tragic tone, as in Pope's Epistle of Eloisa to Abelard. No nation has more works of this sort than the French; among whom Colardeau, Blin de St. More, Dorat, Pezay, Laharpe, deserve particular consideration.

Heron (*ardea*, L.). This tribe of birds is very numerous, and is almost universally spread over the globe. It is distinguished by having a long bill, cleft beneath the eyes, a compressed body, long slender legs, and moderate wings. The tail is short, rounded, and composed of ten or twelve feathers. They are dull, inanimate birds, and are generally seen either perched on trees near the water, or wading in search of food. They feed exclusively on animals, particularly fish and reptiles. The common heron of Europe (*A. major*) is about three feet two inches in length, and five feet three inches in breadth from tip to tip; the body is exceedingly small, weighing scarcely more than three pounds and a half. It always has a lean and starved look, and, according to Buffon, presents the image of suffering anxiety and indigence. From this appearance of the bird, the ancients drew some curious inferences; thus Pliny says, "*Hi in coitu anguntur. Mares quidem, cum vociferatu sanguinem etiam ex oculis profundunt.*"—This assertion, as might be supposed, is wholly without foundation. Though, in times of frost and scarcity, herons can exist for a long time with a very scanty supply of food, in favorable weather they gorge themselves with insatiable voracity. They are very expert fishers, and take their prey either by wading after it where the water is shallow, or by diving from the air, when the object of their pursuit appears near the surface of the water. They digest an enormous load of food in a short time, and again return to their destructive occupation, with new vigor and appetite. Willoughby asserts, that a single heron will destroy 15,000 carp in half a year. Notwithstanding their size and powerful beak, herons will fly from the smallest of the falcon tribe. The flesh of the young heron was formerly a dish in high repute. The most remarkable of the European herons are the egrets (*A. alba*, which is also found in America, and *A. gazetta*). These are distinguished by a large bunch of soft feathers rising from the shoulders, and hanging down over the back and sides. These feathers were formerly worn by knights in their helmets, and still form a decoration for ladies' head-dresses. Besides the *A. alba*, we have several species of egrets in the U. States, as the *A. herodias*, *A. Pealii*, *A. candidissima*, *A. Ludovisiana*. Our limits do not permit a full description of these birds, and we must refer such of our readers as wish for further information on the subject, to Wilson (Am. Ornithology, vols. 7 and 8), and Bonaparte (Am. Ornithology). In general habits, however, the American species closely resemble those of Europe. They are dull birds, and generally to be seen sitting on trees in the neighborhood of water. They build socially on high trees, laying about four eggs. All the species fly gracefully, with the neck bent backwards, and the head resting against the back. The females resemble the males. The young differ from the adult, not obtaining their full plumage until after the third year. They moult annually, when the long slender feathers are also shed, and not renewed for some time.

Herostratus, or Eratostratus; a citizen of Ephesus, who set fire to the splendid temple of Diana, between the city and the port of Ephesus, in order to transmit his name to posterity. Nothing but the walls and a few columns of this exquisite piece of architecture were left standing. The roof and all the ornaments in the interior were totally destroyed. The incendiary expiated his crime by a miserable death. The assembly of the Ionians ordained that the name of Herostratus should be consigned to eternal oblivion. But this decree served to perpetuate his memory; and Theopompus, in his history of Greece, satisfied the wishes of the incendiary. Alexander the Great was born on the night of this conflagration.

Herrera Tordesillas, Antonio de; a Spanish historian, whose father's name was Tordesillas, but who adopted that of Herrera, from his mother. He was born at Cuellar, in Segovia, in 1559. After finishing his education, he went to Italy, when about 20 years old, and became secretary to Vespasiano Gonzaga, brother to the duke of Mantua, and went back with him to Spain, when Gonzaga became viceroy of Navarre and Valencia. The latter recommended him in his will to Philip II of Spain, and Herrera was appointed *coronista mayor de las Indias*, and retained that post under Philip II, III and IV. He died in 1625, having been made, shortly before his death, member of the council

of Philip IV. His works are all written in Spanish. Nicolas Antonio mentions ten of a historical nature. His principal work is *Historia general de los Hechos de los Castellanos en las Islas y Tierra Firme del Mar Oceano* (first edit. 1601, also 1615, folio). It gives the history of the discoveries from 1492 to 1553. It is dedicated to Philip III, who had ordered it to be written. Herrera states in the beginning, that his object is to clear the character of his countrymen from the imputations cast on them for their conduct on this continent. Herrera's character as a historian does not rise in our esteem, when we hear him, in his *Historia general del Mundo*, describe the death of Philip II in the words, *Y asi acabó este gran monarca con la misma prudencia con que vivió, por lo qual meritamente se le dió el attributo de prudente.*

Herrera, Hernando de, a distinguished Spanish poet, born at Seville, in the beginning of the 16th century. His contemporaries called him *el divino*. Like the other poets of his age, Herrera formed himself on the Romans, Greeks and Italians. Many of his poems are amatory, and in his odes he often rises to an elevated strain, and they are perhaps inferior in fire only to those of Luis de Leon. Velasquez blames his excessive polish. Francisco Pacheco, one of his admirers, published *Obras en Verso de Hernando de Herrera* (Seville, 1582). There is another edition of his poems, by G. R. Vejerano (Seville, 1619, 4to.), both very rare. By the preface to the latter edition, we see that Herrera was the author of several other productions, which are lost. He was also a prose writer and historian. Cervantes' opinion of this poet is to be found in his *Canto de Caliope*. Lope de Vega speaks of him in high terms in his *Laurel de Apolo*. Herrera's exterior was pleasing, his disposition mild and engaging. He is said, though against all probability, to have been present at the battle of Lepanto. (See *Parnaso Español*, vol. 7th.)

Herring (*clupea*). Many species of the genus clupea, known under the name of *herring*, appear on our coast at different seasons. The herring of commerce (*C. harengus*) is one of the most important kinds of fish hitherto discovered. The herring fishery, however, which in modern times forms so considerable a branch of commerce to the English, Dutch, and other nations in the northern part of Europe, appears to have been altogether unknown to the ancients. The winter residence of the herring is within the arctic circle, from whence it annually migrates along the shores of this continent, as far south as Carolina, along those of Europe, to the north of France. The immense mass that issues from the north, separates into several divisions, one making its appearance off the Shetland islands in April and May; but these are only the advance guard of a far more numerous body, that follow in June. The appearance of these shoals is always announced by immense flocks of gulls and other rapacious birds, which continually hover over them. It is said that when the great body approaches, its breadth and depth alter the aspect of the ocean, which sparkles with various colors, like a bed of precious stones, on account of the rays of the sun being reflected from the scales and fins. This annual migration is for the purpose of spawning, as, immediately on this process being completed, the herrings abandon the temperate latitudes, and again repair to the north. The spawn, after being discharged by the parent fish, continues to float on the waves for a considerable portion of the spring. In the beginning of summer, the young fry begin to appear, and in July are to be seen in myriads. The Dutch first commenced the herring fishery in 1164, and continued in the exclusive possession of it for several centuries. At length the English, roused by their gains, and jealous of that naval power, of which it was the grand source, endeavored to participate in this lucrative commerce; and it now forms a very important branch of industry in that country.—The *C. menhadin*, or *hard head*, is another species, which frequents our waters in prodigious numbers: they are eatable, but are not much esteemed.—The alewife (*C. vernalis*), however, affords a very important addition to the food of certain portions of the U. States, and is taken in immense quantities early in the spring.

Herrick, Robert; an English poet of the 17th century, a native of London, educated at Cambridge. He took orders in the church of England. In common with many others of the Episcopal clergy, he suffered deprivation under the government of Cromwell; but he recovered his benefice after the restoration of Charles II, in 1660, which period he did not long survive. His compositions were published in 1648, under the title of Hesperides, or the Works, both Humane and Divine, of Robert Herrick (8vo.) A selection from these poems, with an account of the author, by doctor Nott, was printed at Bristol in 1810; and a complete edition at Edinburgh, in 1823 (2 vols., 8vo.) Doctor Drake, in his

Literary Hours, has given specimens of his productions, which show that he does not deserve the comparative oblivion in which he has been involved.

Herrnhut; a town of Saxony, in Upper Lusatia, 6 miles south of Löbau, and the same distance north of Zittau. Population, 1500. It is situated at the foot of Hutberg mountain, and is 1054 feet above the sea. It was built by count Zinzendorf, in 1722, for the use of the Moravian Brethren, and it afterwards became the metropolis and centre of that sect of Christians, who, from this town, are often called *Herrnhutters*. (See *United Brethren*.) It has a great variety of manufactures. The objects of curiosity are the observatory and the burial-ground on a neighboring hill, resembling a garden, and called by the Brethren, *Garden of peace*.

Herschel, sir William; a distinguished astronomer; son of a musician of Hanover; born November 15, 1738. Being destined by his father for his own profession, he was placed, at the age of 14, in the band of the Hanoverian foot-guards. He went to England in 1757, and was employed in the formation of a military band, and in conducting several concerts, oratorios, &c. Although enthusiastically fond of music, he had for some time devoted his leisure hours to the study of mathematics and astronomy; and, being dissatisfied with the only telescopes within his reach, he set about constructing one for himself, in which arduous undertaking he succeeded, having, in 1774, finished an excellent reflecting instrument of five feet with his own hands. Encouraged by his success, he proceeded to complete larger telescopes, and soon constructed a seven, a ten and a twenty-feet reflector, having, in the latter case, finished nearly two hundred object-mirrors before he could satisfy himself. From this period he gradually withdrew from his professional engagements. Late in 1779, he began a regular survey of the heavens, star by star, with a seven-feet reflector, and, after 18 months' labor, discovered, March 13, 1781, a new primary planet, which he named the *Georgium Sidus*. George III, by the settlement of a salary upon him, enabled him to devote the rest of his life to astronomy. At Slough, he commenced the erection of a telescope of the enormous dimensions of 40 feet, and completed it in 1787. Its diameter was 4½ feet, and it weighed 2118 pounds. With this powerful instrument, he continued to prosecute his discoveries, regularly communicating the results to the royal society, till the year 1818. In 1783, he had discovered a volcanic mountain in the moon, and, from farther observations made with his large instrument, in 1787, two others were distinguished, emitting fire. He also ascertained that the Georgium Sidus was surrounded with rings, and had six satellites, and acquired far more knowledge of the appearance, satellites, &c., of Saturn, than had before existed. The four new planets discovered by Piazzi, Olbers and Harding—Ceres, Pallas, Juno and Vesta—he observed with his usual accuracy. He fixed their diameter, which Schröter had determined to be from one to four seconds, at less than one second, and made an ingenious hypothesis, in respect to their nature and formation. (See *Planets*.) He ascertained also the important fact, that Saturn's ring revolves in 10 hours 32 minutes. He was constantly engaged in determining the orbits and physical constitution of individual stars; in fixing their relative positions to one another, and to the Milky Way; in ascertaining the greatest possible distance of distinct vision with the aid of the best instruments. An account of most of his labors is found in the Philosophical Transactions and other English periodicals; but some of them are still unprinted. Herschel received much assistance in making and recording observations from his sister Caroline; and this lady herself discovered several comets. In 1802, he laid before the royal society a catalogue of 5000 new nebulæ, nebulous stars, planetary nebulæ, and clusters of stars which he had discovered, and, in consequence of the important additions made by him to the stock of astronomical knowledge, received from the university of Oxford the honorary degree of doctor of laws—an honor which was followed up, in 1816, by the Guelphic order of knighthood from the king. He continued his astronomical observations till within a few years of his death, which took place at Slough; and he was buried at Upton, Berks, in August, 1822. His son, John F. W. Herschel, has distinguished himself by his skill in mathematics and natural philosophy. Herschel's gigantic telescope, of 40 feet focus, is capable of being moved in any direction, by machinery, which turns on a vertical axis. He found with it the time of Saturn's rotation; and his observations agree with the results at which Laplace arrived by a mathematical analysis deduced from the laws of gravitation. He discovered, likewise, that this singular planet revolves upon an axis per-

pendicular to the plane of its orbit. From observations made with his large telescope, he concluded that light does not come directly from the body of the sun, but from very bright, phosphorescent clouds, formed in the sun's atmosphere. The discovery of Arago, that the sun's rays are not polarized, confirmed the opinion of Herschel. Moreover, he found that the red rays in a beam of light give out more heat than the other six rays together.

Hertford College; an establishment of the East India company, at Hertford, England, for affording instruction in the languages, laws and customs of the East Indies, to persons intended for the service of the company.

Hertha, Jord, Joard, in Scandinavian mythology; the goddess Earth, the mother and preserver of things (Cybele). She was the daughter of Night and Anar, sister of Dagur or Day, wife of Odin, and mother of Thor, or the god of thunder. She is the same with Frigga. In a sacred grove on an island in the Baltic was her sanctuary. When her chariot was drawn through the land, all enmities ceased—festivals began. When the chariot returned, it was washed in a sacred lake, by slaves who were then drowned in its mysterious waters, because they had seen the holy secrets of the goddess. The island of Rugen is supposed to have been the holy island; and a small lake, called *Burgsee*, surrounded by beautiful trees, is shown there as the supposed lake.

Hertzberg, Ewald Frederic, count of, a statesman whose name is intimately connected with the history of Frederic the Great, was born in 1725, at Lottin in Pomerania, and died May 25, 1795, after having been in the public service almost half a century. He studied at Halle, and afterwards received an appointment in the department of foreign affairs. In 1742, Frederic appointed him counsellor of legation, that prince having become acquainted with his talents by the assistance which Hertzberg had rendered him in making extracts from the archives for Frederic's *Mémoires pour servir à l'Histoire de Brandenbourg*. In 1756, he wrote, in eight days, the famous *Mémoire raisonné* in Latin, German and French, from Austrian and Saxon papers found in archives in Dresden, the object of which was to justify Frederic's invasion of Saxony. In 1762, he concluded the treaty of Hubertsburg, on which occasion Frederic received him with the remarkable encomium, *Vous avez fait la paix, comme j'ai fait la guerre, un contre plusieurs.* The king then made him minister of foreign affairs. The first partition of Poland was to be made in 1772; and, as the Prussians maintained that it would have taken place without Prussia's participation, she thought it expedient to acquire West Prussia for her own defence; and Hertzberg exerted himself with great zeal to effect this object. He was also very active in the conclusion of the Fürstenbund, in 1785, to oppose the designs of Austria on Bavaria. (See his 2d vol. of *Recueil des Déductions, Manifestes, Déclarations, Traités et autres Actes, qui ont été rédigés et publiés pour la Cour de Prusse.*) During the last days of Frederic, Hertzberg was one of the few whom the king used to see daily in the *Sans Souci*. Under Frederic's successor, he stilled the troubles in Holland, and labored to promote the balance of power in Europe. But his influence gradually diminished, and, in 1791, he asked permission to retire, which was refused, though he was relieved of some of his offices. He now confined himself almost entirely to the superintendence of the academy and the cultivation of silk. When the second partition of Poland took place, in 1793, and the politics of Prussia, by her participation in the coalition against France, had placed her in a critical situation, he again offered his services, in 1794. His offer was declined, and, 11 months after, he died. The German literature and language received great attention from him—a circumstance the more deserving of mention, as Frederic utterly disregarded, or rather despised them. He improved the condition of the country schools, which had been much neglected. Besides the culture of silk, he devoted himself, in his retirement, to the improvement of the agriculture of his country.

Hervey, James, a pious and popular divine of the church of England, was born at Hardingstone, near Northampton, in 1713, and was sent to Lincoln college, Oxford. Having taken orders, he retired, in 1736, to the curacy of Dummer, in Hampshire. In 1738, he quitted Dummer to reside at Stoke abbey, in Devonshire. During his residence in Devonshire, he planned his Meditations; and an excursion to Kilhampton, in Cornwall, occasioned him to lay the scene of his Meditations among the tombs in the church of that place. In 1743, he became curate to his father, then possessing the living of Weston Favell, and, on the death of the latter, he succeeded him in his livings, both of Weston and Collingtree. He died

in 1758, in the 45th year of his age. The moral character of this conscientious divine was most exemplary; his temper was disinterested, placid and humble, and in benevolence and charity he was surpassed by none with equally bounded means. The style of his writings is flowery; and hence his great popularity among readers who possess little refinement of taste. Besides his Meditations, he is the author of several other works, which are included in the genuine edition of his works, 6 vols., 8vo.

Hesiod; one of the oldest poets of Greece; a native of Cumæ in Æolia, a province of Asia Minor. While he was a boy, he left his native country and settled in Ascra, a village of Bœotia, at the foot of mount Helicon, whence he is called the *Ascræan*. According to some authorities, he practised, in Acarnania, the art of divination, which, especially in Bœotia, was closely connected with poetry. Others say he was a priest in the temple of the muses on mount Helicon: if this were the case, he might easily have practised both poetry and divination together. The latter part of his life he spent at Locris, and was at last murdered by two Locrians, who suspected him of unlawful intercourse with their sister. His body was thrown into the sea, and carried to the shore by dolphins. This led to the detection of the murderers, who were apprehended and punished. Such is the tradition; but little is known of Hesiod with certainty. Even the age in which he lived cannot be precisely determined. A very common tradition relates that, in a poetical contest with Homer, at Chalcis, he came off victorious. Herodotus calls him a contemporary of Homer, and says they lived 400 years before himself (about 900 B. C.). In his Works and Days (172), Hesiod says that he belonged to the period immediately following the Trojan war; but the passage is suspected by critics, and there are many reasons for supposing that he lived at a later period. According to John Tzetzes, 16 works have been attributed to Hesiod. Of 13 we know only the titles; and our judgment of him must, of course, be formed solely on the three which remain. These are the Theogony, a collection of the oldest fables concerning the birth and achievements of the gods, arranged so as to form a connected whole. It is the most important and difficult of all his works. With this was probably connected the Catalogue of Women, to the fourth book of which, entitled the ἠοῖαι μεγαλαι, the second fragment (the Shield of Hercules) must have belonged. It is evidently composed of two pieces, very different from each other, and which can hardly be regarded as the work of one author. Editions of it have been published by C. F. Heinrich (Breslau, 1802; and Bonn, 1819). The contents of the Theogony are borrowed from earlier cosmogonies and theogonies, and the traces of the manner in which it was composed are very evident: there is a difference in the mythology, which is sometimes rude and imperfectly developed, and sometimes more perfect and refined; and a difference in the narration, which is sometimes short and plain, and sometimes diffuse and elegant. The frequent repetitions of the same fable, with variations, led to many contradictions; the additions and interpolations by later writers destroyed the harmony of the style. (See Heyne, *De Theogonia ab Hesiodo condita*, in the *Comment. Soc. Reg. Gott.*, vol. 2, 1779; Wolfe's edition, Halle, 1783; *Letters on Homer and Hesiod*, by Hermann and Creuzer, 1817). The third fragment is a didactic poem, Works and Days,—in Greek and German, by J. D. Hartmann, accompanied with notes and illustrations by L. Wachler (Lemgo, 1792). It treats of agriculture, the choice of days, &c., with prudential precepts concerning education, domestic economy, navigation, &c. In this work, the only one, according to Pausanias, which the Bœotians acknowledged as the genuine production of Hesiod (except the first 10 verses, which they rejected), we learn most of his life and character. He and his brother Perses lived with their father at Ascra, engaged in cultivating the soil and tending cattle. After the death of their father, the estate was divided between them; but unjust judges deprived the poet of half his share, and assigned it to his avaricious, and, at the same time, prodigal brother. Nothing remained for him to do but to husband carefully what remained; and he seems to have been a successful economist. His brother's property, on the contrary, was wasted by neglect and indolence, and lawsuits and corruption completed his ruin. It is not to be denied that the work of Hesiod contains many repetitions, some of which are chargeable to the simplicity of the age when it was written, and others to the connexion of the several parts, which were not originally intended to form a single poem. The abruptness in the transitions is to be attributed to the same cause. It is difficult to contradict these judgments. If Hesiod be com-

pared with Homer, he is found inferior in epic fulness. He is apt to crowd together things different in character, and to lean to a didactic style. The poetry is often overlaid by the reflections; and it is destitute of the fire and vigor which breathe in every part of Homer. If the poetry of each is regarded in reference to the degree of refinement of the age in which it was written, the notions of Hesiod are found to be similar to those of Homer. They are much alike in their estimation of vice and virtue; they equally insist on the practice of justice, the sacredness of an oath, and the laws of hospitality. Fear of the anger of Jove leads them both to forgive their enemies, but only in consideration of suitable satisfaction. But Hesiod's perpetual complaints of the rapacity of kings, and their unjust decisions, and his bitter reflections upon the female sex, have reference to a state of society and manners later than that depicted in Homer, an intermediate state of transition from kingly to republican government, of which distinct traces are visible in his works. The best editions of the works of Hesiod are those by Dan. Heinsius (1603, 4to.); Robinson (Oxford, 1737, 4to.); Lösner (Leipsic, 1787; and Königsberg, 1787). His complete works have been translated into German by H. Voss (Heidelb., 1806); into English by Cooke and Elton.—See the treatise *On the Poems of Hesiod, their Origin and Connexion with the Poems of Homer*, by Fr. Thiersch (Munich, 1813, 4to.).

Hesperides. Hesiod, in his Theogony, calls them the *children of night*, and describes them as living beyond the ocean, and guarding golden apples, and trees bearing golden fruit. According to others, they were the daughters of Atlas, or of Jupiter and Themis, or of Ceto and Phorcys. They were assisted in the charge of their garden by a dragon, which Hesiod calls *Ladon*. According to Apollonius, the names of the Hesperides were Hespera, Erytheis and Ægle; according to Apollodorus, Erytheia, Ægle and Hestia Arethusa; according to Lutatius, Ægle, Arethusa and Hesperis. The golden apples under their care were given by the Earth to Juno on her marriage, and afterwards adorned the gardens of the goddess. Hesiod places these gardens in an island of the ocean, to the west, and Pherecydes at the foot of the Hyperborean Atlas. It was the eleventh labor of Hercules (q. v.) to bring the golden apples of the Hesperides to Eurystheus. The hero killed the hundred-headed dragon, and the virgins fled; or, according to some, Atlas went to them, and procured the apples. The apples were carried to Eurystheus, who gave them to Hercules, and he afterwards gave them to Minerva. By this divinity they were restored to their former situation.

Hesperus; the son or brother of Atlas, and a passionate lover of astronomy. He was persecuted by Atlas, and fled to Italy; whence the ancients called this country *Hesperia*. The nation paid him divine honors, and called the most beautiful star in the western sky, the evening star, or planet Venus, by his name. (See *Planets*.) Others say he was the son of Venus and Cephalus, and, on account of his beauty, received the name of his mother.

Hess; the name of several artists.—1. *Louis Hess*, a Swiss landscape painter of great merit, was born 1760, and died in 1800.—2. *Charles Hess*, engraver in Munich, born 1760, at Darmstadt.—3. *Peter Hess*, son of the preceding, was born July 29, 1792, at Düsseldorf. He belonged to the staff of general Wrede, in 1813, and was present at all the battles which Wrede fought, and thus had the best opportunity of improving in the branch of art he had chosen. He visited Italy. Battles are his favorite subjects. One of his most successful pictures is his cavalry attack at Arcis-sur-Aube, under Wrede. In 1825, he published lithographs of several of his works.—4. *Henry Hess*, brother to the preceding, born April 19, 1798, at Düsseldorf, paints chiefly religious subjects.—5. *Charles Adolphus Henry Hess* was born at Dresden, in 1769, and is the best painter of horses in Germany at present. He has published many engravings, and travelled through Russia, Hungary and Turkey, to study horses. He produced at Vienna, in 1824, lithograph heads of horses of the natural size. In 1825, he went to England, and engaged in a work, intended to show the transitions from the original stock of the horse into the different races, by anatomical drawings.

Hesse-Cassel, or Kurhessen; an electorate, member of the Germanic confederacy, in which it has the eighth place, and three votes in the general assembly. (See *Hessia*.) It contains 4430 square miles, with 602,700 inhabitants, in 62 cities and towns, 33 market-places, 1062 villages, &c.; 491,750 Protestants, mostly Calvinists, 100,000 Catholics, 8000 Jews, and 250 Menonites. The electorate lies between 50° 7′ and 52° 26′ lat. N., and 8° 31′ and 11° 0′ lon. E. The surface is hilly, and in some parts mountainous; the soil not generally very fertile,

except in the province of Hanau, where it is rich, and the climate kindly. The productions are grain, potatoes, some hemp, flax, tobacco and vines. The pasturage is generally good, and wood abundant. The minerals are copper, silver, cobalt, iron, salt, vitriol, alum, pit coal, marble and basalt. The principal rivers are the Werra, Fulda, Diemel, Maine, Edder, Kinzig, Schwalm and Lahn. The university is at Marburg, and had 347 students in 1829. The electorate has 5 gymnasia, 3 seminaries for the education of schoolmasters, &c. Revenue, 4,500,000 guilders; public debt, 1,950,000. The form of government was absolute after the dissolution of the former antiquated estates.* The title of the monarch is, *elector, sovereign landgrave of Hessia, grand-duke of Fulda*, &c. The present elector, William II, was born July 28, 1777, and succeeded his father in 1821. He is married to Augusta, sister to the reigning king of Prussia. He may be styled one of the worst rulers of the present age, and has carried his cruelty even to brutality. His son, a few years ago, was obliged to fly to the king of Prussia, because he would not allow the mistress of his father public honors at court. The father of the present elector was driven from his country by Napoleon, in 1806. Hesse then formed the main part of the kingdom of Westphalia. (q. v.) He lived in England, was reinstated in 1813, when he disowned all which had taken place from the time of his dethronement, and again introduced caning into the army, &c. His arbitrary refusal to acknowledge the sale of the domains during his absence, and his non-compliance with the decisions of the Germanic diet, and the admonitions of Austria and Prussia, respecting this subject, form an interesting subject in the modern history of Germany. Hesse-Cassel was created an electorate with Baden, Würtemberg and Salzburg, in 1802. (See *Electorate.*) It is the only electorate now existing; and, as there is no longer a German emperor, the title has no meaning as far as regards his election. The commerce of Hesse-Cassel is not unimportant. The peasant is poor, oppressed, and in a backward state. (For Cassel, the capital, see *Cassel.*)

HESSE-DARMSTADT (see *Hessia*), grand-duchy of; a member of the Germanic confederacy, containing 3900 square miles, with 781,900 inhabitants, of whom 393,000 are Lutherans, 120,000 Catholics, 170,000 Calvinists, 16,000 Jews, 1000 Menonites. It lies between 49° 22′ and 51° 4′, lat. N., and 8° 0′ and 10° 0′ lon. E. Standing army, 8421, of whom, however, more than half are on furlough. The university is at Giessen (q. v.), and had, in 1829, 548 students. The revenue was, in 1827, 5,878,641 guilders; expenditure the same; debt, 13,973,625 guilders. The surface is generally hilly or mountainous; the soil in many parts poor, but in the valleys fertile, and pasturage generally good. The principal productions are grain, potatoes, flax, tobacco, fruits and vegetables; and vines along the banks of the Rhine and Maine. It produces considerable iron, copper, lead and salt. The climate is generally healthy, and the situation on the Rhine and Maine favorable to trade. In 1806, the landgrave of Hesse-Cassel became a member of the confederation of the Rhine, and, August 13 of the same year, he adopted the title of *grand-duke.* In 1806, the old estates were abolished in Hesse-Darmstadt. May 18, 1820, a constitution was promulgated in compliance with article 13 of the act of the German confederacy. But the estates would not accept it, and, Dec. 17, 1820, a new constitution was promulgated, providing for two chambers, which have this singularity in their constitution, that if a proposition made by the executive is adopted by one chamber and rejected by the other, the votes of both chambers can be counted together, and the majority of both decides. The chambers have the right to complain of officers, make proposals to government, and to grant taxes. Their sessions are triennial. The peasant is much oppressed by heavy taxes, and disturbances have several times arisen.* The present grand-duke, Louis II, succeeded his father, Louis I (as landgrave, Louis X), April 6, 1830, and was born Dec. 26, 1777. The capital is Darmstadt. (q. v.)

HESSE-HOMBURG; landgraviate and member of the German confederacy, containing 164 square miles, with 21,564 inhabitants, mostly Lutherans. It consists of two parts, the lordship of Homburg, situ-

* In 1830, the elector found himself constrained, by popular disturbances, soon after those in Brunswick, to make concessions, and to give the pledge of a constitution, the purport of which has not yet reached us; nor is it improbable that all will be revoked, as the diet at Frankfort issued a resolution in November, 1830, declaring the necessity of a firmer coöperation and of mutual assistance between all the members of the German confederacy, to put down democratic disturbances.

* Of the importance of the disturbances which broke out in 1830, we are as yet (February, 1831) unable to judge.

ated N. N. W. of Frankfort, and the lordship of Meissenheim. The capital is Homburg, with 3490 inhabitants. Revenue, 180,000 guilders; debt, 450,000 guilders; contingent for the confederacy, 200 men. The present landgrave is Louis, lieutenant-general in the service of Prussia, born August 29, 1770.

Hesse-Philippsthal; a collateral line of Hesse-Cassel. (q. v.)

Hesse-Philippsthal-Barchfeld; a collateral line of Hesse-Cassel. (q. v.)

Hesse-Rothenburg; a collateral line of Hesse-Cassel. (q. v.) (Catholic).

Hessia. The Hessians, called, in the early history of Germany, *Catti*, lived in the present Hessia; part of them emigrated to the Netherlands, and were called *Batavi*. They are mentioned under Augustus. Germanicus, son of Drusus, conquered them, burnt their chief place, Mattium (Marburg), and led a daughter of a Cattian prince, together with a priest, in his triumph. At a later period, they belonged to the great empire of the Franks. Even before the time of Charlemagne, Christian churches were built at Hersfeld, Fritzlar and Amöneburg. The German king Adolphus of Nassau made Hessia an imperial principality in 1292. According to the injudicious habit of those ages to divide countries among all the sons of a prince, and sometimes even the daughters, Hessia was often divided and reunited. In 1500, William II was in possession of the whole of Hessia. He died in 1509, and left the landgraviate to his son Philip, then five years old. Many disturbances in Hessia, and in Germany in general, induced the emperor Maximilian to declare Philip of age in 1518, when only 14 years old. In 1523, he put an end to the disturbances caused by Francis of Sickingen, defeated, in 1526, the peasants in the peasant war, and was at the same time a zealous promoter of the reformation. He founded the university of Marburg and four hospitals, from the property of suppressed convents. He was also the author of the celebrated conference between Luther and Zwinglius, at Marburg, in 1529, in the hope of uniting them; and, with the elector of Saxony, he accepted the direction of the Smalcaldic league. The battle of Mühlberg, in 1547, so unfortunate for the Protestants, obliged him to surrender, unconditionally, to Charles V, who kept him for five years near his person. He afterwards ruled his country in peace. His character was impetuous. By his will (1562) he divided Hessia among his four sons. But Philip died in 1585, and Louis in 1604, without heirs; from the others sprung the two existing lines of Hesse-Cassel and Hesse-Darmstadt. (q. v.)

Hesychastes (from the Greek ἡσυχαζειν, to be quiet); the name of a party among the monks on mount Athos, noted, in the 14th century, for their fantastic notions. They regarded the navel as the seat of the soul, and consequently as the object of contemplation. After long perseverance in prayer, with their chin on their breast, and their eyes fixed on their navel, they believed they would finally have a sensible perception of the divine light, and might enjoy the bliss of beholding God. This light, in which the Godhead dwells, and which emanates from the Godhead, they pronounced uncreated, and yet distinct from the being of the Godhead. In a controversy concerning the nature of this light, in which they were opposed by the Calabrian monk Barlaam, under the protection of the Greek emperor Andronicus Palæologus the younger, the zeal of their defender Palama, archbishop of Thessalonica, gained them the superiority in a synod held at Constantinople in 1341. A change of government deprived the Hesychastes of their superiority, and the other contests of the church consigned this error to oblivion. The remembrance of it was recalled by the Quietism of the 17th century, and it may, perhaps, receive some physiological explanation from the Magnetism of the 19th.

Hesychius, the author of a Greek glossary, which has probably come to us in an abridged form, and which he partly collected from former dictionaries, and partly enlarged by many new words and examples from Homer, the dramatic and lyric poets, the orators, physicians and historians, was a native of Alexandria, and, according to some, lived about the end of the fourth, or, as others say, in the fifth or sixth century after Christ. Of the circumstances of his life, nothing is known. The best editions of his glossary are Alberti and Ruhnken's (Leyden, 1746—66, 2 vols., folio), and Schow's (Leipsic, 1792), as a supplement to the former.

Hetæra (Greek ἑταιρα, a female friend); the name given by the Greeks to a concubine, a mistress, &c. Even Venus was worshipped in some places under the surname of *Hetæra;* and her priestesses were also called by this name. The notions of the ancients concerning domestic virtue, their passionate admiration for the beautiful, and the real accomplishments of many of the *hetæræ*, occasioned their

society to be sought by men of the highest eminence, even Plato and Socrates. No shame was attached to associating with them. Aspasia is the most renowned of these *hetæræ*. The names of Leontium, Theodata, &c., are also well known. They may be compared to Ninon de l'Enclos, Sophie Arnault, &c., in modern times. *Hetæræ*, less intellectually famous, were Cratina, Lais, whom Aristippus the philosopher loved, Phryne and others. They also became famous for their connexion with works of art. Praxiteles made a marble and gold statue of the latter, and she was also the model for his Venuses. His son, Cephissodorus, acquired his fame, as several others did, by making statues of *hetæræ*. They were not generally natives of the places where they lived, and at Athens, where citizenship was a subject of great pride, foreign women in general were despised, by the Athenian women, and the term *foreign*, as applied to a female, had much the same signification as *hetæra*. (See *Corinth.*)

Hetaireia, or Hetæria (*Greek;* brotherhood, or society of friends). In 1814, a society of the friends of the Greeks was formed in Vienna by the coöperation of the count Capo d'Istrias and the archbishop Ignatius (who lived in retirement at Pisa), having for its object the diffusion of Christian instruction and true religion, both among the ignorant *papas* (the inferior clergy) and among the people, by schools and other means. The statutes of this association were printed in the modern Greek and the French languages. Princes, ministers, scholars of all nations, and the rich Greeks of the Fanar, joined it, and the association soon consisted of upwards of 80,000 members. The symbol of the society was a ring, with the image of the owl and of Chiron, who, as the educator of heroes, has a boy on his back. Its treasury was at Munich. Originally, the Hetæria had no political object; but by degrees the desire was awakened to coöperate actively in the emancipation of Greece from the Turkish yoke. This desire took the deepest hold of the educated part of the Grecian youth. Powerful allies were sought and found; considerable means were accumulated, that every thing might be in readiness. Odessa was the point of union of the Hetæria with Constantinople, where the society made preparations for a great struggle. As soon as Ypsilanti (see *Greece, Modern, Insurrection of*) called the Greeks to liberty at Jassy, in March, 1821, the youths of the Hetæria hastened from Russia, Poland, Germany, France, Switzerland and Italy. Of the Hellenic volunteers Ypsilanti formed the brave legion of Hetærists, in the black uniform of hussars, with a Walachian cap, having in front a death's head and thigh bones crossed, with a three-colored cockade (black, white and red), and a white banner with a red cross, and the motto of the ancient Labarum, Εν τουτω νικᾶς. The history of their unhappy conflict, and of the manner in which the flower of the Greek youth, the sacred legion of 400 or 500 Hetærists, having been betrayed in the battle of Dragashan (June 19, 1821), by the Arnaouts and Pandoors, fell victims to their courage and patriotism, is given in the articles *Greece, Modern*, and *Ypsilanti*. Twenty only of these heroes, under captain Jordaki, together with some Albanese, escaped, covered with wounds. Another legion, under captain Anastasius, was stationed at Stinka on the Pruth, where they were attacked (June 25) by the pacha of Ibrail, and, after a valiant resistance, fled to the Russian territory by swimming across the Pruth. Jordaki and Pharnaki, with the remaining Hetærists and some Arnaouts, carried on a partisan war in the mountains and forests of Moldavia, defended themselves in monasteries, repelled an enemy four times stronger than themselves (for example, at the monastery of Slutino, July 25, and the following days), and were finally defeated at the monastery of Seck, Sept. 24, 1821, where the wounded Jordaki, to avoid falling into the hands of the Turks, set fire to the monastery, and perished in the conflagration. Thus ended the Hetæria. (See *Nouv. Obs. sur la Valachie*, &c., *par un Témoin oculaire, F. G. L.*, Paris, 1822.)

Heterodox (from the *Greek*); meaning *believing otherwise*, in contradistinction to *orthodox*. It is chiefly used to designate one who denies the dogmas of a particular church. The Catholics call a person who disbelieves all or certain dogmas of the church (sanctioned by councils and the decisions of popes) a *heretic;* the Protestants in Germany prefer the milder expression *heterodox*.

Hetman, or Ataman; the title of the chief (general) of the Cossacks, said to be derived from the old German word *Het* (head). While the Cossacks were under Polish dominion, king Stephan Bathori set over them (in 1576) a commander-in-chief, under the title of *hetman*, and gave him, in token of his dignity, a banner or staff of command, and a seal. These marks of dignity are even now in use. The hetman is chosen by the Cossacks

themselves, but the choice must be ratified by the emperor. When the Cossacks submitted to the Russians in 1654, they retained their form of government entire. But the famous hetman Mazeppa having espoused the party of Charles XII, in 1768, with the intention of uniting again with the Poles, Peter I imposed many restrictions on the Cossacks, and the place of hetman frequently remained long unoccupied. The count Rasumowsky, having been elected hetman in 1750, received, instead of the former domains and revenues, 50,000 rubles annual pay. Catharine the Great abolished altogether the dignity of hetman of the Ukraine, and established instead a government of eight members. The Cossacks of the Don have retained their hetman: his former great authority is, indeed, somewhat circumscribed, but he acquires more and more the character of a sovereign, instead of that of a mere general and governor. (See *Cossacks.*)

Heulandite; the name applied to a species of the zeolite family in mineralogy, by H. T. Brooke, in honor of M. Heuland of London. It had been confounded with stilbite, from which it differs essentially, however, in the form of its crystals, which are always some modification of the right oblique-angled prism. In hardness, it is between calcareous spar and fluor. Specific gravity, 2.200. It is white and transparent, passing into red, when it becomes nearly opaque. It consists of silex 59.14, alumine 17.92, lime 7.65, and water 15.40. It is chiefly found in the cavities of amygdaloidal rocks, and occurs in the Faroe isles, the Hartz, and the trap of the Giant's Causeway and of Nova Scotia, at each of which places it is nearly colorless and transparent. It is found at Paisley in Scotland, and in the Tyrol, of a color approaching to scarlet, and almost opaque.

Hewes, Joseph, a signer of the declaration of independence, was born in 1730, in New Jersey, whither his parents, who were Quakers, had emigrated from Connecticut in consequence of the persecution which their sect suffered in New England. Their son, after receiving a good education, engaged in mercantile pursuits; and, when about thirty years of age, he removed to Edenton, in North Carolina, where he acquired a fortune. He had not long resided in North Carolina, before he was chosen a member of the colonial legislature. In 1774, he was chosen one of the three persons who composed the delegation from North Carolina to the general congress that was to meet in Philadelphia. Here he was soon distinguished for his attention to business, and, July 4, 1776, signed the declaration of independence. From this time, Mr. Hewes retained his seat, with the exception of something more than a year, until his death, in 1779. It is related of him, that when the Quakers held a general convention, in 1775, of the members of their sect residing in Pennsylvania and New Jersey, and put forth a "testimony," denouncing the congress and all its proceedings, he broke off all communion with them.

Hexachord (from the *Greek*); a chord in the ancient music, equivalent to that which the moderns call a *sixth*. Guido divided his scale by hexachords, of which it contained seven; three by B quadro, two by B natural, and two by B molle. It was on this account that he disposed his gamut in three columns. In these columns were placed the three kinds of hexachords according to their order. *Hexachord* is also the name for a lyre with six strings.

Hexameter (from the Greek ἑξάμετρος), a verse of six feet. The sixth foot is always a spondee (two long syllables), or a trochee (a long and a short). The five first may be all dactyles (two short syllables and one long), or all spondees, or a mixture of both. The scheme of this verse then is,

—∪∪|—∪∪|—∪∪|—∪∪|—∪∪|—∪

or, — — | — — | — — | — — | — — | — —

with all the varieties which the mingling of the two kinds of feet, as mentioned above, affords; as,

—∪∪|—∪∪|— —|— —|—∪∪|—∪

for instance,

Κλῦθι μευ, 'Αργυρότοξ' ὃς Χρύσην ἀμφιβέβηκας,

or, — —|—∪∪|—∪∪|—∪∪|—∪∪|— —

as, Κίλλαν τε ζαθέην, Τενέδοιό τε ἶφι ἀνάσσεις,

and so on. This immense variety of which the hexameter is susceptible, its great simplicity, its flowing harmony, and its numerous pauses, constitute the charm of this admirable verse, and adapt it to the most various subjects. The hexameter is so long as to require, at least, one cæsura, which is generally in the middle of the third foot, either immediately after the arsis (the first part of the foot), which is the more common, in which case the cæsura is called a *male* one; as,

Forte sub arguta | consederat ilice Daphnis;

or the cæsura is a syllable later, after the thesis (the latter part of the foot), in which case it is called *female*, as less nervous and powerful; as,

Huc ades, o Melibœe, | caper tibi salvus et hœdi.

If there is no cæsura in the third foot,

there must be one in the fourth, and then always at the arsis. It is considered a beauty if it be preceded by another cæsura in the second foot; as,

Qui Bavium | non odit, amet | tua carmina Mævi.

Every good hexameter has one of these three chief cæsuras, but others may also be used. And here we must mention the cæsura in the arsis of the first foot, if the verse begins with a monosyllable, which, in consequence of such cæsura, acquires a strong emphasis; as,

Urbs | antiqua fuit. Tyrii tenuere coloni.

A full stop at the chief cæsura, as in the verse just quoted, is considered a beauty. It is hardly necessary to mention, that a hexameter without a cæsura, is extremely lame; as the following:

Nuper | quidam | doctus | cæpit | scribere | versus.

A monosyllable may be used at the end of a hexameter, if preceded by another monosyllable; but if it is the intention of a poet to produce a rough verse, or to express something ludicrous or unexpected, a monosyllable may stand at the end without observing the rule just mentioned; as,

Dat latus, insequitur cumulo præruptus aquæ mons.

It is erroneous to suppose that, in reading a hexameter, the divisions of the feet should be distinctly marked in the pronunciation; for instance, the hexameter

Indignor, quandoque bonus dormitat Homerus,

in this way,

Indig-norquan-doquebo-nusdor-mitat Ho-merus.

The proper mode is to divide the verses according to their chief and secondary cæsuras; to discriminate accurately between the long and short syllables, and to dwell slightly, but perceptibly, on the arsis. As the hexameter was particularly used in the epic (q. v.), it received the name of *heroic verse*. If, as was mentioned above, the chief cæsura of the hexameter is in the fourth foot, it is called a *bucolic cæsura*, because it occurs most frequently in the bucolics. A spondee is rarely used in the fifth foot, and then, in Latin, the word with which the verse ends is generally composed of four syllables, and the fourth foot, at least, must be a dactyle; as,

Cara deûm soboles, magnum Jovis incrementum.

Why the last foot cannot be a dactyle, every one feels. The close would be incomplete; the mind would not be at rest. The prevalence of the dactyle or spondee in the hexameter, depends much upon the genius of the language; thus the dactyle is more frequent in Greek than in Latin, and in German than in Greek. It is evident that the hexameter requires distinctly long and short syllables, and cannot, therefore, be formed in languages which have no distinct prosody, as Italian, French, Spanish, English, &c., more particularly in the latter, on account of its great number of monosyllables, very few of which a good ear would allow to be short. Annibal Caro, however, tried hexameters in Italian; Baïf, in French; Stanyhurst, Sidney and Southey, in English; but without success. Adlerbeth used Swedish hexameters in his translation of Virgil. Meermann has written Dutch, and recently, also, Baros and Debreuti, Hungarian hexameters. In no modern European language have hexameters become truly naturalized, except in German, to which this measure, skilfully used, seems nearly as well adapted as to the Greek. Fischart attempted the German hexameter in the 16th century. In the middle of the 18th century, it was used and recommended by Klopstock, Uz and Kleist, but was still in a very rude state. Göthe's hexameters are exceedingly rude, and very often as poor as their sense is beautiful. John Henry Voss improved the German hexameter by the excellent translation of Homer, and his valuable *Zeitmessung der Deutschen Sprache* (Königsberg, 1802). But the German hexameter is most indebted to Schlegel, who has made some of the best observations within our knowledge on it, in the Indian Library, in treating of the Descent of the Ganges, of which he has given a translation in hexameters from the Sanscrit. Grecian tradition attributed the origin of the hexameter to the Delphic oracle; hence it was called also the *theological* and *Pythian metre*.

Hexapla; a collection of the Holy Scriptures, in six languages, used, particularly, for the one published by the Greek bishop Origen, containing the text in Hebrew and Greek letters, the Septuagint, and three other translations.

Heyne, Christian Gottlob, a distinguished scholar, was born Sept. 25, 1729, at Chemnitz, in Saxony, whither his father, a poor linen weaver, had fled from Gravenschutz, in Silesia, on account of religious persecution. The difficulties which pursued him till manhood, could not repress his fine powers, or destroy his natural sensibility; but, on the contrary, threw him back on himself, and taught him to confide in himself. He could hardly obtain the slight assistance which was necessary to gratify his early wish of being instructed in the Latin language. From

1741 to 1748, he attended the lyceum at Chemnitz, where the instructers acknowledged his uncommon talent, and the untiring industry with which, deprived of almost all literary resources, he had acquired a remarkable acquaintance with the ancient languages. In the most destitute condition, he proceeded to the university of Leipsic, in 1748. There he was principally attracted by Ernesti's lectures, which made him acquainted with the principles of interpretation, while the archæological and antiquarian prelections of professor Christ enlarged his knowledge of classic antiquity, and his knowledge of literature was speedily extended by industrious reading and almost excessive nocturnal labor. Besides these studies, he pursued another as a means of subsistence (the law), and listened with great benefit to the history of the Roman law, with reference to ancient literature and history, as delivered by the celebrated Bach, by which means he was afterwards enabled to deliver lectures on Roman antiquities, for jurists in particular. He also wrote, in 1752, a legal disputation, for his degree of master. A Latin elegy, composed by Heyne, at the request of the reformed congregation of Leipsic, on the death of their pastor, made him known to the minister of state, count Von Bruhl, in whose library he was appointed copyist, with a salary equal to about 75 dollars. The only benefit that he derived from this appointment, was an enlarged acquaintance with the works of ancient literature, for which his inclination became every day more settled. Necessity at first compelled him to undertake several translations. The first classic of which he undertook an edition through inclination, was Tibullus, which he published for the first time in 1755. The moral tone of his own mind also led him to the writings of the stoic Epictetus, of which he published an edition in 1756. These two works made him known abroad. The breaking out of the seven years' war deprived Heyne not only of his salary, but also of his other means of subsistence. By Rabener's recommendation, he at last found support in the house of a lady named Von Schonberg, whose brother he accompanied as governor to Wittenberg, in 1759, where he was introduced by Ritter to a more thorough acquaintance with history. The war again dragged him from his studies, and placed him in a difficult situation, which, however, developed in him a talent for business. At this time, he prepared the Latin text for the third thousand of the *Lippert Dactyliotheca*, which made him more intimate with this department of archæology. At Ruhnken's recommendation, he received, in 1763, an invitation to succeed Gessner as professor of eloquence at Göttingen. He was soon after appointed first librarian and counsellor. To discharge the functions of these posts, required the most multiplied labors. He says of himself, with great candor, that, "till he was professor, he never learned the art it was his duty to teach." But he soon made himself at home in his new duties. His numerous and really classical programs, embracing the most attractive subjects of antiquity, and giving us cause to admire the extent of his knowledge (*Opusc. Acad.*, 6 parts), evince that he thought and composed in Latin, and that he could express himself not only with purity, but also with ease and taste. His lectures, which he read with the greatest punctuality, constituted by degrees a circle of the most attractive and instructive subjects that the study of the ancients presented, and were closely connected with his activity as an author. By these prelections, as well as by his five years' connexion with the Royal Society, founded at Göttingen, by Haller, of which he was a most industrious member; by his indefatigable participation in the Göttingen Literary Gazette (*Göttinger Gelehrte Anzeigen*), which, especially under his management, from 1770, had the merit of acquainting Germany with the most important and rare works of the English and French; finally, and above all, by the direction of the philological seminary of Göttingen, which, under his guidance, was a nursery of genuine philology, and has given to the institutions of instruction of Germany, a vast number of good teachers;—by all this, together with his editions and commentaries on classic authors, Heyne has deserved the reputation of being one of the most distinguished teachers and scholars of Germany; nay, we may even say, of the literary world. But the centre of his activity was the poetic department of classical literature, which he espoused for itself alone, and from love of poetry, free from the narrow views which had been and were then prevalent among philologists. His particular merit consists in having raised the knowledge of antiquity and classical literature from the dust of the schools, and introduced it into the circle of the polished world. He esteemed the study of the languages, of grammar and metre, as the foundation of the further study of classic literature, but by no

means as themselves the ultimate object. This is shown by his editions of the poets, which gained him the most extensive reputation, of Tibullus, and especially of Virgil. For the most difficult, also, of the ancient poets, and the one who had had the fewest commentators, for Pindar, he has done much to make him intelligible, and first brought him into the course of instruction. But his principal work, which employed him for 18 years, was his great though unfortunately unfinished edition of Homer. Proceeding from the poets, he entered the territory of mythology, on which he shed much light, by his edition of Apollodorus, &c. Archæology gained equally by his antiquarian essays. Connected with these archæological and antiquarian investigations, were his historical labors, viz., the treatment of Greek and Roman antiquities, and his extensive knowledge of the internal history, constitutions and legislation of the states of antiquity, which he knew how to apply happily to the events of his own time. Even as a man of business and the world, Heyne was worthy of respect; on which account he was intrusted, from all quarters, with honorable employments, and his advice was not unfrequently asked by the curators of the university. He brought the library of Göttingen to its present state of excellence, so that it is regarded, by competent judges of the subject, as the first in Europe, because all the departments are methodically filled. In the same flourishing condition did he leave the other institutions which were intrusted to his supervision. Not merely the fame of his great learning, but the weight of his character, and the propriety and delicacy of his conduct, procured him the acquaintance of the most accomplished and eminent men of his time. George Forster, Huber and Heeren became his sons-in-law. The centre of his activity always was the university, which he loved with filial fidelity and disinterested affection. In dangerous times, the influence which he had acquired, and his approved uprightness and wisdom, were of great service to that literary institution. By his efforts, the university and city of Göttingen were spared the necessity of affording quarters to the soldiery, while the French had possession of Hanover, from 1804 to 1805. At this time, his occupations were much multiplied, and he was himself appointed a member of the committee of the estates. When the kingdom of Westphalia was erected, he was no less active, and had, moreover, the pleasure of seeing his efforts successful and his services acknowledged. After giving a final revision to his works, an attack of apoplexy terminated his well-spent life, July 14, 1812, in the eighty-third year of his age. (See Heeren's *Life of Heyne*, Göttingen, 1813.)

Hiacoomes, the first Indian in New England who was converted to Christianity, lived upon the island of Martha's Vineyard, when a few English families first settled there, in 1642. He was instructed in the truths of Christianity by the reverend Thomas Mayhew, and, in 1645, began his apostolic labors among his red brethren. In August, 1780, an Indian church was established on Martha's Vineyard, and Hiacoomes and Jackanash, another Indian, were regularly constituted its pastor and teacher. Hiacoomes survived his colleague, and lived to the advanced age of nearly 80. His death occurred about the year 1690. He performed all his ministerial duties with the greatest propriety and regularity; was slow of speech, of great gravity of manner, and led a blameless life.

Hiatus (*Latin;* opening) usually signifies a break; in prosody, for example, if one word ends with a vowel, and the next word begins with a vowel, an opening of the lips, similar to that in yawning, is produced in pronouncing them. Nature herself appears to have taught men to avoid the hiatus, since there is, perhaps, no language, in which euphonic letters are not found, the sole use of which is to prevent the hiatus. (See *Euphony.*) In Greek, this hiatus was avoided by the addition of the ν ἐφελκυστικον, or, in some cases, of a σ or a κ to the first word, or by an elision of its final vowel. The doctrine of the *digamma* (q. v.), in the criticism of the text of Homer, is founded on the observation, that, with the exception of a certain number of words beginning with a vowel, which have a hiatus often before them, the hiatus becomes very rare in Homer, and, in most cases, has some particular justification. These words are also rarely preceded by an apostrophe, and, preceding long vowels and diphthongs, are seldom shortened before them. These facts are explained by the assumption of the existence of the *digamma.* A chasm in MSS., occasioned by a part of a manuscript being lost, or by erasures, is often denoted in copies by the phrase *hiatus valde deflendus*, i. e., an unfortunate chasm.

Hibernia; the ancient name of Ireland, so called first by Julius Cæsar. Pomponius Mela calls it *Juverna;* Ptolemy, *Ju-*

vernia; others, *Overnia*, *Bernia*, *Iris*. Aristotle mentions this island by the name of *Ierna*, and, at the same time, speaks of *Albion*. In the *Argonautica*, which go under the name of Orpheus, the island of *Iernis* is mentioned. The inhabitants of Britain told Cæsar, that Hibernia lay west of their island, and was only half as large. Ptolemy, who received more correct accounts from merchants who had been there, makes but few mistakes in his account of its size, form and situation; and by means of their information, he was enabled to form a chart of Hibernia, and to give tolerably accurate accounts of its coast, rivers, promontories and inhabitants. Agricola made preparations for conquering the country, but his design was not executed. Hibernia, therefore, was never reduced to subjection by the Romans. (See *Great Britain*, and *Ireland*.)

Hibrida, Hybrida, or Ibrida (Latin; from the Greek ὑβρις, a mongrel), meaning *of double origin;* for instance, if the father was a Roman and the mother a foreign woman, or the former a freed-man and the latter a slave. *Hibrida* corresponds to the modern *mulatto*. If the parents had not received the *jus connubii* from the senate, the *hibridas* were little better than slaves. Hence *vox hibrida*, a compound of two different languages, as, *monoculus*, *archi-dux*.

Hickory. This term is applied, in the U. States, to several species of walnut, which, however, form a natural section, or perhaps genus (*carya*), differing from the true walnuts, especially in the smooth exterior of the nuts. All the species of *carya* are exclusively confined to North America, and compose one of the characteristic features in the vegetation of this continent. (See *Walnut*.)

Hidalgo; a Spanish nobleman of the lower class. (See *Grandees*.) To the lower nobility pertain the *cavalleros*, *escuderos* and *hidalgos* (from *hido*, son, and *algo*, something). There are *hidalgos de naturaleza*, of noble birth, and *hidalgos de privilegio*, that is, those on whom the king has conferred nobility in reward of distinguished services, and those who purchase nobility. The latter possess all the rights and privileges of the other nobles, but are not so highly respected. With the exception of some old houses and knights of orders, the *hidalgos* differed little from the commoners. The Portuguese *fidalgo* has the same signification. The Genealogical, Historical and Statistical Almanac for 1830 (Weimar) gives 484,131 *hidalgos* in Spain

Hidalgo, Miguel; a Mexican priest, who, in conjunction with Allende, commenced the war of independence in New Spain, in 1809. Hidalgo was, at that time, curate of Dolores, and possessed great influence over the Indians and Creoles. After raising the standard of independence, he was joined by a large body of men and the garrison of the city of Guanaxuato and of some other towns in the same province. Thence he marched to Valladolid; and, continuing to meet with success, he threw off his clerical robes, and assumed the uniform and rank of generalissimo, Oct. 24, 1809. Continuing his march, he approached Mexico, the capital, which was then poorly defended; but when circumstances favored an attack, he drew off his troops, and began to march back towards Guanaxuato. At length the viceroy, Vanegas, collected a sufficient body of troops to become the assailant in his turn. Hidalgo was met and defeated by the Spaniards under Calleja, at Aculeo, and here the patriots received their first check. Other engagements followed, between various chiefs of the two parties. Hidalgo sustained another total defeat near Guadalaxara, Jan. 17, 1811, and was compelled to retire to Zacatecas with his shattered and disheartened forces. Thence he retreated to San Luis Potosi, with the intention of withdrawing into the Texas, in order to reorganize his army. He was finally overtaken at Acatita de Bajan, having been betrayed by Bustamante, one of his officers, and was made prisoner with all his staff. He was removed to Chihuahua, where, after the form of a trial, he was shot, June 20, 1811, having been deprived of his priest's orders previous to his execution. (Poinsett's *Mexico*.)

Hien; a Chinese syllable, which, when added to geographical names, means a city of the third rank.

Hierarchy (from ἱερα, sacred, and ἀρχη, a government); a sacred government, sometimes used to denote the internal government of the church, sometimes the dominion of the church over the state. In the former sense, the hierarchy arose with the establishment of the Christian church as an independent society. Although elders, called *presbyters*, stood at the head of the earliest congregations of Christians, their constitution was democratic, each of the members having a part in all the concerns of the association, and voting in the election of elders, on the exclusion of sinners from the communion of the church, or the reception of the repentant into its bosom.

The government of the congregations was gradually transferred into the hands of their officers, as was natural when the congregations had become societies of great extent. In the second century, the bishops acquired a superiority over the elders, and became the supreme officers of the congregations, although the presbyters, and, in many cases, all the members of the churches, retained some share in the government. The bishops in the capitals of the provinces, who were called *metropolitans*, soon acquired a superiority over the provincial bishops, and exercised a supervision over them. They were themselves subject to the bishops of the principal cities of the Roman empire, Constantinople, Antioch, Alexandria and Jerusalem, who received the title of *patriarchs;* and thus a complete aristocratic constitution was formed, which continued in the Greek church, while, in the Latin, the aristocracy was transformed into a monarchy. The Roman bishop acquired the primacy over the others, and, the opinion having become prevalent that the apostle Peter had founded the Roman church, and that its bishop was his successor, the Roman bishop, moreover, having received, about the close of the 8th century, from the generosity of Pepin the Short, a considerable region in Italy for a permanent, though originally not an independent possession, his authority constantly increased, and he gradually became the monarchical head of Western Christendom. The word *hierarchy* is frequently used in the second sense, viz., of the relations of the church to the state, in which the church is not only independent of the state, but even claims a superiority, and demands the subjection of the political interests to its own. In the first centuries, the church had no connexion with the state. It did not seek to acquire influence over the state, and the state sometimes persecuted the Christian religion. After the church was amalgamated with the state, in the time of Constantine the Great, it obtained protection, but was dependent on the temporal rulers, who asserted the right to convoke the general councils, and to nominate the metropolitan bishops, and even frequently interfered in the internal affairs of the church and its dogmatic discussions. It was the same in the Gothic, Lombard and Frankish states, which were erected on the ruins of the Roman empire. The German emperors, and especially Charlemagne, also exercised over the church the rights of sovereignty, which the Roman emperors had possessed; and, after the feudal system had arisen in the German empire, the bishops held the church lands as fiefs received from the temporal princes; and even the Roman bishop, in his temporal character, stood in a feudal relation to the Frankish princes. But the germ of the hierarchical system already existed at this period, in the idea of the church as a society always enlightened by the Divine Spirit; in the idea, borrowed from Judaism, of a priesthood instituted by God himself, by which the clergy acquired dignity surpassing all temporal grandeur, and an authority emanating not from the state, but from God himself; and, finally, in the superiority of the clergy over the laity, resulting from the circumstance that they were the only depositaries of knowledge. But the hierarchical system could not be completely developed from these germs, till the Roman bishop became the undisputed head of Western Christendom, by which unity and strength were infused into the exertions of the spiritual power. For several centuries, the importance of the Roman bishop continued to increase: his power was especially augmented in the 9th century, by the Pseudo-Isidorian collection of canons, some forged, some interpolated, the object of which was to exalt the ecclesiastical authority above the secular. (See *Papacy.*) Gregory VII (q. v.) exerted the most undaunted courage and liveliest zeal, in, the 11th century, to enforce the claims of the hierarchy; and the principal means which he adopted for attaining this object were, to deprive the princes of the right of investiture (see *Investiture*), and to introduce celibacy among the clergy. (See *Celibacy.*) Gregory did not wholly accomplish his object; but his successors pursued his plan with perseverance and success, and their efforts were favored by the crusades, which were undertaken at the close of the 11th century, and prosecuted for two centuries. These wars promoted a tone of public sentiment favorable to the claims of the church, and, as they were deemed of a religious character, they afforded the popes numerous opportunities to take part in the general affairs of the European nations, and to direct the undertakings of the princes. Amid these wars was developed the idea of the unity of the Christian church, with the vicar of Christ at its head. Thus, from the end of the 11th to the middle of the 13th century, the idea of a hierarchy was accomplished. The church became an institution elevated above the state, and its head, endowed with a supernatural fulness of grace,

stood, in public opinion, above all secular princes. The highest dignities of Europe were the papal and imperial, but the papal tiara was the sun, the imperial crown, the moon. At this time, the popes were generally victorious in the disputes with the princes. Urban II, Paschal II and Innocent III and IV, in particular, knew how to maintain their superiority over the princes, and to exercise a powerful influence on the affairs of the European nations. The popes, however, were no more ambitious than the princes, and only acted in conformity with their character and relations, when they attempted to render the church independent of the political power, and to elevate it above the state. Since the hierarchy rested on public opinion, it was necessary for it to preserve this public opinion by every means, and to suppress whatever threatened to change it. It has, therefore, exerted a pernicious influence by establishing inquisitions, and restricting the freedom of the mind. But, on the other hand, it was, in early times, productive of much good, by serving as a point of union to the European nations; by constituting a balance to the military political power; by frequently composing the differences of the princes, checking the eruption of wars, and giving religion an influence over the barbarous nations of the middle ages. From the 14th century, the papacy, and with it the hierarchy, began gradually to decline. This is manifested by the disputes of the popes with Philip the Fair and Louis the Bavarian, which did not terminate to their advantage, as had been the case before. To this must be added the removal of the popes to Avignon, and the great schism which resulted in the councils of Pisa (1409), Constance (1414), and Basle (1431), where the popes appeared as parties before a higher tribunal; and it was proclaimed that the councils are superior to the popes. But what was of yet greater importance, public opinion gradually began to alter; and, in many places, the doubts started by Wicliffe and Huss found adherents. Meanwhile, the popedom and the hierarchical system stood uninjured in its outward forms till the beginning of the 16th century. But, at this time, the edifice, already tottering, was vehemently agitated by the reformation. In that portion of Western Christendom which separated from Rome, the hierarchy altogether ceased. The Catholic church continued, indeed, even after the reformation, to assert its hierarchical pretensions, but it was obliged to renounce one privilege after another: the papal power declined, and, in practice, became more and more dependent on the civil authorities. (See *Roman Catholic Church.*) —*Hierarchy* is also used to denote a division of the angels, prevalent in the middle ages. This seems to have originated with Dionysius the Areopagite (*Cœlest. Hierarch.* vii). The number of hierarchies was three, each subdivided into three orders: hence Tasso (Jerusalem Del. xviii, 96) marshals his angels in three squadrons, and each squadron in three orders, and Spenser repeatedly mentions the "trinal triplicities." The first hierarchy consisted of cherubim, seraphim and thrones; the second, of dominions, virtues and powers; and the third, of principalities, angels and archangels. Milton, to whose machinery, in his divine poem, many of the popular opinions on the subject may be traced, often alludes to this classification; as, for instance,

Thrones, dominations, princedoms, virtues, powers,
Hear my decree.

Hières, also Hyères, islands of; in the Mediterranean, on the southern coast of France, in the department of the Var; lat. 43° N. They are four in number—Porteros, in the centre of the group, the island of Levant or Titan, of Porquerolles, and of Bagneaux. Around them lie some islets and rocks. Porquerolles and the island of Levant are the most important of the group. They are generally sterile and little cultivated. The Romans called them the *golden islands*, on account, it is said, of their producing fine fruits, particularly oranges. They contain about 1000 inhabitants. All the islands are defended by forts and batteries.

Hières; a town of France, department of the Var; 3¾ leagues from Toulon, 1¼ from the Mediterranean; situated in a delicious country, where an almost constant spring prevails. The air is not healthy during summer, on account of the neighboring marshes. Lat. 43° 7′ 2″ N.; lon. 6° 8′ 3″ E. Hières has 7844 inhabitants, and carries on considerable commerce in olives, wine, oranges, pomegranates, lemons. There are also salt-works in the vicinity. The beauty of the place attracts many strangers. The Romans called the place *Ariæ;* in the middle ages it was called *Ahires.* In the 13th century, many crusaders sailed from the port of Hières.

Hiero I; brother and successor of Gelon. On his accession to the throne of Syracuse, Gelon conferred on Hiero the government of Gela, his native place, and, on his death, left him (B. C. 478) a sceptre, which he had (so to speak) ren-

dered legitimate by his virtues. Hiero's reign, though less glorious than the preceding, was marked by a peculiar splendor on account of his generous encouragement of learning. But the recollection of his predecessor, whose memory was highly revered, exposed the faults of Hiero in a strong light, in the beginning of his reign, when he conducted, according to some historians, in a tyrannical manner. Veneration for the memory of his brother alone repressed the discontents of his subjects. Dazzled by greatness, corrupted by flattery, and suspicious in the extreme, Hiero at first surrounded himself with foreigners and mercenaries, fearing a rival in every one more virtuous and able than himself. His brother Polyzelus was particularly an object of his jealousy. He was a prince beloved by the people, who were accustomed to compare him with Gelon. Hiero, therefore, wished to get rid of him, and gave him the command of the troops sent to aid Sybaris against Crotona. But Polyzelus, penetrating his intentions, fled to the court of his father-in-law, Theron, king of Agrigentum. The protection that he enjoyed here, was the cause of a war, which Hiero terminated by doing a service to his enemy. The inhabitants of Himera had been governed tyrannically by Thrasydæus, son of Theron. Wearied with oppression, they proposed to Hiero to deliver him their city. The king of Syracuse informed Theron of it, who, in consequence, made a proposal to terminate the differences subsisting between them by a permanent peace. Hiero received the sister of the king of Agrigentum in marriage, and Polyzelus was restored to his brother's favor. Without manifesting military talents, Hiero ended with success all the wars which he was obliged to undertake. He expelled the inhabitants of Naxos and Catana, peopled both cities with a new colony, gave the latter a new name, *Ætna;* and, as its founder, took the surname *Ætnæus*, laying claim to the heroic honors which were accorded to those who had founded a city whose population amounted to 10,000 inhabitants. Soon after Hiero's death, the Catanians made themselves masters of their former country, and expelled the new settlers, who built, at a short distance from Catana, another city, called *Ætna*, and Catana resumed its primitive name. Though some blemishes tarnish the first years of Hiero's reign, this must be ascribed to the painful uncertainty inseparable from the station he occupied; but he compensated for his first faults by the noble actions which signalized the remainder of his life. He readily assisted his allies in their wars, and protected the weaker, promoted the sciences, and afforded encouragement to scholars of all kinds. A long sickness which befell him, was the main cause of this alteration. Since he could no longer occupy himself with the cares of royalty, and it was necessary for him to seek recreation, he collected around him a society of learned men, in whose conversation he took an interest. He thus became acquainted with the pleasures of learning, and, after his recovery, never ceased to value it. His court became the rendezvous of the most distinguished men of his time. To their intercourse he was indebted for the improvement of his character and conduct. The names of Simonides and Pindar appear among those of his most constant companions, and show his judgment in the selection of friends. When Æschylus, jealous of the first success of Sophocles, left Greece, he betook himself to Hiero, to close his days in his kingdom. Bacchylides and Epicharmus were his intimate companions. The poet Simonides always possessed a great influence over the mind of this prince, and constantly employed it to inspire him with sentiments worthy of a sovereign. Xenophon would not, in his dialogue on the qualities of kings, have placed words in the mouths of Hiero and Simonides in contradiction with their actions; and the title *Hiero*, which he gives to his book, contains the finest eulogium of this monarch. According to Ælian and Pindar, few princes were to be compared with him. Always ready to give before he was asked, he placed no bounds to his generosity. He was several times victor in the Grecian games. Pindar has celebrated his victories: several odes of this poet are filled with his praises. Hiero died at Catana, 467 B.C., and left the crown, which he had worn 11 years, to his brother Thrasybulus, who lost it, however, one year after.

Hiero II, king of Syracuse, reigned about 200 years after the former. His father, Hierocles, claimed a descent from the family of Gelon. As Hiero was his son by a woman who was not of a free class, the boy was exposed, soon after his birth, for fear that the nobility of his father might be sullied. But, according to Justin, bees took charge of him, and nourished him several days. The augurs, being questioned for advice on the subject, answered that this was the token of future greatness. Hierocles therefore

took him home, provided for his education, and afterwards treated him as his son. Hiero made a good use of the attention expended on him, and applied himself, with spirit and success, to military exercises. He was, on that account, distinguished by Pyrrhus, king of Epirus, who was then master of Sicily, and who, by leaving the island to itself, gave rise to confusion and anarchy. The Syracusans, acquainted with the qualities of Hiero, conferred on him the supreme command; and it was not difficult for him subsequently to arrive at the royal dignity. To procure partisans, he had connected himself with one of the most influential families of Syracuse, by marrying the daughter of Leptines. During Hiero's reign began the first Punic war, in which he was, at first, an ally of the Carthaginians, and was defeated by the consul Appius Claudius, who had come to the aid of the Mamertines. He then saw that the best course for him was to espouse the cause of the Romans, since the victories of the Carthaginians in Sicily could be of no benefit to him, but, on the contrary, would be likely to render them dangerous neighbors. In order to avert the war from his states, he sent ambassadors to the consuls Otacilius and Valerius, to offer a treaty of peace and alliance. From this time, he was only an instrument in the disputes of the two nations. Though he showed himself more favorable to the Romans, by providing them, during the first Punic war, with necessaries of all kinds, he did not refuse the Carthaginians the aid they asked in the servile war, and was able, by his adroitness, to preserve the friendship of both. In the period which intervened between the first Punic war and the second, he turned his attention to the government. He enacted wise laws, and was wholly devoted to the happiness of his subjects. The encouragement which he extended to agriculture enriched him and doubled the revenues of the state. He kept his word pledged to his allies, and, when the Romans underwent a total defeat from Hannibal, at Thrasymene, Hiero proffered them provisions, men and arms, and sent them a golden *victoria*, 320 pounds in weight, which they accepted as a happy augury. This kind attention consolidated the league between Rome and Syracuse; and even the loss of the battle of Cannæ, which was followed by the defection of all the other allies of Rome, did not shake his fidelity. Hiero was not merely employed in the erection of temples and palaces, but also in the construction of military machines of all kinds, under the direction of the great Archimedes. With the intention of surpassing the magnificence of all other kings, he built a ship, which had never been equalled for magnitude and splendor, and, from the description of which, preserved in Athenæus, it must have resembled a floating city. But it being discovered that Sicily had no harbor adequate to the reception of this immense structure, Hiero resolved to make a present of it to king Ptolemy; and, as Egypt was at that time in want of corn, took this opportunity to send a great supply of grain to Alexandria. Hiero died B. C. 214. As his son Gelon died before him, he left the crown, after wearing it 54 years, to his grandson Hieronymus.

HIERODULOI (*holy ministers*). In the temples of the Greeks there was a class of youths and maidens, who were employed in adorning the temple, decorating the altars with wreaths, and embroidering and cleaning the veils and garments of the statues. These maidens were called *plyntridæ* and *ergastinæ*, and the youths and older male ministers were called *neocoroi*, *pastophori*, *hierophantæ* and *daduchoi*. But the *hieroduloi*, properly so called, are of a different nature. They had their origin in the Asiatic worship of nature. The primitive Asiatics worshipped the sun and moon. The goddess of nature, typified by the latter, was called *Venus Urania*, not in the sense of the Greeks, who understood by the term supernatural, heavenly beauty: the Asiatic Urania referred solely to the moon sailing in ether; and the worship of this goddess of the moon, is similar to that of the Assyrian, Phœnician, Persian, Cappadocian Anaitis, Semiramis, Atarogatis, Tauropolus, and to that of Cybele. In the rudest times of antiquity, young girls were sacrificed as victims in the worship of this goddess, who required the most beautiful firstlings. Afterwards, female slaves were substituted, who were either presented to the great goddess of heaven and nature, for her temple halls and pleasure groves, or were purchased by her ministers. These were obliged, in her honor, to surrender themselves, on the annual festivals, to the desires of the pilgrims and worshippers of the goddess. The male *hieroduloi* were youths who lacerated themselves with juggling fanaticism, and, in a fury, whirled round in circles, like the Turkish and Indian fakirs. Strabo speaks of 6000 *hieroduloi*, male and female, in the sacred environs of the temple of the Comanian goddess of nature,

in Cappadocia. In every temple of the Phœnician-Carthaginian Urania, even in the temples of the Ephesian and Phrygian Diana, there were female slaves, who were called, in the Phœnician language, *benoth* (i. e., young maidens), whence the name *Venus* is said to have been derived. The worship of that goddess was imported from Asia into Greece, and here, as well as in the famous temple of Venus, on mount Eryx in Sicily, we find troops of *hieroduloi* who were courtesans, and had to add all that they acquired by their mercenary charms to the treasury of the temple. More than one temple of Venus (among others, that in Samos) was built by funds thus acquired. We still possess, on the fragments of the frieze of a temple, and on two triangular candelabra vases, representations of these servants of Venus, which were formerly considered Spartan dancers, but in which the acuteness of Zoëga detected the true *hieroduloi*. They are represented in a graceful attitude, standing on their toes, in a dancing position, both arms gracefully raised, and turning their slender bodies to the seducing movements of their sacred dance. Their dress consists only of a short garment, gathered with a girdle, and is composed of the most delicate and transparent byssus, hardly reaching the knee. The arms and legs are entirely naked; on their feet they have sandals lightly laced; and, on their hair, bound together in a simple knot, they have a wreath, curiously woven of long, straight, radiating leaves or stalks, which, differing altogether from the head attire of the Grecian women, seems to indicate a foreign, Asiatic origin. Though the term *hieroduloi* was, perhaps, still unprofaned in the earliest times of Greece, when Locrian maidens were sent to Ilium as a tribute for the worship of Pallas, it subsequently denoted those well known servants of Venus, with whom Ionia and Cyprus supplied Greece Proper.

Hieroglyphics (from the Greek ἱερα γλυφη, sacred engraving) was applied by ancient writers exclusively to the sculpture and inscriptions on public monuments in Egypt, because it was thought that they were intelligible only to the priests, and those who were initiated in their mysteries; but, in modern times, the word has been used for any *picture-writing*; any mode of expressing a series of ideas by the representations of visible objects. Thus we speak of Mexican hieroglyphics, waving the idea of sacred, which the name implies according to its etymology. In this article, however, we shall treat only of Egyptian hieroglyphics, intending to return to the general subject in the article *Writing*. We shall also there speak of the interesting Mexican hieroglyphic, the original of which is in the Escurial, and a Spanish version of which was translated into English by Purchas (History of the Empire of Mexico, with Notes and Explanations, in part iii of Purchas's Pilgrimages); yet it will be necessary to mention cursorily some of the principal stages in the developement of that most admirable art, writing, in order to understand to which of them the Egyptian art of writing (hieroglyphics) belongs. Man loves the past. Whether prosperous or adverse events have marked the course of his life, he wishes to remember them, and wishes them to be remembered by his children. This feeling is one of those innate desires which Providence implanted deep in the human mind, which elevates man above the brutes, and which is intimately connected with the consciousness that he does not stand alone, but belongs to a human society, and not only to the present, but also to the past and the future. Who is so stupid as not to desire to know what his parents did, and to inform his children of what he has done? What was, then, the expedient which at first offered itself to man to enable him to commemorate events, to fix, as it were, the evanescent act? We answer, the picture, the physical representation of the event. What can be more natural, for instance, than a rude delineation of water, and persons drowning, if men wish to record a great inundation? This mode of writing, mixed with very few symbolical or conventional signs, is, to the present day, in use among the Indians of North America. Witness their descriptions of battles on buffalo skins, or the directions which one hunting party gives to others, or their inscriptions upon graves, explaining why and when certain persons were slain. Picture-writing—we mean here actual pictures, executed, however, for the purpose of commemorating an event, and not as works of art—exists among all but the most savage tribes, as ancient and modern writers amply prove. But it is plain, that, if certain events occur often, a certain sign, simpler than a complete pictorial representation of the event, will be adopted; for instance, to designate a battle, only a few dead bodies, and, in course of time, perhaps, only two arrows will be drawn; or, to indicate a victory, the head of the conquered general will be represented at

the feet of the conqueror, with a plant peculiar to the conquered country (as is the case in the Mexican hieroglyphics above-mentioned). Thus men would soon arrive at symbolical and conventional hieroglyphics, as a matter of convenience, if for no other reason; but, as their ideas enlarge, they become desirous to represent invisible things, ideas; for instance, in order to reckon time, the natural month would probably be designated by a moon (in many languages the words *month* and *moon* are related), and the number of them by points. But man goes farther; he wishes to express abstract ideas, such as *power*; and what is more natural than that he should designate this idea by some familiar object, which most strongly suggests the notion of strength or power, as, for instance, the picture of a lion? Thus he arrives at the symbolical hieroglyphics. The art of writing takes the same course which we suppose language to have previously taken; that is, it begins with concrete objects, and goes on to abstractions—a course which can be traced, in many instances, in all original languages. Language is first concrete, then symbolical, then abstract. All nations, at a certain stage of their existence, speak symbolically; and the language of poetry, in all ages, is symbolical. How many instances do we not find in the language of the Old Testament? And if Pythagoras, when he says, "During the storm, go and worship the echo," means *Retire to solitude during civil contention*, the whole phrase is symbolical. This circumstance, which springs, at the same time, from disposition and necessity (because the human mind cannot elevate itself immediately to abstraction, but can reach it only by gradual generalization), is of great assistance to man when his efforts to express himself by visible signs have reached the stage abovementioned. An eye, with a sceptre beneath, would not be understood so easily to signify a *king* at present, as it was by the Egyptians. Symbolical hieroglyphics must immediately produce conventional: they are, indeed, conventional themselves, as the symbol chosen is not the only one by which the same idea might have been expressed; and, besides, a sign which is symbolical for one generation, may be merely conventional for the next. Besides, the more men have to write, the less time can they bestow on their writing, and in the same proportion as the symbol gradually expresses more and more the general idea, the sign itself becomes less and less similar to the original symbol, until at last it is no longer to be recognised as the picture of an object, but takes the character of a mere conventional sign. This is the case with most of the signs of the Chinese writing, which no one could recognise as pictures of the objects for which they were originally intended. We have thus traced writing to the stage in which signs representing the object itself, symbols designating the object by association of ideas, and conventional or arbitrary characters, are used together. Of this manner of writing we still find instances among the most civilized nations. The Germans use a †, in works where the saving of space is important, for the word *died*. This is an instance of symbolical hieroglyphics, the cross indicating *death*, either because it was generally planted upon graves, or because it called to mind the death of Him, whose death is most important. In the same way, they write □ *m.*, for *square miles*. This is a figurative hieroglyphic. The Atlas of Las Cases (Le Sage) is full of symbolical, figurative and conventional, or, as they should rather be called, *arbitrary hieroglyphics*. In what way the human mind made the next great step of designating the grammatical forms, for instance, by adding to a hieroglyphic the feminine or plural sign (or, as we should call it, the *termination*), we shall treat of more fully in the article *Writing*. After the human mind has reached the point abovementioned in the formation of signs, it has two ways of farther progress. It may either generalize the sign, or generalize the thing signified by the sign. The first mode was adopted by the Egyptians. Thus the sign of an eagle, which, in the Coptic, that is, the Egyptian language, was called *ahòm*, was used by the Egyptians for the sound *A* in general. The other direction was taken by the Chinese, who founded their art of writing on the analogy of ideas. Thus, for instance, all the words which express manual labor or occupation, are composed, in their written language, of the character which represents the word *hand*, with some other, expressive of the particular occupation intended to be designated, or of the material employed. Plato tells us that Thoth, secretary to the Egyptian king Thamus, invented the alphabet, and Champollion has actually discovered that the Egyptians had a kind of hieroglyphic writing, which was merely phonetic, that is, was composed of a series of signs not having reference to the objects represented, but

merely to the sounds of the words expressed. Thus the figurative signs passed over into mere phonetic characters. This was not only the case in Egyptian writing: the names of the letters of the Hebrew alphabet lead us to suppose a similar transformation. We quote the following passage from a note of professor Moses Stuart to his son's translation of J. G. H. Greppo's Essay on the Hieroglyphic System of M. Champollion, Jr. (Boston, 1830). "One need only to read the interpretation of the names of the Hebrew alphabet successively, in order to believe that, originally, there was some analogy between the shape of the respective letters, and the objects by whose names they are called. For example, beginning with the alphabet, we proceed thus: *ox*, *house*, *camel*, *hollow*, *hook*, *armor*, *travelling-scrip*, *serpent*, *hand*, *hollow-hand*, *ox-goad*, *water*, *fish*, *prop*, *eye*, *mouth*, *screech-locust*, *ear*, *head*, *tooth*, *cross*. These make out the whole original alphabet of the Hebrews; and no one can well suppose that these names rather than others were given to the letters, except on account of some resemblance between them and the objects which bore these names. That the resemblances to these respective objects are not found in the present Hebrew alphabet, is no argument against the position; for all critics are agreed that the ancient Hebrew letters have exchanged their forms for those of a later alphabet," &c. So far professor Stuart. Before we give the system of Egyptian hieroglyphics, according to Champollion's ingenious discoveries, one remark may be allowed to us. In a certain sense of the word, the course which the Chinese have taken may be considered more philosophical than that of the invention ascribed to Thoth, the former being founded on the combination of ideas, and the latter on the mere external sounds; and yet the latter system has become, at least in our view of the matter (a Chinese, of course, would differ from us), much the more important. By about 40 signs we are able to express almost every sound, and, through them, every idea in its various shades (and, with most languages, from 23 to 27 signs are sufficient), whilst the Chinese have 10,000 characters in common use. Our system has become much the most abstract, and with this the Chinese reproach it, when they say, "That which enters the mind of a European enters through the ear" (meaning that our letters represent sounds), "while what enters the mind of a Chinese enters through the eye" (meaning that their signs designate immediately ideas); and the learned Remusat mentions the lively effect of the Chinese picture-writing, in comparison to that of our conventional signs. We can easily believe him. Suppose the Chinese to designate the word *tyrant* by a sign which their well executed writing should show to be derived from a tiger. But the difference, in common cases, is not probably so great as at first appears. In general, if we read a book, the signs do not suggest to us the sounds which they represent, and then the idea (though this is the case with children and illiterate people, who are accustomed to read loud, or, at least, moving the lips, a proof that, to them, the characters actually represent the sounds), but, from habit, the word suggests an idea. If we read, for instance, a word like *loveliness*, the idea which it represents is not produced within us by the slow process that the characters for *love* remind us of the sound *love*, and then of the idea, next *li* of *lovely*, and, at last, *ness* of the sound, and the general meaning of this syllable, and then the whole word of the sound *loveliness*, and the idea which this sound is intended to convey; but the whole word presents itself as one sign to the eye, and suggests, at once, the idea of *loveliness*. Now, generally speaking, there is probably the same process in the mind of a Chinese in common cases. He sees the sign, and it produces, at once, the idea. We may remark, too, as an advantage of our mode of writing, that the etymology of a word frequently has a wonderful effect on us, particularly in original languages, as Greek or German, and, to a certain extent, in derivative languages, as Italian and English. With these reservations, we may allow, that, in certain cases, the Chinese writing may have a much superior effect upon the mind, by presenting a visible image of the thing signified, since impressions received by the eye are almost always much more lively than those conveyed by sounds. A play, read in a room, does not excite our sorrow or our mirth so much as if we see it represented, and a hundred things may well be said or written, which would be considered highly improper or disgusting if painted or drawn. This explains what Champollion says of the remarkable effect which hieroglyphics have on one who understands them, because they include both symbolic and phonetic characters.—We will now give a survey of the hieroglyphic system. The characters used by the

ancient Egyptians, before their conversion to Christianity (after which they adopted the Greek alphabet, with a few supplementary letters), were threefold: 1. hieroglyphic; 2. hieratic; 3. demotic. The first were composed of images of visible objects; the second, of rude and indistinct outlines of the whole, or of parts of such images; and the third, of a still farther reduction of such outlines in a similar manner. The first kind, from which the others were derived, was originally a real picture-writing, representing ideas by their visible images when possible, or by obvious symbols when any direct representation was impossible. This mode of writing is only suited for a nation in the first stages of civilization, and man would soon discover some more complicated, but more perfect mode of representing what is usually expressed by words, of speaking, in short, by means of visible signs. But words are combinations of sounds, and the next step, therefore, was to devise some method of expressing sounds. As soon as such a device was adopted, any combination of sounds, that is, any word, whether the name of a visible object or of a mere abstraction, could be immediately represented to the eye. The Egyptians, who were, as every day shows more clearly, the most civilized of all nations known to us at a very remote period, arrived at this point very early. They selected several common and well known hieroglyphics, such as immediately suggested some word of frequent occurrence, and used them to express the initial sound of that word, or, as we should say, its first letter. The more simple outlines or fragments of these hieroglyphics, used in the hieratic character, would therefore have the appearance, as well as perform the functions, of letters; and, when rounded off into the demotic, epistolographic, enchorial (q. v.), or running-hand, would lose all resemblance to the figures from which they were originally derived. It is plain that these last characters might entirely supersede the use of hieroglyphics, or other symbols, from the facility with which they were formed. We shall see that they actually did so, for the ordinary purposes of life. Thus the demotic characters were, as has been now settled beyond doubt, nearly, if not strictly, alphabetical. The hieroglyphic character was thus rendered capable of expressing sounds, and consequently words, independently of pictured signs. These signs are, according to Champollion's great work, *Précis du Systéme Hiéroglyphique* (Paris, 1824), divisible into three distinct classes: 1. figurative signs, such as were the images of the things expressed; 2. symbolic; 3. phonetic, or expressive of sound. At a later period, probably, a fourth class was brought into use; that of enigmatical symbols, derived either from some very remote affinity between the object represented and the idea implied, or formed by a combination of different figures, apparently incapable of being thus united. We will mention here, in the outset, that Champollion's object, in the work above referred to, is to demonstrate the six following important points:

1. That the phonetic-hieroglyphical alphabet can be applied with success to the legends of every epoch indiscriminately;

2. Which is, in fact, the consequence of the first statement, that this phonetic alphabet is the true key of the whole hieroglyphical system;

3. That the ancient Egyptians constantly employed this alphabet to represent the sounds of the words in their language;

4. That all hieroglyphical legends and inscriptions are composed principally of signs purely alphabetical;

5. That these alphabetical signs were of three different kinds, the demotic, hieratic and the hieroglyphical, strictly so called; and,

6. That the principles of the graphic system, which he has laid down, and which he proves by a great variety of applications and examples, are precisely those which were in use among the ancient Egyptians.

As all visible objects, with all their parts, and in almost any position, besides an endless variety of arbitrary combinations, come within the scope of the hieroglyphic draughtsman, it might, at first, be supposed that the number of the characters would be almost unlimited; but the necessity of limitation must soon have been felt, for, unless the sense assigned to each character was fixed, the reader would be lost in vague conjectures, and, unless the number of characters was confined within certain bounds, no memory could retain them all. The whole number therefore observed by M. Champollion, after more than 20 years' study, was only 864, of which perhaps some are duplicates. He arranges them in the 18 following classes:

Celestial bodies, ...	10
Human figures in various positions,	120
Human limbs, taken separately, . .	60

Wild quadrupeds,	24
Domestic quadrupeds,	10
Limbs of animals,	22
Birds, either whole or in parts,	50
Fishes,	10
Reptiles, either whole or in parts,	30
Insects,	14
Vegetables, plants, flowers and fruits,	60
Buildings,	24
Furniture,	100
Coverings for feet and legs, head-dresses, weapons, ornaments and sceptres,	80
Tools and instruments of various sorts,	150
Vases, cups, and the like,	30
Geometrical figures,	20
Fantastic forms,	50
Total	864

The figures were arranged in columns, vertical or horizontal, and grouped together, as circumstances required, so as to leave no spaces unnecessarily vacant, which of course would often have happened, had they written their signs successively, as we do our letters, since the signs differ so much in shape and size. Here we must remember that the hieroglyphic writing is eminently monumental. Its special use was in inscriptions that were engraved or sculptured upon public edifices. It is also found executed in similar ways, upon objects which preserve the religious or domestic usages of ancient Egypt. It is delineated in numerous manuscripts; also on the wooden coffins of the mummies, and, finally, upon harder substances, such as baked or enamelled earth, &c. Hence, both from the nature of the signs employed, and from the situations in which they were chiefly used, the hieroglyphic writing is a species of painting, and the reason of the rule just stated, is therefore easy to be conceived. Beauty of appearance was never forgotten, and Champollion, in his letters from Egypt, dwells on the fine appearance of these various objects, executed with admirable exactness, and often painted with colors, which still continue very bright. The general order in which the characters are to be perused, is shown by the direction in which they are placed, as their heads are invariably turned towards the reader, or, which is the same thing, to that side of the tablet at which the inscription begins, whether it be right or left, for either was admissible in the pure hieroglyphic, though not in the demotic character. To this general rule, Champollion has met with only one exception in a hieroglyphical MS. in the royal collection; the figures, therefore, form a sort of procession, and seem, from their relative position, to be connected with each other. The figurative, or, as they are called by the English, the *pure hieroglyphics*, i. e., the images of the things signified, occur often either in an entire or an abridged but intelligible form; and some of that class were often used merely to determine the sense of the preceding figures, just as capital letters are employed by us to distinguish proper names or words of peculiar importance. This was the more necessary among the Egyptians, as their names were all significant, and liable to be taken as such, unless accompanied by some indication of their peculiar use. The hieroglyphic of *man* or *woman*, *god* or *goddess*, was consequently subjoined, according to the sex of the person or deity named. Thus the characters expressing *Ammon mai*, when alone, signify *Beloved by Ammon;* but, when followed by that which stands for *man*, represent a proper name, which the Greek would probably have expressed by *Philammon* or *Ammonophilus:* temple, image, statue, child, asp, and monumental pillar were, in like manner, expressed by figures, evidently representing the things meant. In the bass-reliefs at Medinet-tábu, the scribe recording a victory, has a hand with ciphers, expressing 3000, placed in the hieroglyphic column over his head, plainly indicating 3000 hands of men, slain or conquered in battle. Above this is the figure of a man, followed by 1000, evidently signifying 1000 prisoners taken. (*Précis*, pl. xix, fig. 1, 2.) The figure or outline of a boat, followed by a line, signifying *n* (i. e., *of*), and the name of a god, signifies the vessel of that god in which his image or shrine was carried on solemn occasions. *Sun*, *moon*, *star*, *vessel*, *scales*, *bed*, *bull*, *loaf*, *sistrum*, *fish*, *goose*, *tortoise*, *ox*, *cow*, *calf*, *haunch*, *antelope*, *bow*, *arrow*, *dish*, *altar*, *censer*, *flower-pot*, *enclosure*, *chapel*, *shrine*, &c., are among the words expressed hieroglyphically, by images of the objects themselves. These hieroglyphics, therefore, are called, by Champollion, *figurative proper*. Other terms, such as *sky* or *firmament*, and the names of the different gods, are rendered by very obvious symbols, still in some degree representing the object expressed, at least, according to the notions and dogmas of the Egyptians; the former, by the section of a ceiling, with or without stars subjoined; the latter,

by an outline of the animals sacred to the deity to be represented. These are termed *figurative conventional*. Sometimes only part of the object to be represented is painted or engraved, as the plan of a house, instead of a house itself. These hieroglyphics are called *figurative abridged*. Abstract ideas, however, could not well be expressed by images of visible objects; and metaphors, common in spoken language, when clothed in a visible form, gave birth to a second class of hieroglyphics—that of images used in a symbolical sense. These are the characters generally alluded to by the ancients, when they speak of hieroglyphics; and the circumstance that they are, from their nature, more abstruse and difficult of interpretation, was the occasion of the prevalent but mistaken notion, that all the figures on the Egyptian monuments are strictly symbolical—an error which led the learned world, for so many centuries, to such extravagant and contradictory interpretations. Almost all the figures of speech are, if we may so express it, placed before the eye by this class of hieroglyphics. "Two arms stretched up towards heaven" expressed the word *offering*; "a censer with some grains of incense," *adoration*; "a man throwing arrows," *tumult*. These instances, therefore, furnish examples of *synecdoches*. *Metonymies* are exhibited in "a crescent, with its horns bent down," for *month* (*Horapollo, II*, 12); in "a pencil and a palette," or "a reed and an inkstand," for *writer*, *writing*, *letter*, &c. The "bee," to signify *an obedient people*; "fore-quarters of a lion," for *strength*; "a hawk on the wing," for the *wind*; "an asp," for *power of life* and *death*; are so many metaphors symbolically expressed. As we are unacquainted with many of the ancient notions, prejudices, &c., and therefore with many of their associations of ideas, and with the transitions of meaning which many signs must have undergone, this class is the one which will always cause the greatest trouble to the decipherer. An ancient Egyptian writer, Horapollo (*I*, 20), tells us, that *paternity* and the *world* were expressed by the figure of a "beetle;" *maternity* by a "vulture." Who could have ascertained the signification of these signs, if not assisted by direct information of this kind? The head of the animal sacred to a deity, is often placed upon the figure of a man, to signify the deity itself. This certainly produced figures monstrous to us, but it is founded on the notion, which has prevailed among mankind from time immemorial, that some particular animal enjoyed the protection of a particular god. Even at present, in many Christian countries, certain animals are believed to be under the particular protection of certain saints; certain animals, too, are used in paintings, as symbolical accompaniments of apostles and saints.* Now the Egyptians, in writing their hieroglyphics, put the head of this animal upon the statue, instead of putting it by the side of it, as the owl is placed, by the Greeks, by the side of Minerva; thus the figure of a man, with the head of a ram, signified *Jupiter Ammon*; with the head of a hawk, the god *Phré*; with the head of a jackal, *Anubis*, and so on. The gods were also represented, by leaving out altogether the figure, and exhibiting only the sacred animal, with some of the divine attributes. Thus a hawk, with a circle on its head, signifies *Phré*; a ram, having its horns surmounted by a feather, or, more generally, by a circle, *Cnuphis*, &c. Lastly, there is a kind of hieroglyphics for the Egyptian gods, which we may call either *symbolic* or *enigmatical*; such as an *eye*, for *Osiris*; an *obelisk* for *Jupiter Ammon*; a *nilometer*, for the god *Phtha*. Spineto (see lecture iv, of his valuable *Lectures on the Elements of Hieroglyphics*, &c., London, 1829) ascribes these hieroglyphical representations of the deities to the sacred dread which all Oriental nations, and even, in some degree, the Greeks and Romans, had of pronouncing the names of the gods. "And although we find," he says, "these mystic names expressed phonetically in the hieroglyphical legends, yet we are to remember that the characters themselves were considered as sacred, and peculiarly fitted to be employed in religious matters. This is so true, that in all documents written in the demotic or common characters of the country, the names of the gods and goddesses were invariably written symbolically; just as the Jews never wrote at full length the ineffable name of *Jehovah*, but always expressed it by a short mark, which they pronounced *Adonai*." Champollion openly asserts that the Egyptians wrote the names of their principal deity, at least, in one way, and pronounced it in another. As the Egyptians were a very civilized nation, it is clear that hieroglyphics like those described (we mean

* An instance of a true hieroglyphic, among Christians, is the sign for the Deity, a triangle (alluding to the Trinity), with an eye in the middle (alluding to God's omniscience)—a hieroglyphic found in all Roman Catholic and Protestant countries of the European continent; for instance, on organs, over the altars, &c.

the figurative and symbolical) could by no means suffice to designate their various wants, occupations and ideas; and this want may be reasonably supposed to have led to the invention of the third class of hieroglyphics, which M. Champollion calls *phonetic*, i. e., designating a sound. He has also discovered the principle on which these signs were chosen to express one certain sound; it is this, that the hieroglyphic of any object might be used to represent the initial sound of the name of that object. The following table shows this more clearly: the first column gives the letter expressed by a hieroglyphic; the second, the English name of the object represented; and the third, the corresponding word in the Coptic (i. e., Egyptian) language.

Letter.	*Hieroglyphic.*	*Egyptian Name.*
A,	an eagle,	ahom.
—,	a piece of meat,	af *or* ab.
A, O,	a reed,	aka *or* oke.
B,	a censer,	berbe.
K,	a knee,	keli.
K,	a basin,	knikiji.
G,	———,	gnikiji.
K,	a cup,	klaft.
T, Th,	a beetle,	torres. thorres.
L,	a lion,	laboi.
M,	an owl,	moulaj.
—,	water,	môou.
N,	inundation,	neph.
—,	vulture,	noure.
P, Ph,	mat,	prêsh. phrêsh.
R,	mouth,	rô.
—,	tear,	rimé.
—,	pomegranate,	roman.
S,	star,	sion.
—,	child,	si.
—,	egg,	soouhi.
T,	hand,	tot.
—,	wing,	ten-h.
SH,	garden,	shnê.
—,	antelope,	shash.
J,	swallow,	jal.
Kh,	fan,	khai.

This principle being admitted, it follows, that the number of phonetic hieroglyphics might be increased almost without limit, as the names of a great many different objects might have the same initial sound. The whole number of elementary sounds intended to be represented was 29, which is certainly very great for so early an alphabet—a circumstance which deserves still more attention, if we consider that phonetic hieroglyphics were in use with the Egyptians from time immemorial (see Spineto, page 95 et seq.). The great number of hieroglyphics, which the principle above-mentioned would assign to each of these sounds, would have been a continual source of error. The characters, therefore, thus applied, were soon reduced to a few; and, as far as has been hitherto ascertained, 18 or 19 is the largest number assigned to any one letter, while few have more than five or six representatives, and several only one or two. The pronunciation of the Egyptian language was, probably, rapid and indistinct; besides, several dialects were spoken in different parts of the country, and thus consonants were easily interchanged, as we find to be the case at present with so many languages. This was probably one of the reasons, or the only one, that the vowels are so often left out in the hieroglyphics; just as is the case in Hebrew. The rule which may be considered as having generally guided, in choosing between so many signs for the same sound, was, to take that sign which seemed most appropriate to the meaning of the word which was to be written phonetically. If the name of a king was to be written, those phonetic hieroglyphics would be taken, which represented things of a noble character. The goose, called *chenalopex*, we find usually representing the *S* of *Si*, the word for *son*, on account, as Horapollo says, of the attachment of this bird for its young. If we had to write the word *London* in hieroglyphics, and were to choose between the sign of the *lamb* and of the *lion*, both of which might be used for an *L*, we should certainly take the latter, on account of the heraldic relation which this animal bears to England; and, for the *N*, we might choose, among the many figures capable of representing it, that of a *fishing-net* or a *navy*, as reminding us of the sea, to which London is so much indebted; and so on. Thus the *eagle* is frequently used for *A*, in the names of Roman emperors, and the *lion* for *L*, in those of Ptolemy and Alexander. With the Chinese *hing-ching* (q. v.), or phonetic signs, a similar choice takes place. This is a great addition in writing certain words, because it assists in conveying a favorable or unfavorable idea, and thereby adds to the force of the word itself. What a scope for wit would such a choice of signs afford, in the correspondence of modern fashionable society! The Egyptians used a very great number of abbreviations in writing phonetically, of which the late doctor Young has shown many in the registries of deeds,

drawn up under the Ptolemies, and published by him. Though, as we have stated, Champollion considers the phonetic alphabet the true key to the whole hieroglyphical system, all the sorts of the hieroglyphical characters are used together; and, had not so much already been done by the critical ingenuity of the learned, we should almost despair of ever being able to read inscriptions, in which such different signs are used promiscuously; yet we are informed that Champollion has acquired much skill in deciphering these writings, so mysterious for thousands of years, and reads most of them with comparative ease. Those hieroglyphics, which are called *enigmatical*, may be considered a division of the symbolical. They are a more complicated and obscure kind, probably formed by the *anaglyphs* or allegorical sculptures, mentioned by Clement of Alexandria. They appear to have been bass-reliefs or tablets, containing mythological or historical subjects, expressed in allegorical delineations, or implied by the figures of human beings, with heads of birds and beasts, such as those with which the Egyptian temples were filled; and among which we must rank the sphinxes, forming avenues at their entrance. Symbols such as these, grouped and combined according to certain rules, might be so disposed as to form an allegorical representation of the religious and philosophical doctrines of the Egyptians. None but the initiated were suffered to dive into these mysteries, and the key to them was kept exclusively in the hands of the priesthood. As the ordinary style of hieroglyphics must have been legible for every well educated Egyptian, a more refined system was devised; a language more strictly ideographical was invented; metaphors, similes, imagery and allegory were imbodied in actual forms, and the links, connecting the chain of ideas thus expressed, were implied, either by the relative position of figures, their attributes, or their ornaments, so as to present to the eye of the initiated an intelligible, and, if such an expression may be allowed, a legible picture, in what appeared to the uninitiated an incoherent tissue of extravagance. "The images of the gods in the sanctuaries, the human beings with heads of beasts, or beasts with human limbs, might be termed," says Champollion (*Précis*, 427), "the *letters* of that secret writing, which consisted of the anaglyphs or enigmatical sculptures, forming the fourth class of hieroglyphics." "It was in this sense, probably," he adds, "that the Egyptian priests called the ibis, the hawk and the jackal, the images of which were carried in procession on certain solemn occasions, *letters* (γράμματα, Plutarch, *De Iside et Osiride*), as being the true elements of a sort of allegorical mode of writing." It is in the interior of their temples and their sepulchres, that these symbolical records are found "distinguishable without difficulty," says the same writer, "from the historical scenes and civil or religious ceremonies, represented in the bass-reliefs and paintings on the walls of their public buildings." The origin and characteristics of the *hieratic* or sacred character, so denominated to distinguish it from the *demotic*, or popular, have already been briefly stated. It consists of nothing more than imperfect and dashing sketches of the hieroglyphics, which thus assumed the form of a flowing and rapid hand. For figures and symbols, it often substitutes phonetic groups or arbitrary characters, which bear no resemblance to the hieroglyphics for which they stand. Religion and science, both fostered by the priest, seem to be the only subjects for which this character was used; nor did it undergo any material change in its form and structure, during the many ages through which it was used, resembling, in this respect, the use of a *court hand*, as it was called for centuries, in copying records and other legal proceedings in England and the continent of Europe, and the long continuance of a particular phraseology in legal instruments. The real hieratic character resembles the Chinese, and is written with as much rapidity. One peculiarity of this character deserves notice here. In hieratic texts, the oval frame enclosing the name of kings, called *cartouche* (q. v.), is expressed by a semicircle at the beginning of the word, as might be expected; but at the end, instead of a corresponding curve, followed by a straight line, expressive of the remainder of the frame, as is usually the case in the demotic character, three, four or five dashes, either straight or slightly curved, are substituted for it. The common Egyptian character, called *demotic* from its popular use, *epistolographic* from its fitness for letter-writing, and *enchorial* from its being peculiar to Egypt, and distinct from the Greek, so familiarly known there under the Ptolemies, seems to have been derived from the hieratic by nearly the same process as the latter from the hieroglyphics. It is, however, more simple; not strictly alphabetic, because a small number of images or figures are still found in

it; some few symbols, also, connected with religious subjects, occur; but these figures and symbols are almost invariably so curtailed and simplified, as to lose all resemblance to the objects expressed. The whole, therefore, has the appearance of a written alphabet. The number of equivalent signs is much smaller, the whole of those which clearly differ from each other not exceeding 42. In the direction of the lines from right to left, and in the suppression of many vowels, this system of writing resembles that of the Phœnicians and Hebrews.

Numeration by Hieroglyphics. The units are expressed by single upright strokes, and they are always repeated to mark any number below 10. The number 10 is represented by an arch, either round or angular. The repetition of these arches produces the repetition of as many tens up to 90. A hundred is exhibited by a figure very much resembling our 9. This same figure is again repeated for every 100, for any number below 1000. One thousand is represented by a cross, over which is a figure like). Thus, to express the numbers 2, 3, 4, 7, &c., we are to mark 2, 3, 4 or 7 upright strokes. To signify 20 or 90, we are to write 2 or 9 angular or round arches: the number 42, for instance, is expressed by 4 arches, which mean 4 times 10 = 40, and by 2 upright strokes, which mean 2. To signify the ordinal numbers, we are to place at the top of each of the numbers a figure, which resembles our 8 placed horizontally (∞); thus a single upright mark, with the horizontal ∞ over it, would signify *first;* and, if this figure be changed into one like the three sides of a square, then the numbers will signify the *first time*, &c. (*Spineto*, lect. ii, p. 72). This system, though much inferior to that admirable invention, by which the place of the number indicates what product of 10, or 100, or 1000, &c., it is, is yet greatly superior to the Greek and Roman numeration.

But upon what basis does all this theory rest? The answer to this question is the account of one of the most ingenious discoveries in the history of mankind; and, if the invention of the fluxions, by Newton, and the infinitesimal calculus, by Leibnitz, is designated as the most brilliant proof of the calculating and abstractive power of the human intellect, the deciphering of hieroglyphics, which, for thousands of years, lay before us sealed up, may well be called the masterpiece of criticism. We shall here give a brief outline of the history of this discovery, which has become still more interesting of late, by the dispute for priority between the French, who claim it for their countryman Champollion, and the English, who claim it for the late doctor Young, though impartial readers will probably decide for the former, without any derogation from the great merits of doctor Young. It has been erroneously asserted, that the hieroglyphic writing was a mystery known only to the Egyptian priests, and carefully concealed by them from the world. This opinion is directly contradicted by a remarkable passage of Clement of Alexandria (*Stromata*, v. 657), who expressly states, "that the educated Egyptians learn, first, the Egyptian manner of writing called *epistolographic* (enchorial or demotic), then the hieratic, and, finally, the hieroglyphic." But, at a later period, after the introduction of Christianity, when the Grecian alphabet was adopted in Egypt, the old modes of writing were neglected, and even the knowledge of them became finally lost. If we derive no information from the Greek and Roman authors on this subject, it may be accounted for on the ground, that they considered it too well known to require explanation; and in fact the passage of Clement of Alexandria, above referred to, is so general as to have been entirely unintelligible, before the discoveries of modern scholars had explained it. At the epoch, then, of the revival of learning, nothing was known of the nature of hieroglyphics. The Jesuit Kircher (q. v.) involved the subject in a learned smoke in the 17th century. Warburton (*Divine Legation of Moses*) discussed the ancient texts, and made some approach to the discovery of alphabetic characters; but it was reserved for the 19th century to solve this great enigma. The learned Zoëga, a Dane, in his celebrated work *De Obeliscis*, which appeared in 1800 (dated 1797), threw a strong light on Egyptian antiquities and history. Quatremère, a Frenchman, demonstrated the identity of the Coptic and the Egyptian language in his *Recherches sur la Langue et la Littérature de l'Egypte* (1808)—a most important and indispensable step in the progress of discovery. But the monument which led directly to the knowledge of the Egyptian manner of writing, was the Rosetta stone, a mutilated block of basalt dug up at Raschid (Rosetta) in Egypt, by the French troops, when building the fort St. Julien. This stone contained an inscription in three characters, one of which, in Greek, concluding with these words, was found to

contain a decree in honor of Ptolemy Epiphanes; "This decree shall be engraved on a hard stone, in sacred, common and Greek characters" (ἱεροις και ἐγχωριοις και ἑλληνικοις γραμμασιν.) The stone fell into the hands of the English after the French troops in Egypt had capitulated, and was deposited in the British museum. The society of antiquaries in England undertook the investigation of the stone, and caused an engraving of the inscription to be distributed to learned individuals and societies in Europe and America. Porson (q.v.) and Heyne (q. v.) furnished translations of the Greek text, which was rendered very difficult by the mutilation of the stone and other circumstances. The next attempts were directed to the enchorial text. The distinguished Orientalist Sylvestre de Sacy, in Paris, detected the words *Alexander* and *Alexandria* from their corresponding situations in the enchorial and Greek text, his attention being attracted by the repetition of a certain group of equal signs. Mr. Akerblad (q.v.), a Swede, constructed an alphabet of the enchorial character, which has not, however, proved correct in all points. Doctor Young (q. v.) next furnished an interpretation of the enchorial text by placing it side by side with the Greek text, in which he was guided by the recurrence of the proper names, and employing the alphabet of Akerblad in deciphering it. His first writings were in the 18th volume of the *Archæologia* (1815), and in the *Museum Criticum* (part vi, 1815); but the most important of his productions at this period was the article *Egypt*, in the Supplement to the *Encyclopædia Britannica* (vol. iv, 1819). On these papers are grounded the claims of doctor Young, whose merits are undoubtedly great, to the priority in the discovery of the interpretation of hieroglyphical writing, which, we think, can be shown to be without foundation. In 1822 appeared M. Champollion's letter to M. Dacier, in which the phonetic theory is fully displayed. Two years afterwards, Champollion published his *Précis du Système Hiéroglyphique* (1824), of which a second edition appeared in 1828. In this work he has perfectly developed his great discovery of the phonetic character of the hieroglyphics; he has deciphered the proper names of sovereigns of Egypt from the Roman emperors back through the Ptolemies, to the Pharaohs of the elder dynasties, and detected the hieroglyphical expression of a large number of natural relations, grammatical accidents and terms of the vocabulary. His labors have already thrown a great deal of light on the early history of Egypt; the walls of the temples and obelisks, and of monuments like the Rosetta stone, are covered with historical inscriptions, and a great number of papyri are in existence, written both in hieroglyphics and enchorial character; and M. Champollion has lately returned from the land of mysteries with a great mass of materials for future researches. An impartial examination of doctor Young's article *Egypt*, we think, will show that he is not the author of this great discovery. In the sec. vii of the article, entitled "Rudiments of a Hieroglyphical Vocabulary," he attempts to analyze and interpret 218 characters or groups of characters, in going through which he no where distinctly asserts that any of them are phonetic; and M. Champollion has rejected 141 of his explanations as erroneous. After an analysis of the name of Ptolemy, which is altogether erroneous, he says that this is an instance "of the few proper names, in which some of the steps may be traced, by which alphabetical writing seems to have *risen out of* the hieroglyphical." His analysis of Berenice, group No. 60, furnishes another specimen of the actual amount of doctor Young's knowledge of the alphabetic character of hieroglyphics. Now it may be observed, that he proposes this analysis in two out of more than two hundred groups, without any intimation of there being any thing novel or important in it; he gives them as specimens of the manner in which, "*in a few proper names*," traces of a transition from hieroglyphic to alphabetic writing may be found; many of the characters he reads as syllables; he proceeds, when possible, by identifying the hieroglyphic figures with the enchorial character, which latter he expressly declares to be *not* alphabetical; and, finally, at the end of his vocabulary, he says, "the phonetic characters will afford something like a hieroglyphic alphabet, which, however, is merely collected as a specimen of the mode of expressing sounds in some particular cases, and not as having been universally employed, where sounds are required." Champollion's own statement of the difference between his own system and doctor Young's is sufficiently clear on this point. We are sorry to see to what a degree of obstinacy national vanity may lead, when we find the merits of Champollion treated, in English works on hieroglyphics, as secondary, or allowed with a certain reluctance. We look with eagerness to the forthcoming work of Cham-

pollion for further contributions to the history of that nation, before whose works Belzoni and Denon, and so many other travellers, have been lost in amazement.—Lastly, we must mention the system of Spohn and Seyffarth, two German professors. The former is recently dead, and the latter has developed farther the system of the former; which is chiefly that the Egyptians originally borrowed their alphabet from the Phœnicians (Spohn having discovered some real or apparent resemblance between some demotic letters and Phœnician characters), but that, the Egyptians being fond of variety, they first increased the number of their ordinary characters very amply; then, from the same love for caligraphy, gave them the forms now found in the hieratic texts; and, lastly, by way of attaining the acme of caligraphic excellence, arranged all sorts of figures of all sorts of things in something like forms, or assumed them as symbols of their letters, in order to serve as substitutes for them. These are the hieroglyphics; so that, in this case, against all probability, the human mind would have proceeded from the simple to the complicated, the reverse of what generally and very naturally takes place. This system, too, assumes the Rosetta stone as its basis. (See *Rudimenta Hieroglyphices*, Leipsic, 1826, a work published from the papers of Spohn by Seyffarth, who is a professor at Leipsic.)—For further information on the subject of hieroglyphics, see Champollion's *Précis*, his letters to the duke of Blacas d'Aulps, his letters written from Egypt, and the great work which he is preparing from the stores collected during his long stay in Egypt; doctor Young's article *Egypt*, in the Supplement to the *Encyclopædia Britannica*, his Account of Egyptian Antiquities (London, 1823, &c.); Jablonski's *Pantheon Ægyptiacum*, and the marquis Spineto's Lectures, which, though it contains a few theories perhaps too boldly advanced, yet is a lucid and excellent work. The translation of M. Greppo's work, by Mr. Stuart, which we have mentioned already, besides the information on hieroglyphics which it contains, strives to show how important this knowledge may become for biblical criticism.

Chronological Periods of Egyptian History—which are of great importance for the subject of this article. From the histories of Egypt by Manetho, Herodotus, Diodorus, Strabo, Plutarch and others, and from the discoveries of Champollion, chronologists have been led to divide the history of the Egyptian empire into five periods. They are described as follows by the marquis Spineto (p. 15, seq.): "The first begins with the establishment of their government, and comprehends the time during which all religious and political authority was in the hands of the priesthood, who laid the first foundation of the future power of Egypt, founding and embellishing the great city of Thebes, building magnificent temples, and instituting the mysteries of Isis;—from Misraim to Menes.—The second period begins at the abolition of this primitive government, and the first establishment of the monarchical government by Menes. From this time commences what is generally called the Pharaonic age, which ends with the invasion by Cambyses. This is doubtless the most brilliant period of the Egyptian monarchy, during which Egypt was covered with those magnificent works, which still command our admiration and excite our astonishment; and, by the wisdom of its institutions and laws, and by the learning of its priests, was rendered the most rich, the most populous, and the most enlightened country in the world.—The third epoch embraces nearly 200 years, and begins with the overthrowing of the empire of the Pharaohs by Cambyses, 529 B. C., and ends at Alexander.—The fourth epoch embraces the reign of the Ptolemies. It begins at the death of Alexander, or rather at the elevation of Ptolemy Lagus to the throne of Egypt, 323 B. C., and ends at the death of the famous queen Cleopatra, when that kingdom became a Roman province.—At this period, which precedes the birth of our Savior by two years only, the fifth epoch begins, and continues to the time when, about the middle of the fourth century, the Christian religion having become the religion of the country, the use of hieroglyphics was for ever discontinued, and the Coptic characters were generally adopted."

We shall now exhibit an outline of Egyptian mythology, taken from an Appendix, by Mr. Isaac Stuart, to the above translation of Greppo. Mr. Stuart principally follows Spineto. We give more room to it than to corresponding articles relating to other nations, on account of the high and increasing interest of the subject, and the little knowledge generally possessed respecting it.—"The origin of the world from a dark primitive chaos, is a dogma belonging not only to almost all the Oriental nations, and to many of the Greek schools, but fully believed by the ancient

Egyptians. Mind and matter were supposed by them to have coexisted from all eternity, and it was the influence of mind upon matter, which reduced the latter to form, and brought it forth from darkness to light. The ancient Egyptian philosophers all represent this mind as infinite and eternal; as presiding over all other gods, both spiritual and material; as having given origin to the world, and as governing and penetrating through all nature. This supreme mind was the Demiurgos of the Egyptians, their god Ammon. It would be interesting here to trace out the analogy between the philosophy of the Greeks and Egyptians, about the origin of the world and of the souls of men. But we can only advert, at present, to a few traits. The theory of Orpheus about an immense egg of matter, from which, by the fiery nature of spirit, the world was hatched, was borrowed from the Egyptians, and was carried by him from Egypt into Greece, where it became the basis of the Stoical system of active and passive principles. Again, that belief in the spiritual origin of the soul, which may be traced in much of the philosophy of Greece, sometimes in a pure form, and sometimes more or less adulterated, was also an important dogma of the Egyptians, though by them it was blended with the doctrine of metempsychosis. Jablonski, after collecting strong evidence of this fact from ancient writers, thus describes the views which the Egyptians had of the soul: 'Nempe Anima, secundum Ægyptios, erat τὸ θεῖον, *Divinitas*, vel *Essentia Divina*, quæ a sede suâ veluti delapsa, aliquamdiu per homines et animalia transibat, donec ad pristinum locum rediret.' (*Pantheon Egyptiacum*, p. 32.) All the animated part of creation being distinguished by sexes, and the Egyptians regarding nature as productive and animated, they were thus led gradually to transfer their notions of gender to Ammon, who generated all things. In one point of view, however, they acknowledge both a *male* and *female* principle in this supreme god of their theogony. One of the symbols made use of to represent Ammon was the head of a ram, or a ram holding between his horns a circle.* Wherever either of these symbols occurred, this deity was called *Nef*, *Nouv* or *Chnouphis*,† *Noub* or *Chnoubis*; all which appellations are proved, by Champollion and by M. Letronne, to signify one and the same attribute of Ammon, viz., his *male nature*. In this form, Spineto remarks, that 'he was considered as one of the modifications, or rather an emanation, of the great Demiurgos, the primitive cause of all moral and physical blessings. He was then called the *Good Genius*; the male origin of all things; the spirit which, by mixing itself in all its parts, animated and perpetuated the world.' Virgil describes him very well in his *Æneid*, lib. vi. 726:

Spiritus intus alit, totamque infusa per artus
Mens agitat molem, et toto se corpore miscet.

He is sometimes symbolically represented by a large serpent, which designates him as the spirit who flows through the whole earth. It is this spirit to which Horapollo refers in the following passage:—Οὕτω παρ' αὐτοῖς τῷ παντὸς τὸ δικηον ἐστὶ πνεῦμα (*Hieroglyph.*, lib. i. cap. 64.). In this form he is called *Agathodæmon* by the Greeks. The female principle in nature was represented by the goddess Neith, another emanation from the Demiurgos. 'This goddess,' says Spineto, 'occupied the superior part of the heavens, inseparable from the first principle, and was considered also as presiding over the moral attributes of the mind. Hence wisdom, philosophy, and military tactics, were departments that had been attributed to her, and this consideration persuaded the Greeks to look upon her as their *Minerva*, who was regarded as equally the protectress of wise men and warriors.' The similarity between the Egyptian *Neith* and the *Minerva* of the Greeks, is indeed very striking, and goes far to prove that the Greeks derived their goddess from Egypt. Besides the identity of their offices, both presiding over philosophy and war, the origin of both is similar. The Neith of the Egyptians was an emanation from Ammon, their supreme god; the Minerva of the Greeks sprung from the brain of Jupiter, the supreme god of the Grecian mythology. According to St. Croix, Egyptian colonies from Sais carried over the ceremonies of Neith to Athens, where she became the Ἀθήνη of the Greeks (the Minerva of the Latins). At the period when she was introduced into Athens, the partisans of Neptune suffered severe persecution, and Neptune was entirely supplanted by Neith. This fact gave rise to the fable about the contest between this goddess and Neptune. The goddess Neith was symbolically represented by a vulture, which is the usual image

* "The names of all the divinities whom we shall mention, are represented phonetically, figuratively and symbolically. We shall select only now and then from these representations."

† "*Chnouphis*, in the old Egyptian language, signifies *good*."

of *maternity*. Her peculiar place of worship was in the city of Sais, where she had magnificent temples, one of the propylæums of which, on account of the enormous size of the stones and colossal statues, is said 'to excel every thing of the kind before seen in magnificence and grandeur.' The following inscription, in hieroglyphics, upon one of her temples, is very remarkable, both 'as giving a sublime idea of the creating power of nature,' and as presenting a striking correspondence with the idea given in Scripture of the Supreme Being. It is thus interpreted by Champollion: '*I am all that has been, all that is, all that will be. No mortal has ever raised the veil which conceals me; and the fruit I have produced is the sun.*' Jablonski establishes the fact, that the priests of Sais regarded Neith, as the priests of Memphis and of Thebes regarded Ammon Chnouphis, viz., as the *mens æterna ac opifex* (*Pantheon Egyptiacum*, lib. i. cap. 3). To this spirit was attributed the origin and manner of all existences, and to its decree and ordination every thing was referred, as to its cause. To this spirit, too, the reader will recollect, was attributed an existence from and through all eternity, and a dwelling in the upper world far above and beyond the vision of men. The correspondence, then, between the two first phrases of the inscription at Sais, and the following passages employed in Scripture to designate the Deity, will appear very striking. *Which was, and is, and is to come* (Rev. iv. 8). *The same yesterday, to-day, and for ever* (Heb. xiii. 8). *I am that I am* (Exodus iii. 14). *No man hath seen God at any time* (John i. 18). *Who only hath immortality, dwelling in the light which no man can approach unto; whom no man hath seen or can see* (1 Tim. vi. 16). While upon this subject, we cannot but notice another description of the Supreme Being, analogous to that in Scripture. It occurs in the sacred books of the Hindoos, called the *Vedas*. Speaking of Vishnoo, the supreme god of the Hindoo mythology, it is said, '*All which has been, all which is, and all which will be, are in Vishnoo. He illuminates every thing, as the sun illuminates the world.*' (See *Recherches du Paganisme*, by De Sacy, vol. ii. *De Triplici Theologia Mysteriisque Commentatio*, p. 45.) Amid the gross and materializing views which pervaded many of the religious systems of the ancient world, it is pleasing to find some at least recognising the *spiritual existence of one Infinite Mind*. This seems very evidently to be the case with the system of the Hindoos; and among the Egyptians, though material gods and goddesses emerged from the sun and moon, the zodiac, and whole planetary system, to throng their mythology; though they conjectured that various divine personages emanated from Ammon himself, and this in the gross way of heathenish conceit; still they had some pure conceptions of a Supreme Deity. Such facts go far to prove something like a religious instinct in man, a nature which, however degraded he may be, implants the conviction of an exalted Power, and leads him to express his views of it by some dim and imperfect emblems. But we must proceed to notice other gods of the Egyptian mythology. The god *Phtha*, whose image Champollion has found always sculptured near the image of Ammon Chnouphis, on the bass-reliefs of Thebes, Ipsamboul, Edfou, Ombos and Philæ, belonged to the family of Ammon, and was the son of Ammon Chnouphis. He is symbolically represented by a human form with the head of a hawk, by a peculiar cap or head-dress, and sometimes simply by a hawk holding an emblematical head-dress. His functions are thus described by Spineto (p. 129):—'He was the god to whom the priests attributed the organization of the world, and consequently the invention of philosophy, the science which exhibits the laws and conditions of the very nature he had organized. He was considered as the founder of the dynasties of Egypt (in the fabulous age of Egyptian history), and the Pharaohs consecrated to him the royal city of Memphis, the second capital of the empire, where he had a magnificent temple superbly embellished, in which the grand ceremony of the inauguration or installation of the Egyptian kings was splendidly performed; and he was also considered as their protector, by the titles they had assumed of *Beloved of Phtha*, *Approved of Phtha*, and the like. Under one form, in which Phtha is called *Socari*, he is connected with the Egyptian *Amenti*. Phtha was assimilated by the Greeks to their Ἥφαιστος (Vulcan). Spineto thinks he was 'a very superior being to this blacksmith.' But there is an evident resemblance in their functions. Diodorus Siculus states, that the Egyptian priests regarded Phtha as the inventor of fire; and, as has been already remarked, he was the great artist of the earth. So Vulcan was regarded by the Greeks as the god who presided over fire, and as a great artist, whose forges were situated in various parts of the earth. Champollion remarks, 'that many passages in ancient authors attest

the fact that one of the principal gods in Egypt, who was likened by the Greeks to their Ἥφαιστος, bore the name of *Phtha* in the language of Egypt.' Among other evidence of this fact, he cites the Rosetta inscription, and an old Theban Coptic homily, composed by S. Schenouti, which designate Ἥφαιστος and Phtha as the same god (*Précis*, p. 149—151). The divinities whom we have now described, were among the principal of those who inhabited the upper world, and who are ranked in the first class of Egyptian gods. But the Egyptians supposed the earth itself to be subject more directly to the power of gods who were *visible*. The most important among these was the sun, which luminary, on account of its being the source of so many blessings, has, among almost all heathen nations, been worshipped as a god. Its influence in promoting the alternation of day and night, and the change of seasons, in reänimating nature, and in maturing the products of the earth; its appearance in the heavens, being the most brilliant luminary upon which the eye of man is fastened;—all these circumstances led the Egyptians to consider the sun as the deity who presided over the *physical* universe, and as 'the eye of the world.' One manner in which he was hieroglyphically represented was by a globe, which was usually of a reddish hue, and stood upon the head of a hawk. He was called, in the Egyptian language, *Re* or *Ri*, and derived his origin from Phtha, whose son he is often called, and whom he succeeded, according to the priests, in the government of Egypt. 'In consequence of this belief,' says Spineto, 'all the Egyptian kings, from the earliest Pharaohs to the last of the Roman emperors, adopted, in the legends consecrated to their honor, the pompous titles of *offspring of the sun*, *son of the sun*, *king like the sun of all inferior and superior regions*, and the like.' This last title is fully explained in a letter from Champollion, from which we learn that the double destiny of the soul was symbolized by means of the march of the sun in the upper and lower hemispheres. Splendid worship was performed in honor of the sun in Egypt, and Heliopolis (ἡλίου πόλις, i. e., *city of the sun*) was particularly consecrated to him. We might exhibit here some analogies between the *Re* of the Egyptians and the *Phœbus* or *Apollo* of the Greeks and Latins. But we must leave these, and also the consideration of other planetary divinities, in order to describe a few more important personages in the Egyptian Pantheon. Inscriptions are frequently found which contain the names of divinities, written both in Egyptian and in Greek. In this form occurs the name of a goddess called *Sate*, who was assimilated by the Greeks to their Ἥρα (the *Juno* of the Latins). She is a goddess of the first rank, and she is represented as the daughter of the sun, and as partaking with her father in employments that have respect to the physical universe. 'She seems to have been,' says Spineto, 'the protectress of all the Egyptian monarchs, and especially of the Pharaohs of the eighteenth dynasty—a dynasty which reckons among its members the greatest kings that ever reigned over Egypt; a Mœris, an Amenophis II, an Ousirei, a Ramses Meïamoun, the grandfather of Ramses Sethosis, so well known by the ancients under the name of *Sesostris*.' The image of this goddess occurs in many temples of Upper Egypt and of Nubia; in the temple of Elephantina, she is exhibited as receiving offerings from Amenophis II, and presenting this prince to Ammon Chnouphis, who sits upon a throne. The frequent occurrence of her image near to that of Ammon, to whom she is in this way addressing some service, proves that she was an important personage in his family. Her emblems and titles are very splendid. The following is an example of the latter: 'Sate, the living goddess, the daughter of the sun, the queen of the heavens and of the earth, the ruler of the inferior region [which here designates Lower Egypt, according to Spineto], the protectress of her son, the lord of the world, the king of the three regions [Upper, Middle and Lower Egypt, according to the same], son of the sun, Phtamen Ousirei.' Champollion describes her characteristic emblem as the upper part of a head-dress, called *Psheut*, adorned with two long horns. This is placed upon the head of an image, which represents a woman with the sign of divine life in her hands. Sme is another goddess of the first rank among Egyptian divinities, whose employment seems chiefly to have been in the Egyptian *Amenti*. Spineto thus describes her: 'She was called by the Greeks Ἀλήθεια, and answers to Themis, the goddess of justice and truth. These attributes evidently show her to have been another representation of the infinite Power, who continued to influence and to act upon the destinies of men, even after death, in a future life; for we find this goddess almost invariably represented on the monuments exhibiting the ceremony of funerals, perpetually leading the soul

to the balance, where the deeds and actions of its life were to be weighed, previous to its being introduced to Osiris. She is figuratively represented by the image of a woman, holding the sign of divine life, and having her head decorated with a feather, which is the peculiar distinction of all her images. Symbolically, she was exhibited by the great serpent, who was the emblem of immortality and of wisdom.' (*Lect.* iv.) Such are some of the principal gods and goddesses in the Egyptian Pantheon. The most important of the second rank are the goddess Isis, and her brother and husband Osiris, to whom, following the selection of Spineto, we shall devote a few details. Osiris was the chief god of the Egyptian *Amenti*, answering to the *Pluto* of the Greeks and Latins. By some, Osiris is said to have been the *Sol inferus*, that is, the sun when it passed into the lower hemisphere, and through the autumnal and wintry signs of the zodiac, in opposition to the *Sol superus*, or sun when it passed through the upper hemisphere, and through the summer signs of the zodiac. Jablonski attempts to establish this supposition, though he errs in confounding the name of Serapis with Osiris (*Pantheon Egypt.*, lib. ii. cap. 5). But whether this was the case, or whether Osiris is to be regarded as an entirely distinct divinity, we have not now the means of determining; it is sufficient for our purpose to know where his dominion was exercised. This was over the souls of men after their decease—a fact which is revealed by almost every legend and painting relating to the dead. Spineto furnishes a description of a representation of this kind in his fifth lecture (pp. 150, 156). Osiris was phonetically exhibited, according to Spineto (*Lect.* iv. p. 141), 'by a sceptre, with the head of a species of wolf, which denotes the vowel O; the crooked line, S; the oval, an R; the arm, an E, or an I, which gives *Osre*, the abbreviation of *Osire* or *Osiri*.' Isis, according to Jablonski (*Pantheon Egypt.*, lib. iii, cap. 1 and 2), represented the moon; and, as the Egyptians adored a *Sol superus* and *Sol inferus*, so they worshipped a *Luna supera* and *infera*, or *Isis cœlestis* and *terrestris*. Besides officiating in the Egyptian Amenti, she was recognised in a variety of capacities; among others, as the inventress of agriculture, the divinity who contained within herself the seeds of productive nature (*Plutarch de Iside*, p. 372), and as the inventress of sails and of navigation. (The elevation of a ship formed one feature in her mysteries; *Spineto*, p. 140.) She seems to have been the prototype of a large number of Grecian divinities; among the rest, of Proserpine and Ceres; particularly of the latter, whose adventures and mysteries her own strongly resemble. (See *Recherches du Paganisme*, by De Sacy, vol. i, p. 150, seq.) She was symbolically represented by a throne, a half circle, and an egg, which last sign denoted her gender as feminine; figuratively, by a disk and a pair of horns. The *Amenti* of the Egyptians, corresponding to the *Hades* of the Greeks, and to the *Tartarus* of the Latins, was the *place of the dead*. It was governed by Osiris as chief, and by many subordinate divinities. The following quotations from Spineto (*Lect.* iv.) will show where the souls of men were distributed after death. 'The Egyptians divided the whole world into three zones. The first was the earth, or the zone of trial; the second was the zone of the air, perpetually agitated by winds and storms, and it was considered as the zone of temporal punishment; and the third was the zone of rest and tranquillity, which was above the other two. Again, they subdivided the first zone, or the earth, into four regions or departments: the second, or the zone of the air, was divided into two only; the first of these was subdivided into four regions, and the second into eight, making twelve altogether; these, being added to the four regions of the first zone, made sixteen: and, lastly, the third zone of the tranquil atmosphere contained sixteen more regions; so that the sum total of the regions in which the souls of the dead were to be distributed, was in fact thirty-two.' There is an evident variation between the divisions made by Spineto, and those made by Champollion in his letter. It would seem more probable that there were *twenty-four* principal zones, corresponding to the *twenty-four hours* of the day—twelve for the upper hemisphere, through which the sun passed during the twelve hours of light, and twelve for the lower hemisphere, through which the sun passed during the twelve hours of darkness. But the subordinate zones may have been more or less numerous (Champollion makes seventy-five zones in the lower world); and hence arises the variation between Champollion and Spineto. This circumstance, however, would not affect the division of the world into the three general portions, which Spineto announces; and, as the minor divisions are comparatively unimportant, we shall continue to quote from this author.

'The god *Pooh* was supposed to be a perpetual director—a sort of king of the souls, which, after having parted from the body, were thrown into the second zone, to be whirled about by the winds through the regions of the air, till they were called upon either to return to the first zone, to animate a new body, and to undergo fresh trials in expiation of their former sins, or to be removed into the third, where the air was perpetually pure and tranquil. It was over these two zones, or divisions of the world, situated between the earth and the moon, that the god *Pooh* exercised the full extent of his power. He had for his counsel the god *Thoth*, who presided over that portion of the second or tempestuous zone, which was divided into eight regions, and was only a temporary dwelling of the dead. This was, in fact, nothing else but the personification of the grand principle of the immortality of the soul, and the necessity of leading a virtuous life; since every man was called upon to give a strict account of his past conduct, and, according to the sentence which Osiris pronounced, was doomed to happiness or misery; for, generally speaking, it seems that the Egyptians had assigned to their principal gods and goddesses, most closely connected with their Demiurgos, two different characters; the one presiding over, or assisting in, the creation of the universe; the other performing some duties, or exercising some act of authority in the *Amenti*, as was the case with the god Phtha, the goddess *Sme*, and others.' Spineto, after describing the manner of embalming the dead, as practised at Memphis, gives a brief account of a cemetery near to that city, 'which was the largest and most frequented of any in Egypt;' and also narrates the principal ceremonies performed on occasion of a burial. It shows from whence an important part of the Greek mythology was derived. (See our articles *Cemetery*, and *Cerberus*.) Representations exhibiting the punishment in the *Amenti*, of souls whose bodies were denied burial in this world, Spineto thinks must have been common in ancient times, but only a few have been yet discovered. Among these, says Spineto, 'is a monument in which the urn, containing the soul, or actions of the deceased, could not balance the weight of the image of Sme. In consequence of this deficiency, on a flight of stairs which formed the communication between the Amenti and the world, the deceased was represented under the form of a dog, with his tail between his legs, running away from the god Anubis, who was pursuing and driving him back again into the world. This representation confirms the opinion, that the Egyptians admitted the doctrine of the metempsychosis, and believed that the souls of men, for particular crimes, were condemned to return to life under the shape of some animal, to atone for their past sins.' In comparing the Egyptian *Amenti* with the *Hades* of the Greeks, and with the *Tartarus* of the Latins, Spineto briefly adverts to some points of assimilation, as follows: 'Upon the whole, the first seems to have been the prototype and the origin of the two last. Orpheus, who had been initiated into all the secrets of the mysteries of Egypt, carried into Greece these mysteries;* and the Greeks soon so altered the whole, as to render them no longer cognizable. Osiris became Pluto; Sme, Persephone [or rather Themis simply]; Oms, Cerberus; Thoth, Mercurius Psychopompos; Horus, Apis and Anubis, the three infernal judges, Minos, Æacus and Rhadamanthus. To conclude the whole, the symbolical heads of the different animals under which the forty-two judges (see *Cemetery*) were represented, being deprived of their primitive and symbolical meaning, were changed into real monsters, the Chimeras, the Harpies and the Gorgons, and other such unnatural and horrible things, with which they peopled their fantastic hell; and thus the Amenti of the Egyptians, as indeed the greater part, if not the whole of their religion, became, in the hands of the Greeks and Romans, a compound of fables and absurdities.'"

HIEROMANCY (from the Greek ἱερομαντεια); that species of divination which predicted future events by the inspection of sacrifices.

HIERONYMITES, or JERONYMITES; hermits of St. Jerome (Hieronymus); an order of religious, established in 1373, which wears a white habit with a black scapulary. In the Netherlands and in Spain, where it was devoted to a contemplative life, and possessed, among other convents, the splendid one of St. Lawrence, in the Escurial, the sepulchre of the kings, this order became one of the most opulent and considerable. In Sicily, the West Indies and Spanish America, this order (which has never been politically important) possesses convents.

HIERONYMUS, ST. (See *Jerome, St.*)

* "Any one who will take the trouble to compare the mysteries of Isis and Osiris with those of Ceres and Proserpine, with those of Venus and Adonis, and with those of Bacchus, will discover many striking resemblances.—TR."

Hierophant was the first priest or director of the Eleusinian mysteries, and could be chosen only from among the descendants of Eumolpus, who was regarded as the founder of these mysteries, and the first hierophant. It was required that his exterior appearance and dress should correspond to the elevated office with which he was invested. It was necessary for him to be somewhat advanced in manhood, to be without visible defect, and to possess a remarkably pleasant voice. His forehead was adorned with a diadem, and his hair fell naturally down his neck and shoulders. His conduct was to be without blemish, and he was to possess the reputation of sanctity among the people. After his election, he was not allowed to marry; and, with a view of suppressing all sensual desires in their birth, he was obliged, like the other priests of Ceres, to wash himself in the juice of hemlock. Other accounts say, that these priests even drank the juice. It is also asserted that second marriage alone was interdicted to them, and that their wives could participate in certain occupations, such as adorning the statues, &c. It was the office of the hierophants, and of the descendants of Eumolpus generally, to preserve and interpret the unwritten laws, according to which the slanderers of the divinity and the defamers of her solemnities were punished. In the inferior mysteries, it was his office to introduce the novice into the Eleusinian temple, and to initiate those who had undergone the final probation into the last and great mysteries. In the mysteries themselves, he represented the Creator of the world: he explained to the novice the various phenomena that appeared to him, in a loud, penetrating voice. In the great mysteries, he was the sole expounder of the secrets of the interior of the sanctuary, namely, of secret instruction, which was actually the object of the whole institution. He was therefore termed *mystagogue* or *prophet*, and no one was permitted to pronounce his name in the presence of an uninitiated person. In public solemnities, it was his office to adorn the statues of the goddess, and even to carry them. (See *Eleusis*.)

Higginson, Francis, an eminent preacher, was born in England, and received his degrees from Emanuel college, Cambridge. He then embraced the ecclesiastical profession, and settled at Lancaster, where he soon acquired a high reputation for pulpit eloquence. But he subsequently left the English church, and became a convert to the doctrines and manners of the Puritans. His eloquence and fervor, however, procured him the offer of some of the best livings in the country; but he refused them, on account of his opinions, and supported himself by keeping a school. When the company of Massachusetts Bay began to form a plantation there in 1628, they applied to Mr. Higginson to go thither and prosecute his ecclesiastical labors. He promptly acceded to the request, and, in May, 1629, set sail from the Isle of Wight, and, on the 29th of the ensuing June, arrived in Salem harbor. It is related that when the ship was receding from the coast of England, he called up his children and the other passengers, and said to them, "We will not say, as the Separatists were wont to say at their leaving of England, Farewell, Babylon! farewell, Rome! but we will say, Farewell, dear England! farewell, the church of God in England, and all Christian friends there! We do not go to New England as Separatists from the church of England, though we cannot but separate from the corruptions in it, but we go to practise the positive part of church reformation, and propagate the gospel in America." There were but seven houses in Salem at the time of his arrival, but he immediately entered upon the performance of his duties. These, however, he was not destined to discharge long, for he died in August, 1630. He wrote an account of New England, entitled A short and true Description of the Discoveries and Commodities of the Country, which is printed in the first volume of the Collections of the Historical Society of Massachusetts. One of his sons, also named Francis, who was an excellent scholar, kept a school for some time in New England, but finally settled in the county of Westmoreland, in his native country. He wrote a book against the society of Friends, called the Irreligion of Northern Quakers, said to be the first publication against that sect. He also published a treatise, *De quinque maximis Luminibus*; *De Luce increatâ*; *De Luce creatâ*; *De Lumine Naturæ, Gratiæ et Gloriæ*.

Highlands, Scotch; the north of Great Britain, or the part of Scotland divided from the Lowlands by the Grampian hills (q. v.), and having on its wild, rocky coast many bays and inlets of the sea. These mountains, which at a distance appear an undivided mass, are separated by many valleys and declivities, the largest of which are the beds of the rivers Leven, Carn, Tay and Dee. Besides these extensive valleys, there are others, the openings of which, from the Lowlands, were

originally so wild and narrow that they appeared almost impassable till they were extended by art. Amongst these passes, the most extraordinary are, Bealmacha, on Loch Lomond; Aberfoil and Leney, in the county of Monteith; the pass of Glenalmond over the Crieff; the entrance into the county of Athol by Dunkeld, over mount Birnam; and some beds of rivers. This natural boundary was one of the principal causes that the Highlanders remained a distinct race from the inhabitants of the plains (the Lowlanders). In the Grampian chain there are some hills of considerable height, as Ben Lomond, Ben Lawers, Shehallien and others. The Highlands appear in majestic grandeur from these mountains. Covered with clouds or enveloped in fogs, their summits are often scarcely perceptible, while their sterile appearance, and the deep, rocky defiles by which they are hollowed, bear the traces of violent convulsions of nature. Towards these summits the soil is barren; lower down is a thin covering of heath, where none but birds of prey, white hares and ptarmisans are met with. Farther down still live red deer and grouse; and on fertile plains interspersed with rich heath, are numerous herds of sheep. At the foot of the mountains, beautiful valleys are formed, traversed by rivers from the hills, or enclosing splendid lakes, or covered with wood, or producing different kinds of corn. Many of these valleys have numerous inhabitants, whose principal property consists in cattle. The territory peopled by the Gaelic race consists of the counties of Sutherland, Caithness, Roy, Inverness, Cromarty, Nairn, Argyle, Bute, the Hebrides, and part of the counties of Moray, Banff, Stirling, Perth, Dumbarton, Aberdeen and Angus. The boundary forms a line, beginning at the entrance to the Pentland Frith, extending round St. Kilda, and encircling the whole group of the eastern and southern islands to Mull; then continues, proceeding from Ardmore, in the county of Dumbarton, on the mainland of Scotland, along the Grampian hills to the county of Aberdeen, and ending at the north-east point of Caithness. The inhabitants are descendants of the Celts, and their territory forms the land of the old Scots. (See *Scotland.*) They call their country *Gaeldach* (land of the Gaels) or *Albanich.* The names of *England* and *Scotland* are unknown in the Gaelic dialect. The English are called by them *Saxons* (Sassanach); the Lowlanders, *Gual* (strangers), and their country, *Gualdach.* While, after the union of the Picts and Scots (see *Scotland*), in the ninth century, the Scotch Lowlands, by the intercourse with southern Britain, gradually became more and more civilized, the social relations of the Highlanders assumed a peculiar character, having for its basis the circumstances of the original Celtic inhabitants. The condition of the country, and the motives which led them to fix their residence there, determined the nature of their institutions. Unable to contend on equal terms with the force which urged them from below, and desiring to preserve their independence, they protected themselves in those mountain-castles, which have always been the sanctuary of liberty, and the refuge for those who would oppose their more powerful neighbors. In the absence of their kings, who had their seats in the Scotch Lowlands, and protected by the mountains, they did not always submit to the dominion of a distant sovereign, who was neither able to enforce obedience nor to afford protection. The division of the country of the Gaels into single valleys, glens and islands, separated either by mountains or inlets of the sea, necessarily led to the formation of small tribes; and men of considerable property or distinguished talents, under whose command the others had fought, or under whose protection they had settled, became chiefs. As the inhabitants of these valleys had little intercourse with each other, on account of the natural condition of the country, each valley became the territory and property of a tribe, which had arms for defence, a sufficient number of artisans for their confined wants, pasture for their cattle, wood for building, &c., moss and turf for burning, and a territory for hunting. These tribes were without inducements to change their habitation, to invite foreigners, or to promote a general intercourse among the various settlements; so that each of them isolated itself. Thus the nation was split into single masses, connected, indeed, by the same language and customs, but living under different rulers. Thus was formed, in each tribe or clan (q. v.), a patriarchal government, a kind of hereditary monarchy, founded rather on custom, and confirmed by general consent, than regulated by laws. The Highlander honored, in his chief, the descendant of a distant ancestor, from whom the whole clan was believed to have sprung. The clan showed him a filial devotedness; and even the name *clan* is derived from the Gaelic word *klaan*, that is, *children.* The more the ties of real or

supposed relationship contributed to union and friendship in the clan, the easier were the members excited to violence by injuries from without their limits, as there was no general government to look to for protection. A necessary consequence of the isolation of each clan was, that each concluded marriages chiefly within itself; and thus a general relationship really grew up. Many of the members, therefore, had the same name with the chief, so that a feeling of kindred and mutual attachment existed. Towards all, the chief stood in the light of a superior, commander and judge. He could call upon the young men to accompany him in the chase or to fight under his banner. The whole system of the clans rested essentially upon the power which custom gave the chief in virtue of primogeniture. The obligations of the members of the clan to the chief were indissoluble by any relation into which they might enter. The chief was generally, yet not always, proprietor of the whole territory of the clan, or of the greater part, yet not with absolute right of possession. A certain portion of the best part of the territory was allotted to him as his special property. The rest of the land was distributed, for longer or shorter periods, among that class of the clan which consisted of the farmers. These were the near relations of the chief, or the descendants of a distant and common chief. To these brothers, nephews, cousins, the chief gave land on condition that he might resume it at pleasure, or on lease for a short time, or (which was the general mode) as a kind of mortgage redeemable on the payment of a fixed sum. After two generations, these portions of land were generally resumed in order to be conferred on nearer relations, upon which the descendants of the former possessors returned to the class of the common members of the clan. This change of property was so common, that the ordinary class were confirmed by it in their belief of their original relationship with the chief, as, in each generation, some families joined them, whose ancestors had belonged to the kindred of the chief. Sometimes, however, the young relations received land in perpetual possession, or acquired property by inheritance, marriage, or other means. In such cases, they retained their original rank, and generally each stood at the head of a subdivision of a clan, which considered him as its immediate head, though they always remained dependent on the chief of the clan, and generally even tributary. The largest clans often had several of such subdivisions. The chieftains of the branches and their subjects had sometimes a particular name, called *bur sloine*, or genealogic surname, which originated from the baptismal name or surname of him who had established the clan. Where there existed no such sub-chiefs, the feoffees above described stood nearest to the chief. They were honored as noble, and called themselves *Duinhe Wassal*. A feather upon the cap designated their rank. These again parcelled their portions into smaller farms, which they let to people of the common class for a rent. Generally these stood in the same dependence upon their immediate lord as the latter upon the general chief. When the population in these narrow and sterile valleys increased, the means of support soon became scarce. The strict separation of the clans, and the hereditary enmities not unfrequently existing between them, prevented emigration to the neighboring valleys, and, still more, to the lower country (the Lowlands). The consequence of too great a population was indolence. The younger sons of the more distinguished part of the clan, who joined the common people reluctantly, showed a contempt for peaceful occupations, and collected the most courageous youths of the tribe, with whom they went on predatory expeditions (called *creachs*) against the Lowlands and hostile clans. As the chief wealth of the country consisted in cattle, hostilities were generally commenced by driving away cattle. There existed, also, a class of bold adventurers, called *cearnachs*, employed on expeditions of uncommon peril, or by which uncommon honor was to be gained. In later times, however, their profession was considered less honorable, and consisted in gathering tribute from the lower country, or payment for protection against depredation, called *blackmail*. One means of support for the younger sons of the chiefs, was the military service in France and Spain; and, after the banishment of the house of Stuart, to which the Highlanders were faithful, it became still more common to follow foreign colors. Thus they always remained acquainted with war, and the fame of the deeds of their countrymen in foreign countries nourished their martial spirit at home. A warlike disposition and contempt of labor was found even among the lowest classes. The labor of the field was left mostly to old people and women, whilst the vigorous men spent their time in idleness, in hunting, or in active sports. Mechanics stood in higher esteem than mere farmers. Weaving was a labor for wo-

men, but the men only were tailors. The smith who made arms, or at least mended them, was particularly esteemed, and belonged to the household of a chief; yet most of the arms used were sent from the Lowlands. The chief generally lived surrounded by his dependants. His castle was the place where rewards were distributed, and the most envied distinctions were bestowed. The chief did not distinguish himself by the splendor of his dress or household, but merely by a more numerous household and more guests. What he received from his dependants, was again consumed for their liberal entertainment. Every member of the clan was welcome in the castle, and was, according to his rank, treated with a civility and delicacy, of which elsewhere little is known. This treatment elevated the clan in their own esteem, and drew still tighter the ties between them and their chief, whose power, though mildly exercised, was, according to its nature, absolute. The laws which he administered were simple. Esteem of his authority, and gratitude for his protection, were natural consequences of his patriarchal government. Hence the unshaken fidelity of the clans, of which the Scottish history affords so many splendid instances, particularly in the civil wars of 1715 and 1745. Sometimes there was a deviation from this constitution of the clans; and even the right of inheritance, on which the whole institution was founded, was disregarded in particular cases. There are also examples of deposing unworthy chiefs; and, during the troubles after the revolution (1688), a chieftain was deserted by his whole clan, because he wished to lead it against the banners of the house of Stuart; and thus loyalty triumphed over the strong bond of vassalage. In the earliest times, the Highland chiefs owed allegiance to the native princes, by whom the Scottish kings were acknowledged as sovereigns merely in name. Among these native princes were the powerful lords of the Isles, who flourished from very ancient times to the reign of James V. They ruled over all the Western Islands (the Hebrides), from Ilay north, and over the western part of the county of Inverness, and, as powerful allies, exerted an influence over the greater part of the Highlands. The earls of Athol, of Mar, of Lennox, and other powerful lords, governed the remainder. These islands first became dependent upon the Scottish crown in the commencement of the 15th century; nevertheless, the divisions which afterwards took place among the clans, did not contribute much to strengthen the power of the kings of Scotland; and although the tribes could no more, as in earlier times, under one head, disturb the peace of the land, yet when a common cause united some of them, they broke from their mountain-holds and descended into the plain country. During the disturbances which distracted Scotland after the death of James V, the independence of the Highland chiefs was still more confirmed. When, in the 17th century, the martial spirit declined in the Lowlands of Scotland, the Highlanders showed, for the first time, a decided superiority in the art of war, which contributed much to infuse into them a higher feeling of their own power, and to make them more obstinate in their adherence to their native customs. But not long after the first victories which they had obtained in the Lowlands, they were severely chastised by Cromwell in their own mountains. He placed strong garrisons in several places, commanded flying divisions of the army to pass through the mountains, search the most secret lurking places, and dismantle the castles of the chiefs, and at length compelled the clans to lay down their arms, and give security for their peaceful conduct. After the restoration of the house of Stuart, to which the fidelity of the Highlands had so much contributed, the yoke imposed by Cromwell was removed from them; the fortresses which had been built for their subjugation were destroyed or forsaken; and the laws against the predatory expeditions of the Highlanders were no longer enforced. Under these circumstances, the old constitution of the clans was again strengthened. During the reigns of William III and queen Anne, the government, being employed in wars upon the continent, thought it best to preserve quiet in the Highlands by the distribution of money. The alarm occasioned by the insurrection in 1715, in favor of the house of Stuart, led to the adoption of various measures to break the power of the chiefs. By the clan act (so called), the property of the vassal who had taken arms in a rebellion was given to his feudal lord who had remained faithful; and where the case was reversed, the loyal vassal was allowed the entire property in lands which he had held of a rebellious chieftain. Another statute relieved the vassals from their duty to follow their feudal lord in the chase, and to fight in his private quarrels. The third measure was

the disarming of the Highlanders; but this was so negligently performed, that most of the adherents of the house of Stuart were able to conceal their weapons, in order to employ them, upon a favorable opportunity, against the government. The most effectual of all the measures was the making of roads from the Highlands to the Lowlands, by which means, in the course of time, a gradual blending of the inhabitants of both parts of the country took place. But other circumstances occurred, which produced, in the sequel, a violent dissolution in the relations of the clans. The exasperation occasioned by the proceedings of government, made the people so much the more susceptible to the promises and encouragements which the house of banished princes did not spare. The chieftains made every effort to maintain their threatened power, and to destroy the effect of the innovations with which the government sought to weaken the bonds of the clans. A dangerous means, to which the government had recourse, favored the designs of the Highlanders. About the year 1729, companies were formed among the Highlands, of which the sons of the chieftains, or the distinguished vassals, were appointed officers; but the chiefs themselves had the highest command. These companies, six in number, were usually called, from their dark-colored tartans, the *Black Watch* (*Freicudar Dhu*). Their duty was, to execute the law for disarming; to terrify the discontented; to prevent meetings of the people, and conflicts between hostile clans; and, particularly, to check predatory excursions. With this view, they marched through the land, and had thus an opportunity to become acquainted with the boldest individuals; and it is certain that the chiefs knew how to employ this institution for their own purposes. So much, at least, is clear, that the Black Watch was a means of nourishing the warlike spirit which the previous measures of the government were intended to repress. The rebellion in 1745 (see *Edward Stuart*) was a consequence of the secret disaffection of the Highlanders, and of instigations from abroad. The event of the contest gave the government an opportunity to abolish the patriarchal constitution of the Highlanders (1747), to execute the law for disarming them, and even to prohibit their national dress, of Celtic origin, which distinguished them from all other people. This beautiful dress, favorable for light and free motion, was peculiarly fitted for the warrior, the hunter and the herdsman. The material of Highland clothing has remained the same for centuries—a woollen stuff, sometimes with a cotton woof, and always checkered with various colors. Each clan has usually its peculiar mixture of colors. The chief part of the dress is a short petticoat descending to the knee, and called the *kilt*. Horsemen and aged men sometimes wore likewise a kind of tight pantaloons, called *trewes*. The waistcoat and kilt were embroidered, or adorned with lace. The plaid was two yards broad and four long. It was a piece of tartan, which surrounded the body in broad, elegantly arranged folds, fastened by a girdle; the lower part fell down, and the upper part was drawn round the left shoulder, and left the right arm free. If it were necessary for both arms to be free, it was fastened with a silver clasp upon the breast. In front hung a large pouch of goat skin or dog skin, resembling a lady's reticule. There was a dagger, besides a knife and fork, in a sheath hanging upon one side. The cap belongs to the Highland dress. Instead of the feathers, which were worn by people of rank, the lower classes wore bunches of heath, or a branch of the holly or oak. The shoe consisted of pieces of thick leather, which were fastened with strips of leather over the foot. The strict prohibition of this dress (1747) was peculiarly galling to the Highlanders, and they were often ingenious enough to elude it. This prohibition was first formally removed in 1782. Since then, the old dress of the people has been gradually forsaken, and is now only found in some districts, mingled with the dress of the Lowlanders, and only common among the lower classes of the people. The arms of the Highlander were, the sword upon the left side, and a short dagger upon the right, a musket, a pair of pistols, and a target. In the want of a musket, or if ammunition failed, a long lance was used, called a *Lochaber axe*, suited either for cutting or thrusting. Each clan formed, under the command of its chief, a regiment, whose companies consisted of separate families, each under the direction of its head. Courage and love of freedom, attachment to country and domestic ties, hospitality and a social disposition, honesty in private intercourse, and inviolable fidelity to trust reposed in them, were the distinguishing characteristics of the Highlanders, and are so still, notwithstanding all the changes which their manners have undergone in later times. A knowledge of books was but little diffused, and only among those of high rank, who

were educated partly in France. But the history of their native land, poetry and music, were darling pursuits even among the common people. Each chief had his bard, who sung the deeds of his race, and of the individual members of the clans. These singers were held in high esteem, and were, like the *senachies*, or the elders of the tribes, the preservers of old stories, which they retained in memories strengthened by continual exercise, in the absence of a written literature. The favorite musical instrument was the bagpipe, and its lively sounds in battle supported the animation of the contest. A warm imagination, affected in a lively manner by the sublimity and the perfect solitude of the landscapes of their country, was the source of many of their peculiar superstitions. The Highlands form the only country in Europe that never has been disturbed by religious contests, nor suffered from religious persecution. The Presbyterian and Catholic are the prevailing forms of belief. The latter is limited to the county of Inverness and some of the islands. Among the nobility there are also some adherents to the Episcopal church. Protestants and Catholics live together in a very friendly manner. The political measures of 1747 gave the first impulse to the great change which took place, in the course of time, in the manners of the Highlanders, although it did not manifest itself decidedly till 20 years later. This change was seen in the whole character and condition of the Highlanders, and not merely in their manners and exterior, but even in the appearance of their country. Lands which were long under the plough became wild; whole valleys, once the dwelling-place of powerful clans, were made desolate; and families which, like Alpine plants, were rooted in their native soil, saw themselves compelled to seek support in manufacturing cities, or to emigrate to America. The character of the Highlanders has lost much of its romantic and chivalrous tone. One of the most striking traits of the altered Highlander is his great indifference to the old relations of the clan, although, long after the abolition of clanship, the attachment of the people to their chief continued, and what the law denied, fidelity gave undiminished. The impatient desire of acquisition on the part of the landlords, also, caused many oppressions, which gradually loosened the bonds of love and fidelity. Still we find, indeed, some landholders who seem like remnants of former days, and have secured to themselves the attachment of their dependants. But many have been estranged from their country by a residence in London and Edinburgh; and, to meet the increased expenses occasioned by their style of living, they have been led to measures which have injured the poorer classes of the people; and the great increase of sheep-breeding, particularly, has taken from the people the means of support. Thousands have emigrated to America within 30 years, to whom the beloved home of their fathers offered nothing but the prospect of poverty.—See major-general David Stewart's *Sketches of the Character and Present State of the Highlanders* (3d edition, Edinburgh, 1825, 2 vols.); to which we may add, *Remarks on Col. Stewart's Sketches*, &c. (London, 1823); also, the work of doctor McCulloch, *The Highlands and Western Isles of Scotland* (London, 1824, 4 vols.), which destroys the beautiful illusions that Walter Scott's descriptions of Scotland and the Scots had produced.

Highlands of the Hudson (called, also, *Highlands of New York*, *Fishkill Mountains*, and *Matteawan Mountains*); a range of mountains in New York, extending in a north-east and south-west direction across the Hudson, in the counties of Rockland, Orange, Westchester, Putnam and Duchess. They are 53 miles above the city of New York, and occupy a space from 16 to 20 miles in width. The Indian name was *Matteawan*, which signifies the *country of good fur*; and the same name is still properly applied to the whole range. Some of the highest peaks are Beacon Hill, Grand Sachem, Breakneck, Blue Hill and Butter Hill. The heights of the summits, above the level of the Hudson, vary from 1100 to 1685 feet. This range is composed principally of granite and gneiss, and is supposed to have originally formed the southern shore of a great lake, which perhaps extended northward over lake Champlain. Various persons, who have examined the valley of the Hudson, lying between these mountains and lake Champlain, have found evidence, which to them appeared satisfactory, that this tract once formed the bed of a lake; but respecting the time when the present passage through the Highlands was opened, history furnishes no information.

High Mass is that mass which is read before the high altar on Sundays, feast days, and particular occasions, such as the celebration of a victory. (See *Mass.*)

Highmore, Joseph; a portrait and historical painter, born in London, June 13, 1692. He early displayed a strong partiality for the fine arts, which was discour-

aged by his family, who placed him in a solicitor's office. The whole of his spare time was, however, devoted by him to the study of his favorite pursuit; and, immediately on the expiration of his clerkship, when only 17 years of age, he abandoned the law, resolved to trust in future to his talents as a painter alone for his chance of fame and fortune. The year following, he married, and continued rising in reputation, till, on the revival of the order of the Bath, he was selected as the artist to be employed in painting the knights in full costume. The years 1732 and 1734 were spent by him in professional tours through the Netherlands and France, and, on his return, he applied himself with renewed exertions to the cultivation of an art which he exercised nearly half a century. He died in 1780. Among his best paintings are, the Hagar and Ishmael, in the foundling hospital; the Finding of Moses, &c. The illustrations to the original editions of the novels of Richardson, were also from his easel. As an author, he is known by the Critical Examination of Rubens's two Paintings in the Banqueting House, Whitehall (4to.); Observations on Dodwell's Pamphlet against Christianity; the Practice of Perspective (1763); and two vols. of Moral and Religious Essays; with a translation of Brown, on the Immortality of the Soul.

Highness; a title of honor given to princes. The kings of England and Spain had formerly no other title, the first till the time of Henry VIII, the second till that of Charles V. The petty princes of Italy began to receive this title in 1630, and the duke of Orleans assumed the title of *royal highness* in 1631, to distinguish himself from the other princes of France. The prince of Condé took the title of *most serene highness*. At present, the children of crowned heads are generally styled *royal highness*. Those of the emperors of Austria and Russia are styled *imperial highness*. The grand-dukes and the elector of Hesse-Cassel are called *royal highness*. The French *altesse royale* corresponds to *royal highness*, but *altesse* is not the same as *highness*, it being used for *your grace*, and for the German *Durchlaucht*.

High Pressure. (See *Steam Engines*.)

High-Priest; the head of the Jewish priesthood. Moses conferred this dignity upon his brother, in whose family it descended without interruption. After the subjugation of the Jews by the Seleucidæ, the Ptolemies and the Romans, it was often arbitrarily conferred by the foreign masters. In the time of Jesus, the office appears to have been held by several priests alternately. The importance of this officer is indicated by the splendor and costliness of his garment, which was among the most beautiful works of ancient art. The breastplate of the high-priest is particularly celebrated. It was called *urim* and *thummim*, i. e., according to Luther, *light* and *right*. According to other commentators, it received its name from 12 precious stones, which were set in gold, and on which the names of the 12 tribes were engraved. In this dress, the high-priest appeared as the holiest and highest person of the nation, in the exercise of his official duties. To him belonged the regulation and superintendence of the worship of God, the declaration of the oracles of Jehovah to the people (he alone being permitted to consult them on important public occasions), and the preservation of the national sanctuary. Although the administration of justice was committed to particular judges, yet to him the last appeal was made in difficult cases, even in temporal affairs, and nothing important in war or peace could be undertaken without his assent. He was called, by way of distinction, the *priest who stands before the Lord:* he occupied the peculiar situation of a mediator between Jehovah and the nation. Once a year, he entered alone into the holy of holies (the innermost part of the tabernacle, afterwards of the temple), and, by his prayers and sacrifices on this occasion, the whole Jewish people believed that God was reconciled to them, and all their sins forgiven. The articles *Hierarchy*, and *Popery*, will show how the Roman Catholic hierarchy made use of the constitution of the Jewish priesthood, as a foundation for their own authority, and transferred the prerogatives of the high-priest to the papal chair.

High Treason. (See *Treason*.)

High Water; that state of the tides when they have flowed to the greatest height, in which state they remain nearly stationary for about 15 or 20 minutes, when the water begins again to ebb. The time of high water is always nearly the same in the same place at the full of the moon, and, at all other times, the time of high water depends upon the age of the moon; the rule for finding which, the age of the moon being given, is as follows, viz.: add four fifths of the days of the moon's age, as so many hours, to the time of high water at the full of the moon, and the sum is the time of high water, answering to that day nearly.

Highway Robbery. (See *Robbery.*)

Highways. (See *Roads.*)

Hilarion; a Christian anchorite of the fourth century, born at Gaza, in 291. On his conversion from idolatry, he became the founder of monachism in Syria, after the example of St. Anthony, whom he had seen in the deserts of Egypt. To this purpose, he dedicated the whole of his possessions, and, by the fame of his sanctity, induced many to join him. His death took place in the year 371, in the island of Cyprus.

Hilary, St.; a Christian prelate of the fourth century, one of the early fathers of the church, born at Poictiers, of which city, after his conversion from heathenism, he eventually became the bishop, in 355. His zeal in favor of the Athanasian doctrine respecting the Trinity, which he defended with much energy at Bezieres, drew on him the persecution of the Arian party, with Saturninus at its head, who prevailed on the emperor Constantius to exile him into Phrygia. After four years spent in banishment, he was permitted to return to his see, where he occupied himself in committing the arguments for his side of the question to writing, and continued to distinguish himself as an active diocesan till his death, in 367. His works were printed in folio, at Paris, in 1693. There was another of the same name, bishop of Arles, a Semipelagian in his opinions, who was the author of a life of St. Honoratus, and some devotional tracts. He died in 449, and also enjoyed the honors of canonization.

Hildburghausen, Saxe, one of the Saxon duchies, consisting of part of the former duchy of Coburg and the county of Henneburg, received its name from its former capital. It is situated on the southern declivity of the Thuringian forest, and is moderately fertile. (For its revenue, &c., see *Statistical Table of Europe*, IV, 608.) It has estates on the old system. The nobility sends 6 deputies, the cities 5, the peasants 6, the clergy 1. Compared with many other estates, they enjoy considerable privileges: they grant taxes, and have the inspection of the public revenue, the right to impeach officers, and to propose laws. By the treaty of division (1826) between Coburg, Hildburghausen and Meiningen, respecting the lands of the extinct lines of Saxe-Gotha and Altenburg, Hildburghausen received the principality of Altenburg, with the exception of Kamburg, and, in return, gave up the territory of Hildburghausen to Meiningen. (q. v.) Thus, the Hildburghausen line received, instead of 230 square miles, with 32,000 inhabitants, 530 square miles, with 108,000 inhabitants.

Hildburghausen; the former capital of the duchy, on the Werra, a well built town, with 3500 inhabitants.

Hildebrand. (See *Gregory VII.*)

Hildesheim; formerly a German bishopric, now a principality of the kingdom of Hanover, on the north side of the Hartz; very fertile. It consists, at present, of 657 square miles, with 131,500 inhabitants. Louis the Debonnaire founded the bishopric in 822. In 1802, Prussia took possession of it; in 1807, it was added to the kingdom of Westphalia; in 1814, it was annexed to Hanover.

Hildesheim, a city in Germany, formerly the see of the preceding bishopric, founded by Louis the Debonnaire, in 822, belongs at present, with the principality, to Hanover; is the seat of a Catholic bishop, and of a Lutheran consistory; has a Catholic seminary and gymnasium, and a Lutheran gymnasium, and 13,450 inhabitants, whose chief dealings are in grain, yarn and linen. The cathedral contains an ancient Irmensaule. (q. v.) Lat. 52° 9′ 32″ N.; lon. 9° 55′ 46″ E.

Hill, Aaron, an English poet and miscellaneous writer, was born in London, in 1685. His father, originally a gentleman of good estate in Wiltshire, left him almost wholly unprovided for; which circumstance obliged him to quit Westminster school at the age of 14. His relation, lord Paget, being ambassador at Constantinople, he ventured, uninvited, to join him, and a tutor was provided for him, under whose care he travelled through Palestine, Egypt, and various parts of the East. In 1703, he returned to England, and, after the death of lord Paget, he travelled for three years with sir William Wentworth. In 1709, he published a History of the Ottoman Empire, partly from materials collected in Turkey; which publication, although it obtained much notice, the author himself subsequently regarded as a crude and juvenile performance. In 1710, he became manager of Drury-lane theatre, which post, however, he soon gave up. While in the management of Drury-lane, he wrote his first tragedy of Alfred, and Rinaldo, an opera. In 1713, he obtained a patent for extracting sweet oil from beech mast, and a company was formed under his auspices; but, after a trial of three years, the scheme entirely failed, as did a subsequent plan for establishing a plantation in Georgia. He still continued to write for the theatres,

and several of his pieces were brought on the stage. He also composed poems. In 1724, he commenced a periodical paper, called the Plain Dealer. In 1731, he rewrote his Elfrid, which he brought forward under the title of Athelwold. He afterwards translated in succession the Zaïre, Alzire and Merope, of Voltaire, all of which show him in the light of a superior dramatic translator. He still, however, continued to interest himself with schemes of commercial improvement, until his health began to decline; and he died in February, 1750, in his 65th year, and was interred in Westminster abbey. His versions of Zaïre and Merope kept the stage until within a few years.

Hill, sir John, a writer of the last century, distinguished for the versatility of his talents, and the multitude of his publications, was born about 1716, and was by trade an apothecary; but, having married a wife without a fortune, he was obliged to seek further resources for the increase of his income. The duke of Richmond and lord Petre employed him to manage their botanic gardens, and enabled him to travel through various parts of the kingdom, and collect scarce plants, of which he published an account by subscription. The scheme was not very profitable, and he therefore turned his attention to the stage; but, after two or three exhibitions at the Haymarket and Covent-garden, he returned to his shop. A translation of a Greek tract on gems, by Theophrastus, which he published in 1746, procured him both money and reputation as an author. He undertook a General Natural History (3 vols., folio); and, in conjunction with George Lewis Scott, he compiled a Supplement to Chambers's Cyclopædia. In 1752, he published Essays on Natural History and Philosophy, containing curious microscopical observations. At the same period, he started the British Magazine, and also carried on a diurnal publication, called the Inspector. Notwithstanding his literary engagements, he was a constant attendant on every place of public amusement, where he collected, by wholesale, a great variety of private intrigue and personal scandal, which he freely retailed to the public in his Inspectors and magazines. This discreditable occupation involved him in various quarrels. He invented several quack medicines, which, by means of the puffing advertisements he wrote to recommend them, had for some time a considerable sale, to his great pecuniary advantage. His talents as a botanist, however, were by no means despicable. His greatest undertaking was a work entitled the Vegetable System (17 vols., folio). The title of knighthood he owed to the king of Sweden, who bestowed on him the order of the polar star, in return for the present of a copy of his botanical works. He died of the gout, a disease for which he professed to have a specific, in November, 1775. Besides the works already mentioned, he wrote novels and plays, now deservedly forgotten. Having had a quarrel with Garrick, on account of the rejection of one of his dramas, that celebrated actor characterized Hill, not unjustly, in the following caustic epigram:

> "For physic and farces his rival there scarce is;
> His farces are physic, his physic a farce is."

Hill, Robert; an industrious scholar, remarkable for his application to study, notwithstanding the obstacles arising from domestic penury, and a menial occupation. He was born in 1699, at Miswell, near Tring, in Hertfordshire, and was apprenticed to a tailor and staymaker. To those employments he occasionally joined that of a schoolmaster, by means of which he with difficulty supported himself and his family. In spite of these discouragements, he contrived to make himself acquainted with the Latin, Greek and Hebrew languages; and he exhibited so much literary talent as to attract the favorable notice of the reverend Joseph Spence, who, with a view to benefit this pains-taking student, published a tract, entitled a Parallel between a most celebrated Man of Florence (Magliabecchi) and one scarce ever heard of in England, (R. Hill), printed at Strawberry-hill, 1758, 8vo. By the assistance of his friendly biographer, Hill was relieved from his embarrassments, and enabled to remove to Buckingham, where he died in 1777. He was the author of an answer to bishop Clayton's Essay on Spirit; Criticisms on the Book of Job; and a tract, entitled the Character of a Jew.

Hill, Rowland, reverend, son of sir Rowland Hill, was born at Hawkstone, in 1744, and educated at Eton and Cambridge. While yet at Eton, he embraced the views of the Methodists, and at Cambridge he preached in the prison and in private houses, before entering into holy orders; he also preached in the tabernacle and chapel of Whitfield, in London—a step which at once identified him with the Calvinistic Methodists. Family influence prevented him, however, from formally joining that body, his avowed pred-

ilection for which, at the same time, rendered it extremely difficult for him to obtain ordination in the church. At length he obtained a title to orders, and was ordained deacon. "Soon after," says a notice of him, "this man of God determined upon disobedience to earthly statutes and human canons, that he might be obedient to a heavenly vision, and perform a divine and immortal work. In imitation, therefore, of his illustrious patron and pattern, Whitfield, he soon began to lift up his voice in a wider sphere of labor—to proclaim the gospel to listening crowds in barns, meeting-houses, and, when they were too small or too distant, or not to be procured, in streets and fields, by the highways and hedges." In 1783, he laid the foundation of Surry chapel, in the Blackfriar's-road, London, in the duties of which he has spent about the half of every subsequent year, employing the rest of the time in provincial excursions. His sermons are represented to be a singular mixture of solemn exhortations and violent denunciations: sometimes he introduces odd stories, puns and jokes.

Hill, lord, second son of sir John Hill, baronet, entered the army at the age of 16, and was soon distinguished by his zeal, his activity, and the mildness of his manners. His first commission was that of ensign. He afterwards obtained leave of absence for one year, to complete his military education at the school at Strasbourg. He then accompanied his uncle, the late sir Richard Hill, on a tour in Germany, France and Holland. When he returned, he was promoted to a lieutenancy, and, in 1792, to be a captain. He next accompanied his friend, Mr. Drake, on a diplomatic mission to Genoa, as his secretary. From thence he went to Toulon, and served successively as aid-de-camp to lord Mulgrave, general O'Hara, and sir David Dundas. He went to Egypt as lieutenant-colonel. He afterwards served both in Scotland and Ireland, and was made brigadier-general. He next served in Spain, and commanded the reserve of sir John Moore's army, at the battle of Corunna. Subsequently he was present at the battles of Roleia and Vimiera, in Portugal. He then served a second time in Spain, and, general Paget being wounded, he took the command of his corps. He was in the battle of Talavera, and was slightly wounded in the hand. For his conduct he received the thanks of parliament, and was promoted to the command of the 94th regiment. General Hill surprised a French corps, under the command of general Girard, near Arroyo de Molinas, in October, 1811. This corps, of 2500 foot and 600 horse, was routed, and all who composed it either killed or taken, except about 200 men; their baggage, &c., falling into the hands of the English. He then marched to Merida, and destroyed the enemy's magazines there. He was next with the army under Wellington, and his division compelled the French to retreat to Vittoria. He also distinguished himself much on other occasions. On the conclusion of the war, he was created a peer. Afterwards he was appointed to the command of the English and Hanoverian troops in the Netherlands, till the arrival of the duke of Wellington. At Waterloo, he commanded a division of the army, and contributed much to its success. His lordship has been honored with several foreign orders of knighthood. When the duke of Wellington became prime minister, lord Hill succeeded him as commander-in-chief of the army, which office he continues to hold, since the duke has been succeeded by lord Grey.

Hima; a Sanscrit word, signifying *cold, winter.* Hence *Himalaya* mountains. (q. v.)

Himalaya, Himaleh, or Himala Mountains, the *Imaus* of the ancients, called, by the old Indian bards, the *king of mountains*, is a snow-capped chain, rising, in gigantic masses, on the northern boundary of Bengal and Upper Hindoostan, and forming the rich valley of Cashmere (the land which produces the costly shawls). There are five passes over these mountains known to us, one of which leads to Thibet, and two to Chinese Tartary. These roads, the highest in the world, rise to an elevation of 14,496 feet. To these mountains, piled up before the elevated plateau of eastern Asia, the Hindoos have made pilgrimages for thousands of years, visiting the temples and altars of their gods, where the Ganges, the holiest of their rivers, rolls out from among the precipices and snows, and where secret horrors surround the throne of Mohadeo. No European had ventured to traverse this wilderness, for fear of the barbarous Ghorkas, before the enterprise was undertaken by two officers of the British army, who served in the campaigns of 1809 and 1815 against Nepaul,—Kirkpatrick, whose Description of Nepaul (1811) made us acquainted with the eastern, and Fraser, who has given an account of the western part of these Indian Alps; but, in 1819, Francis Hamilton gave a complete picture of this country. Fraser published his jour-

nal in 1820—Journal of a Tour through a Part of the Snowy Range of the Himala Mountains, and to the Sources of the Rivers Jumna and Ganges (with 20 engravings). Colebrooke and captain Webb made the first barometrical and trigonometrical measurements of the Himala mountains, but with imperfect instruments. According to their account, the height of the White mountain, or *Dhawala-Giri*, the Mont Blanc of the Indian Alps, at whose foot the river Ghandaki rises (29° 30′ north lat., 83° 45′ east lon.), is 26,872 feet, or, according to Blake, who corrected their measurements, 28,015. In the chain of the Andes, Chimborazo is 21,440 feet high; in the Alps, the most elevated summit, Mont Blanc, is 15,766 feet high. The lowest line of perpetual snow, on the north side of the Himala mountains, is 17,000 feet; on Chimborazo, 15,746; on the Alps, 8,300 feet. The highest point of the Himalaya which captain Gerard reached,—the Chipea-Pic,—on the borders of Chinese Tartary, was 19,411 English feet; on Chimborazo, Humboldt reached a height of 19,374 English feet. Webb also determined the height of 27 other summits of the Himalaya, the greatest part of which he found to be above 20,000 feet, and the highest to be 25,769 feet above the level of the sea. Captain Hodgson and lieutenant Herbert took trigonometrical measurements of the whole central chain of the Himala mountains. Among 38 summits, the highest, Jawahir was 25,589, and the lowest was 16,043 feet high; and more than 20 peaks were higher than Chimborazo. They lie between 30° 80′ and 28° 49′ south lat., and 78° 51′ and 80° 54′ east lon. from Greenwich, at the sources of the Yamuna and the Ganges, which is here called *Bhagirathi*, before it unites with the Yamuna, the Jahnavi and the Alakanandra in the plain. In the summer of 1815, Fraser ascended higher than Webb had done; he was the first European who reached Gangavatari (Gangautri), a small temple, sacred to Bhagirathi (10,300 feet above the level of the sea), the point to which the Hindoo pilgrimages are directed. After him, captain Hodgson, in the summer of 1821, ascended to a height of 12,914 feet, to Vanara Pugha, where the river Jumna, or Yamuna, bursts out of a bed of ice and snow 300 feet in depth, in a defile of the Jumnotri, which rises to the height of 21,155 feet. Between the highest peaks of this mountain, the overflowing of the streams forms a sacred lake, where the goddess Yamuna has her secret residence, which no pilgrim dares to approach. The Bhagirathi also rises here, among the glaciers. The Jahnavi, the third principal branch of the Ganges, has its source not far from hence, but at the northern side of the snowy mountain in Thibet. These streams rush along in narrow beds, worn deep in the solid granite, through dreadful chasms and precipices. Steep walls ascend perpendicularly from a sandy plain to the height of 3000 feet. A small ridge lies in front, of 600—700 feet in height, formed of sand-stone. Then comes a chain from 1500 to 5000 feet in height, consisting of quartz; behind this is limestone, 7000 feet high. Next succeeds the central mountain, separated from the preceding by the valley of a river. The principal masses are gneiss, mica and clay-slate. The streams carry down blocks of granite. There is no trace of glaciers. In the wilderness of ragged rocks, hot springs arise, overshadowed by cedars and firs. This dreadful solitude is the home of the primitive Indian mythological world, but the land has been made entirely desolate by the tyranny of the Ghorka (who, not long ago, governed Nepaul); and the misery of the inhabitants makes a striking contrast with the happiness of the divine life which the Indian poets represented as existing in this place. The principal difference between the European and Asiatic Alpine world is in the richness and variety of trees and plants which the latter displays, whose splendor and beauty, even on the border of perpetual snow, astonish the traveller. The barley, which comes to perfection on the mountains, at the height of 14,000 feet, is so extremely productive, that a person at Vienna, 1822, raised from a single barley-corn 15 perfect ears, 334 corns. (See Alex. von Humboldt's *Sur l'Élévation des Montagnes de l'Inde*, and A. W. von Schlegel's Indian Library, i, 4.)

Himmel, Frederic Henry, a popular German composer in the lighter kind of music, and a celebrated pianist, born, 1765, in Brandenburg, studied theology, and, having played in the presence of the king, while in Potsdam, for the purpose of obtaining a clerical appointment, was made by him his chapel-master, and sent to travel. Himmel died, 1814, in Berlin. He thought too highly of his own powers, and liked a gay life, so that he did not study enough, as is perceptible in his greater compositions. His *Fanchon* is his best opera. Many of his songs are still sung in Germany.

Hinckelmann, Abraham, born, 1652, in Saxony, was, for a long time, a clergyman in Hamburg. He was a learned Orientalist, and his edition of the Koran

(Hamburg, 1694, 4to.) is the first that was printed in Arabic. He died in 1695. He was an amiable man, of a sensitive spirit, and his death is supposed to have been hastened by a libellous pamphlet written against him.

Hindenburg, Charles Frederic; one of the most learned men of his age, celebrated for his discovery of the combinatory analysis. He was born at Dresden, 1739, and studied medicine, together with intellectual philosophy, natural philosophy, mathematics and belles-lettres. In 1781, he was appointed extraordinary professor of philosophy at Leipsic; in 1786, he was made ordinary professor of natural philosophy at the same university. Many foreign academies and learned societies elected him a member. Died 1808. His works are enumerated in Meusel's *Gelehrtes Deutschland.*

Hindoos, or Gentoos; the primitive inhabitants of the East Indies; one of the most ancient nations; distinguished for their humanity, gentleness, industry, and polished by letters and the arts, at a time when most of their Asiatic neighbors were yet only in the first stages of civilization, when the Greeks lay in obscurity, and the people of Europe in general were destitute both of the useful and the fine arts. They form a numerous people, have preserved their national character for thousands of years, even under the dominion of foreigners, and have retained, to the present day, their language, their written characters, their government, religion, manners, customs and habits of life. They are, in general, of a brownish-yellow complexion, but the higher and richer classes are almost as white as Europeans. They are somewhat above the middle height, well-proportioned, and, in particular, very flexible and dexterous. They are remarkable for their small hands. Temperance, frugality, hospitality, and obliging manners, are the favorable traits in their character. They are reproached with indolence and avarice. They possess great natural talents, but are, at present, deprived of opportunities for their developement. In earlier times, before they were oppressed by a foreign yoke, they had reached a higher degree of civilization, and their country has been considered as the cradle of all the arts and sciences. They practise agriculture, breeding of cattle, fishing, hunting and mining. They cultivate forests, and are largely engaged in manufactures, commerce and navigation. They manufacture cloths of a great variety and value, particularly of cotton and silk; among which are the finest muslins, fine shawls, mats, cordovan leather, &c., and are inimitable in dyeing. In the arts of music and painting, they are backward, but in dancing, statuary and architecture, they are more advanced. They are acquainted with arithmetic, astronomy and chronology, and are very fond of poetry and singing. The most extraordinary custom of the Hindoos is the burning of widows at the funeral of their husbands—a practice which has prevailed from times immemorial. (See *Suttees.*) This burning of the widows exists chiefly in the countries governed by the native princes. The division of the people into several entirely distinct orders, or classes, which has existed from the remotest times, forms the castes. (See *Castes.*) There are four castes, which, to the great disadvantage of cultivation, are essentially and perpetually separate from each other, so that no transition from one to another is possible; no connexion between them by marriage, or in any other way, is permitted, and no individual of one class can assume the habits or engage in the occupations of another. The distinction is complete, in every sense, hereditary and personal; all the privileges or disabilities are inherited; no one is permitted to become what he is destined to be by nature, but he is obliged to become what his birth permits, or to remain what it condemns him to be. The slightest transgression of these laws is punished with loss of caste, and sometimes, in particular cases, with death. Even the difference of food is precisely marked out. The three higher castes are prohibited entirely the use of flesh; the fourth is allowed to eat all kinds, except beef; but only the lowest classes of the fifth caste are allowed every kind of food, without restriction. Thus the lower the rank of a Hindoo, the less he is restricted in his food and drink; but, on the other hand, the other burdensome restrictions increase with the inferiority of rank. The first and noblest caste is called *Brahmana*, and is the class of the Bramines, or Brahmanes, who are priests, scholars, teachers in schools and academies, lawyers, and state officers. (See *Bramins.*) The second noble order is called *Cshatriyas*, or *Chehteree*, and is composed of the Cshatriyas, or Raja-putras, the kings and warriors. They preserve the name *Raj-puts*, *Raja-putras*, by way of distinction, in their old hereditary dominions in Hindostan. The third noble caste is called *Bise*, or *Vaisyas;* it is composed of husbandmen and merchants. The merchants are called *Banians*, or *Wannians.* The fourth noble caste is that of the *Sood-*

ras, or *Shuder*, and comprehends the artisans and laborers. Besides these four castes, with their subdivisions, there are numerous mixed castes, or spurious classes, called *Burrun Shunker*, which have sprung from the unauthorized unions of individuals of different castes. These mixed races form a transition to the degraded outcasts, the *Parias*, (q. v.), *Chaclys* and *Peleya*, that is, contemptible, vile, unclean men. These consist of those unhappy wretches who are obliged to do whatever no one else can do without pollution. They are not only considered unclean themselves, but they render unclean every thing they touch. They are deprived of all civil privileges, and stigmatized by particular laws, regulating their mode of life, their houses and their furniture; they are not allowed to visit the pagodas, or temples, of the other castes, but have their own pagodas and religious exercises; they are not suffered to enter the houses of the other castes (if it is done incautiously, or from necessity, such a place is purified by religious ceremonies); they must not appear in public markets, are confined to the use of particular wells, which they are obliged to surround with bones of animals, to warn others against using them; they dwell in miserable hovels, distant from cities and villages, and are under no restrictions in regard to food. To the Hindoos belong the Seiks, Jats, Rajapoots, Mahrattas, the Singalese, &c., of whom some have gone over to the Mohammedan religion; others, like the Seiks, have a religion of their own. (See *Bengal*, *Hindoostan*, *India*, *Indian Literature*, *Indian Mythology and Religion*, and *Indian Languages*.) The abbé Dubois, who lived in the East Indies for thirty years, has described the Hindoos, in a faithful, complete and lively manner, in his work *Mœurs, Institutions et Cérémonies des Peuples d'Inde* (Paris, 1825, 2 vols.).

Hindoostan, or Hindostan, or India this side the Ganges; an extensive region in the south of Asia, between lat. 7° 56′ and 35° N., and lon. 67° and 92° 50′ E. It is bounded on the north by the Himalaya mountains, on the east by the Birman empire and the bay of Bengal, on the south and southwest by the Indian ocean, and on the west by Beloochistan and Afghanistan. Its greatest length, from north to south, is about 1800 miles; its greatest breadth, 1500 miles. Its superficial area is estimated by Mr. Hamilton at 1,280,000 square miles. Some writers divide it into four great divisions, Northern Hindoostan, Hindoostan Proper, the Deccan, and the country south of the Krishna; others comprise the two last under the Deccan, and call the two first *Hindoostan*. The mountains are the Himalaya (q. v.) in the north, and the Ghauts in the Deccan. The latter are divided into two ridges, the Eastern and Western. The Western Ghauts, the longest ridge, extend from cape Comorin to the Taptee or Surat river, including about 13 degrees of latitude, with a single opening of 16 miles, which admits the Paniany. Their distance from the coast is usually about 40 miles—seldom more than 70; their height computed from 3000 to 4000 feet. The Eastern Ghauts extend from the north of the Cauvery, lat. 11° 20′ N., to the banks of the Krishna, lat. 16° N.—The word *ghaut* signifies a pass through the mountains, and the high land is called *bala-ghaut* (that is, above the passes), and the low land *payeen-ghaut* (that is, below the passes). The country between the ridges is generally table land, and some of it very fertile. These mountains are generally composed of granite, and on the western side are extensive forests of teak timber. The principal rivers are the Indus (q. v.), the Ganges (q. v.), and the Burrampooter. (q. v.) Beside these are the Nerbudda, the Godavery, the Krishna, and other considerable streams. In a country of such extent and diversity of surface, the climate must of course be very various. In the north it is mild; in Sind and the neighboring provinces, and on the coasts, the heat is excessive. The prevailing winds are the monsoons. (q. v.) The soil of the country is, in general, remarkably fertile, and the vegetation is extremely rapid. There are two crops a year, one in September and October, and the other in March and April. Among the vegetable productions may be mentioned corn, rice, maize, sugar-cane, betel, ginger, cocoa, coffee, mulberries, cotton, indigo, saffron, the different fruit trees of Europe, palms, bananas, teak, benzoin, camphor, bamboo, &c. The mineral kingdom is also extremely rich. Gold, silver, copper, iron, and other metals, porcelain earth, porphyry, saltpetre, borax, diamonds, &c., are among its productions. Among the animals are found the gibbon, the ourang-outang, and a great variety of monkeys, bears, tigers, buffaloes, gazelles, wild boars, elephants, rhinoceroses, jackals, &c. The immense serpents sometimes reach the size of 20 feet. Among the birds are pelicans, cassowaries, parrots, swans, &c. The mass of the Hindoo and Mohammedan population is at about

the same degree of civilization, but there are some tribes which are in a state of barbarism. Besides the Hindoos (q. v.), the inhabitants are Afghans (q. v.), dispersed about the country under a feudal government; Parsees or Guebres (q. v.), (infidels), who are found principally on the western coast, and speak a Persian dialect; Arabians, also on the western coast, descendants of merchants formerly established in Hindoostan, who differ from the other inhabitants in language, complexion, features and manners; Moguls or Monguls (q. v.), who established themselves in the 8th century, and founded the Mogul empire in the 16th century; Belootches in the north-west. Among so many nations, there is a great variety of religious systems, but the principal religion is Bramanism (see *Indian Mythology*), much modified in some parts of the country (see *Seiks*); that of the Nepalese is Buddhism (see *Buddha*); that of the Afghans, Belootches, Arabs, and some Hindoo natives, is Islamism. The number of the inhabitants is very uncertain. Hamilton estimated that of the continental part at 132,000,000; others have carried the estimate to 180,000,000, and some have reckoned it at 110,000,000. The Sanscrit (q. v.), the original language of the country, is so ancient that neither history nor tradition makes mention of it as a spoken language. The oldest languages derived from it are the Pracrit, the Bali, and the Zend, which are the sacred languages of different sects. The modern dialects have nine tenths of the words in common, but, except the Hindoostanee, which is spoken every where, and the Gujerattee, which is the general language of the markets, they are all local. (See *Indian Languages*.) The privileged castes (q. v.) alone are permitted to cultivate the sciences. The lower castes, however, are allowed to study rhetoric, moral philosophy and poetry, but literature and science are no longer encouraged as formerly. The English language is becoming more general, and the dialects of Hindoostan seem destined to become dead languages. (See *Indian Literature*.) The English government has, indeed, acquired such a preponderance, that 123,000,000 of the inhabitants of Hindoostan are dependent on it, either as subjects, tributaries or allies. The nizam of Hyderabad, the rajahs of Mysore and Travancore, the Mahratta prince Holcar, the Mahratta rajah of Nagpour, the rajah Guicowar, the nabob of Oude, and some others, are bound to pay a tribute, furnish aid in war, and are forbidden to admit European officers into their armies, or to receive foreign ambassadors. The Mahratta prince Sindia, the rajah of Nepaul, and the Seiks, are allies of the English East India company, but, excepting the Seiks, have only a precarious independence. In all parts of the country, the form of government is a pure despotism. Hindoostan was divided by Aurengzebe into numerous provinces, which continue to form political divisions in the English possessions, but they have been discontinued in the Indian states. The following table contains a view of these provinces, with the corresponding presidencies or states of the present day:—

Provinces.	*Presidencies or Indian States.*
Agimere,	Bombay presidency, Rajapoots.
Agra,	Bengal, state of Sindia, states of the Rajapoots.
Allahabad,	Bengal, states of the Bundelcund, nabob of Oude.
Oude,	Bengal, nabob of Oude.
Aurungabad,	Bombay, state of the Nizam.
Bahar,	Bengal.
Balagat,	Madras.
Bengal,	Bengal.
Berar,	State of the Nizam.
Bider,	State of the Nizam.
Bejapoor,	Bombay, rajah of Setara, state of the Nizam.
Cashmere,	State of the Seiks.
Coimbetore,	Madras.
Cochin,	Madras, rajah of Travancore.
Delhi,	Bengal, Seiks.
Gondwana,	Bengal, rajah of Nagpour.
Gorval,	Bengal.
Guzerat,	Bombay, state of Guicowar, state of Holcar.
Hyderabad,	State of the Nizam.
Canara,	Madras.
Carnatic,	Madras.
Candeish,	Bombay, state of Holkar.
Cutch,	Bombay, state of Guicowar.
Lahore or Punjah,	Seiks.
Mysore,	Rajah of Mysore.
Malabar,	Madras.
Malwa,	Bengal, states of Sindia, Holcar.
Nepaul,	Nepaul.
Orissa,	Bengal.
Salem and Baramal,	Madras.
Northern Circars,	Madras.
Sindy,	State of Sindy.
Travancore,	Rajah of Travancore.

We have already mentioned the states

of Hindostan which preserve an appearance of independence. The rest of the country belongs to the English, except the territories in the possession of European powers. These are Goa, Damaun and Diu, belonging to Portugal (see *India, Portuguese*); Pondicherry, Karikal, Mahe, Chandernagore, and the factories of Calicut, Surat and Masulipatam, belonging to France (see *India, French*), and Tranquebar and Serampore, belonging to Denmark. (See *India, Danish;* see also the articles *East India Companies, Bengal, Bombay, Madras,* &c.) The name of Hindoostan, as before stated, is of foreign origin, the Bramins having no general name for the country over which their doctrines have been disseminated. When they spoke of it as a whole, they designated it by the epithets *Medhyama*, or central; *Ponyabhoumi*, or land of righteousness; or *Bharat-Khande*, country of Bharat, one of nine brothers, whose father governed the whole world. The early annals of the Hindoos are so fabulous, that it is difficult to separate the truth from fiction. Their own opinion of their antiquity is wholly chimerical; yet the astronomical knowledge of the Bramins, and the monuments of Hindoo architecture and sculpture, prove the great antiquity of this people, whose country was little known to the Greeks previous to the conquests of Alexander. That conqueror carried his arms beyond the Indus, and Seleucus Nicator, one of his successors, advanced as far as the Ganges. Arsaces, king of the Parthians, and some of the Bactrian kings, also made extensive conquests. About two centuries before the Christian era, the Parthians and Scythians overran all Northern India, or *Indo-Scythia*, as Ptolemy calls it. In the middle of the 7th century, the Chinese penetrated to the countries on the Ganges. At the beginning of the next century, the followers of Mohammed invaded Hindoostan, subjected nearly the whole of the Moultan, and established themselves in Northern India. One of the governors of the conquered provinces, Mahmoud (q. v.), becoming independent master of Ghiznih (Gazna), was the first modern conqueror of Hindoostan, and founded the Mussulman dynasty of the Ghaznevides, which lasted from 797 to the middle of the 12th century; he is said to have pushed his conquests as far as Goa. The last prince of this dynasty was deposed in 1152, by Kassim Ghauri, founder of the Ghauride dynasty, which derived its name from the country of Ghaur, and resided in Lahore; the Ghaurides subdued Kanara and the kingdom of Bisnagor, the Moultan, Delhi, and the country as far as Benares. In the beginning of the 13th century, the empire of the Ghaurides was divided, and Kutub, who received, for his share, the conquests in India, founded the Patan dynasty (or, as some call it, the Iletmishi dynasty), and made Delhi the seat of his empire. The reigns of the Patan emperors were disturbed by the invasions of Gengis Khan (q. v.) and Tamerlane. (q. v.) In 1525, the Mogul dynasty was placed on the throne of Hindoostan by the successes of Babur. (See *Moguls.*) Akbar (q. v.), his grandson, confirmed and extended his power in the northern part of Hindoostan, and reduced Bengal. The history of this part of the country is very confused and uncertain, till the 13th century. Towards the end of the 14th century, Tamerlane had taken possession of it, and it had subsequently been subject to native princes or to the Mohammedan emperors of Delhi. Akbar (died 1604) also reduced Cabul and Cashmere. He divided his empire into 16 subahs (governments), which were subdivided into provinces; the latter were administered by governors, called *nabobs*. One of his descendants, Aureng-Zebe (q. v.), ascended the throne, after having poisoned his father and put to death his two brothers. He carried the Mogul empire to its highest pitch of power and glory. The Mahrattas (q. v.), a warlike people from the Ghauts, were joined by several of the Hindoo princes, and, under the command of Sevajee, conquered an extensive territory. Aureng-Zebe was obliged to treat with them, and to yield them one quarter of the revenue of the provinces in the Deccan, which they had overrun. After the death of Aureng-Zebe, his empire continually declined, and became the prey to revolt and anarchy. The power of the Mahrattas, in the mean time, was rapidly extending, and, in the middle of the 18th century, the possessions of the Mogul emperors, although their persons continued to be respected, were reduced to the city of Delhi and its territory. The last Mogul emperor received a pension from the English, who (1803) took possession of Delhi and Agra.

Hindostan. (See *Hindoostan.*)

Hing-Ching (*Chinese*, meaning *representation of sound*). The Chinese alphabet is composed of ideographic and phonetic signs; these phonetic signs are all syllabic; they are called by the Chinese *hing-ching*, of which, according to Abel

Remusat's Chinese Grammar, p. 4, half of the alphabet consists. The Chinese have also a sign by which they can render ideographic signs phonetic, which, for instance, becomes necessary, when they wish to write foreign proper nouns, and have no sounds among their phonetic characters which express the foreign sound. (See *Hieroglyphics.*)

Hingham; a post-town in Plymouth county, Massachusetts, 14 miles south of Boston. It is built at the head of an arm of Massachusetts bay, and is a handsome and compact village. The manufacture of wooden-ware is carried on very extensively, and umbrellas are made in considerable quantities. Hingham has some navigation, besides what is required for the disposal of its manufactures. There are five houses for public worship, and an academy. A newspaper is published here. The mackerel fishery is carried on to a considerable extent from this place. The number of vessels employed in this business, in 1821, was 27, and the mackerel taken amounted to 10,875 barrels. In 1830, the number of vessels employed in the fishery was 64, and the number of barrels taken, 44,878. Upwards of 8000 hogsheads of salt were consumed for striking and packing mackerel caught from Hingham in the last-mentioned year. Population, in 1830, 3357. Major-general Benjamin Lincoln was born here, in 1733.

Hipparchus. (See *Hippias.*)

Hippias; prince of Athens, son of the great Pisistratus, after whose death he assumed the government, in conjunction with his brother Hipparchus: the latter was assassinated during the Panathenæa, while conducting a solemn procession to the temple of Minerva, by a band of conspirators, under two young Greeks, Harmodius and Aristogiton. Hippias now seized the reins of the government alone, and revenged the death of his brother by imposing taxes on the people, selling offices, and putting to death all of whom he entertained the least suspicion, after having forced them to confess by the most dreadful tortures. This fate fell even upon several of his best friends, whom Aristogiton, full of indignation, had falsely accused as conspirators. The Athenians, wearied with these cruelties, formed a plan to free themselves from the yoke. They found means to bribe the priests of the Delphic oracle, which commanded the Spartans to release the Athenians from the tyranny of the Pisistratides. In compliance with the command of the divine Pythia, Sparta broke off her alliance with the tyrant of Athens, who was obliged to yield to the united attack of his foreign and domestic enemies. Hippias was expelled from the city B. C. 510, and Athens breathed more freely. But the means by which the voice of the oracle had been gained, did not remain a secret, and the Spartans, filled with indignation, demanded the restoration of Hippias, but without success. Hippias now sought protection and support from Artaphernes, the satrap of Sardis, and induced Darius, who was already irritated against the Athenians, on account of the assistance which they had rendered to the Asiatic Greeks, to require them to receive Hippias. Their decisive refusal kindled the first war of the Persians against the European Greeks. But the battle of Marathon, in 490, destroyed, with the army of Darius, the hopes of Hippias; he himself fell on that bloody day, fighting against his country.—*Hippias* was also the name of a sophist.

Hippocentaurs, in mythology; a species of monsters, sprung from the union of a Centaur and mare. From the derivation of the word, it is highly probable that it denotes a rider who spears an ox from on horseback, for this term is compounded of the words ἵππος, κεντεῖν and ταῦρος.

Hippocrates, the most famous among the Greek physicians, founder of a school in medicine, and author of the first attempt at a scientific treatment of medicine, was born in the island of Cos, and in the city of the same name, B. C. 456, and belonged to the celebrated family of Asclepiades, or descendants of Æsculapius, from whom Hippocrates was the 17th in descent. His father, Heraclides, a physician, instructed him in the art of physic, and his education was conducted with all the care that was usual in the principal families, during the flourishing period of Greece. He probably enjoyed the instruction of the philosophers then living at Athens, and, among them, of Heraclitus. He spent the greater part of his life in visiting the different cities of Greece, for the purpose of improving in his art. He remained longest in Thrace and Thessaly, particularly in the Thracian island Thasus, and probably travelled also over a great part of Asia. He died in his 90th year. The writings which are extant under the name of Hippocrates cannot all be ascribed to him. There were several of the name. Some of these writings are the productions of the Alexandrian school. Others, though genuine, have been collected, altered, explained, and mixed with additions by his descendants. The genuine writings of

Hippocrates are, the first and third book on epidemics; aphorisms; the treatise on diet; on air, waters and situations; on prognostics; some surgical treatises; the oath; the law. The most esteemed edition is that of Geneva, of 1657, in 2 vols., folio. Besides this, we may mention that by Van der Linden (Leyden, 1665, 2 vols.), and that by Chartier (Paris, 1639—79, 13 vols., folio, together with Galen). The latest is by Kühn (vol. 1st., Leipsic, 1825). Hippocrates was a zealous, unwearied observer of nature, and considered diseases with a free spirit, unprejudiced by any system; hence we have from him the finest description of their natural course, disturbed neither by medicines nor by any violent or precipitate interference. He was by this means best enabled to become acquainted with the healing power of nature, and with the different ways in which she effects the restoration of the sick, as well as with the exterior means by which she was supported in her operations. He adopted a principle of life as a fundamental power of the living body (*Enormon*) on which life, health or sickness were dependent; but he did not express himself more distinctly respecting it; nor did he enter into many hypotheses and investigations on the nature of disease in general. He paid great attention to the exterior influences, as the remoter causes of the maladies; in particular to air, food, climate, dwelling-place, and even to the social relations of the sick. He made the observation, that nature followed, in the course of the diseases, certain periods of increase and diminution, and was led by this to his doctrine of the *critical days*. In his method of curing, the dietetical precepts take the first rank. He advises to adapt the diet to the degree of strength of the sick. At the same time, he makes it his object to observe the operations of nature, to lead them, to imitate them, and, as circumstances require, to augment or to repress them. During the increase of the disease, he did not willingly undertake any thing decisive, lest nature might be disturbed in her wholesome operation on the matter of disease; but, during the crisis of secretion and evacuation of the matter of disease, or shortly before, he assisted nature by means which promoted the discharges. His peculiar merit in medicine consisted chiefly in clearing this science from the useless subtilties of the many philosophical sects of that period, and in making it, instead of the exclusive property of the priests, a common good, open to every one who wished to study it; in observing the course of undisturbed nature with a clear eye and an enlightened mind, and in the faithful communication of his experience. He directed the attention of physicians to the importance of exterior influences, to the healing powers of nature, and to the necessity of an appropriate diet; and enriched the doctrine of the symptoms, and of the prognostics in diseases, with a number of observations, founded in nature, and manifesting his great genius and skill as a physician.

Hippocrene (*the horse's fountain*); a spring on mount Helicon, a mountain in Bœotia, consecrated to the muses, the waters of which possessed the power of poetic inspiration. It was sacred to the muses and Apollo. It is said to have risen from the ground, when struck by the hoofs of Pegasus.

Hippodamia was the name of several females of antiquity; for example, of the wife of Pirithoüs (see *Pirithoüs)*, king of the Lapithæ. The most celebrated is the daughter of Œnomaüs, king of Pisa in Elis. On account of a prediction that he was to be murdered by his future son-in-law, he made a condition that all the suitors for his daughter should contend with him in a chariot-race, and, if he should overtake them before they arrived at the goal, should fall by his hand. He thus succeeded in slaying 13, or, as some say, 17 suitors, when Pelops, by corrupting the charioteer, caused Œnomaüs to be upset in the middle of the course, by which means he lost his life. Thus Hippodamia became the wife of Pelops, and mother of Atreus and Thyestes. She committed suicide, from grief at the accusation of having misled these sons to fratricide.

Hippodrome (from ἵππος, horse, and δρόμος, course, race) was the name, among the Romans and Greeks, of the public place where the horse and chariot races were held. Of all the hippodromes of Greece, the most remarkable was the one of Olympia, of which a description may be found in Pausanias. After this one, there was none more remarkable than that of Constantinople, which still fills the traveller with astonishment. Severus began the erection of this splendid structure, and Constantine finished it, in imitation of the great circus at Rome. It is surrounded by two ranges of columns, extending farther than the eye can reach, raised one above the other, and resting on a broad foundation, and is adorned by an immense quantity of statues, of marble, porphyry and bronze, of men and beasts, emperors and athletes. Among other remarkable

monuments of art, the four bronze horses of Lysippus stood here, which have migrated from Greece to Rome, Constantinople, Venice and Paris, and have, at last, been transported back to Venice. The Turks call this place *Atmeidan*, that is, *horse-place*, and thus recall to the mind its former destination. It is, at present, 400 geometrical paces in length, 100 in breadth, and, passing over many slight irregularities, almost quadrangular; and, notwithstanding the corroding touch of time, some remarkable relics of antiquity are still found here.

Hippogriff; the name of a fabulous animal, a griffin whose body terminated in that of a horse. It was a symbol of Apollo, but it is uncertain whether it belonged to him as the god of the muses or of the sun. Buonarotti thought that the Greeks had borrowed this symbol, together with the worship of Apollo, from the East, without knowing the exact signification; and this is not improbable. Although it may have been originally the symbol of the god of the sun, the poets sometimes attribute it to the god of the muses, instead of Pegasus.

Hippolytus. (See *Phædra*.)

Hipponax; a Greek poet, born at Ephesus, 540 years before the Christian era. His satirical raillery obliged him to fly from Ephesus. As he was naturally deformed, two brothers, Buphalus and Anthermus, made a statue of him, which, by the deformity of its features, exposed the poet to universal ridicule. Hipponax resolved to revenge the injury, and wrote such bitter invectives and satirical lampoons against them, that they hanged themselves in despair.

Hipponous; the original name of the celebrated Bellerophon, the son of Glaucus and of a daughter of Sisyphus, king of Corinth. Having unintentionally killed his brother, he fled to Prœtus, king of Argos, who received him hospitably, and expiated him. But queen Antea soon conceived a criminal love for the youth; and, when Bellerophon, revering the rites of hospitality, did not return her affection, she avenged herself by calumniating the innocent youth to her husband. Prœtus sent him to his father-in-law, Jobates, king of Lycia, with tablets having characters engraved on them which were of dangerous import to the bearer. Jobates, in compliance with the hospitable custom of the heroes of antiquity, entertained the stranger during the space of nine days, before he inquired into the object of his visit; and having, on the tenth day, learned his commission, he also feared to lay hands on his guest. He ordered him, however, to kill the Chimera (q. v.), a monster which had three heads, and breathed fire, being convinced that no valor would enable him to sustain this combat. But Bellerophon, mounted on Pegasus—a present from Pallas—fought in the air, and overpowered the monster. After this, he conquered the Solymians, and, at last, the Amazons. Jobates, then recognising the divine origin of the youth, gave him his daughter Philonoë in marriage, and shared his kingdom with him. The children of Bellerophon were Isanderos, Hippolochus and Hippodamia. He, at length, attempted to ascend to Olympus on his winged steed, but, as some writers assert, was hurled down by the thunderbolt of Jupiter; according to others, Pegasus, stung by a gadfly, threw him off; and from that time he avoided the face of man, and wandered through the deserts of Aleia in Cilicia, where he perished with hunger.

Hippopotamus (*H. amphibius*). This genus of the *pachydermata* consists of but a solitary species, at present existing; recent observations, however, have shown, that four others lived in the earlier ages of the world. The hippopotamus is fully equal to the rhinoceros in size, and is not less formidable. He has four cutting teeth in each jaw, those in the lower jaw straight and pointing forward nearly horizontally, the two middle ones being the longest. The canine teeth, or tusks, are four in number; those in the upper jaw short, those in the lower very long, and obliquely truncated. They are sometimes two feet in length, and weigh upwards of six pounds. These tusks are in great request with the makers of artificial teeth, as they are not subject to turn yellow. In figure, the hippopotamus more closely resembles an unwieldy ox than any other animal. A male hippopotamus has been known to be 17 feet in length, 7 in height and 15 in circumference. The head is very large, being three feet and a half in length; the mouth is amazingly wide, the ears small, pointed, and lined with fine, short hairs; the eyes and nostrils are small; the lips very thick, broad, and beset with a few scattered tufts of short bristles; the body is thinly covered with very short, whitish hair, more sparingly distributed on the under parts; the tail is short, slightly compressed, and almost bare; the legs are short and thick; the feet large, and divided into four parts, each furnished with a hoof; the skin is very thick, and of a dusky color. The hippo-

potamus is confined to Africa, and abounds most in the lakes and rivers of Abyssinia, Nubia and Upper Egypt; but these animals are also found in considerable numbers in the Gambia, Niger, &c. They formerly were plentiful near the cape of Good Hope, but are now nearly extirpated. To preserve the few remaining, the government have prohibited the shooting them without express permission. The hippopotamus appears to have been well known to the ancients, though their descriptions of its form and habits are inaccurate. Thus Aristotle and Pliny describe it as having hoofs like an ox, a mane like a horse, a flat nose and a tail like a hog. That the latter author should have been so erroneous is extraordinary, as several of these animals had been exhibited at Rome. Scaurus, during his edileship, had five crocodiles and a hippopotamus in a temporary lake, and Augustus produced one on the occasion of his triumph over Cleopatra, and we find the figure of it on medals and mosaic pavements. But the ancients knew no other mode of description, than that of comparing the parts of an unknown animal with those of animals well known, hence giving rise to innumerable errors. The *behemoth* of Job is considered by most commentators to be the hippopotamus, as the description of his size, manners, food and haunts is very similar to those of the latter animal. Among the ancient Egyptians, it was revered as a divinity, as it is among the Negroes of Congo, Elmina, &c. The great strength of the hippopotamus would render it one of the most formidable of quadrupeds, were its disposition ferocious; but it is mild and gentle except under great provocation or when wounded. When excited, however, his power is dreadful: he has been known to destroy boats with his teeth, or upset them, by raising them on his back. There is no doubt that it can be tamed. Belou states he saw one kept in a stable, which showed no inclination to escape, or to commit any mischief, even when released from confinement; and Sparmann thinks they might be reared without much difficulty. The voice of the young is a squeak, like that of a hog; that of the adult is said by some writers to resemble the neighing of a horse, whilst others represent it as a loud, sonorous noise, between the bellowing of an ox and the roaring of an elephant. From the unwieldiness of his body, and the shortness of his legs, the hippopotamus cannot move very swiftly upon land; when pursued, he takes to the water, and, plunging in head foremost, sinks to the bottom, where it is said he can move along with the same slow and stately pace as in the open air. He cannot, however, continue for any great length of time thus immersed, but is obliged to rise to the surface for breath. In manners, the hippopotamus approaches somewhat to the hog. His sleeping place is usually muddy islands, overgrown with reeds; in these places, also, the female brings forth. She is supposed to go with young about nine months, and to produce but one at a birth. She is often seen in the rivers with her calf on her back. Her manner of suckling somewhat resembles that of the cow. A herd of females has but one male. The males often contest each other's right over the females; the contest that ensues, as may readily be supposed, is terrible. Their bite is very severe, and masses of flesh, torn out by the grasp of their monstrous jaws, mark the spot of their encounters. Sometimes, the weakest will attempt to fly, leaving his conqueror master of the field; but this seldom occurs, and it not unfrequently happens than one, or even both, perish on the spot. Although the hippopotamus is an inhabitant of the waters, his food is entirely of a vegetable character, in search of which he leaves his liquid residence, and ranges along the banks, committing wide devastations through all the adjoining country. On the banks of the Nile, he often defeats the hopes of the husbandman, whole fields of grain and sugar-cane being destroyed, not only to satisfy his appetite, but also trampled down by his great weight. It has been pretended, that the hippopotamus devours great quantities of fish; but it appears from the best evidence, both of travellers and from his anatomical structure, that he is nourished exclusively on vegetable food. The stomach, like that of the ruminating animals, is divided into several pouches. The flesh of the hippopotamus is eaten in Africa. The Hottentots, and many other nations, are extremely fond of it. The fat resembles lard. The choice pieces are said to be the gelatinous part of the feet and the tongue. The hide, which, as has already been stated, is very thick, is converted by the Negroes into shields, and is also used by the inhabitants of the cape for whips. It is asserted by Labat, that the blood is used by Indian painters in the preparation of their colors. The modes of capturing these animals are various. The Egyptians throw a large quantity of dried peas on some place where they expect the hippopotamus to pass; these the hungry animal eagerly devours;

this mass of dry food disposes him to drink, and the water, swelling the peas in his stomach, destroys him (*Hasselquist*). The Hottentots sometimes practise the same stratagem. But they more commonly either take them in pitfalls prepared for this purpose on the banks of rivers, or shoot them with tin balls (*Sparmann*). In some places, the natives place boards full of sharp spikes in the ground, which these heavy beasts strike with their feet, become disabled, and fall an easy prey to the hunter. The most dangerous method is harpooning them; this, however, is a very common mode in Africa, and it is said that it is by no means rare to see ten or a dozen canoes employed in this kind of chase. Among the fables of the ancients respecting them, is, that they vomited fire; and Pliny relates, that this animal, when he feels his habit overcharged, repairs to some place covered with sharp reeds, and obtains a discharge of blood by lying down upon them in such a posture, that they pierce the tender parts of his skin. As has already been mentioned, the remains of four extinct species have been discovered in Europe, and described by Cuvier. These are the *H. antiquus*, which appears to have been about the size of the existing species. The bones of this animal are found in considerable numbers in the Val d'Arno Superiore in Tuscany, and have also been met with near Montpellier and Paris in France. *H. minor*, apparently about the size of a wild boar; it is not known where the bones were found. *H. medius;* this species which is established on two fossil teeth, is supposed to have been intermediate between the two latter. *H. minimus;* this appears to have been very small, not exceeding the common hog in size. Cuvier, in arranging these two latter species with the hippopotamus, remarks, that although it is probable that such is their true situation, yet that it is impossible to be absolutely certain of the fact, as no incisor or molar teeth have yet been discovered. No remains of this genus have yet been discovered in America, though it is far from unlikely that future researches may afford us specimens.

Hirschberg, after Breslau, the chief commercial place in Silesia, particularly in respect to the linen trade, is charmingly situated in the principality of Jauer, government of Liegnitz, at the confluence of the Bober and Zacke, not far from the Riesengebirge, has above 6200 inhabitants, partly Catholics, partly Protestants, with a good gymnasium. It is remarkable for its bleacheries. Hirschberg has also cloth manufactures, a sugar refinery, &c. About five miles distant is Warmbrunn, a mineral bath, much resorted to from the north-eastern part of Germany. The circle of Hirschberg contains over 47,000 inhabitants, who mostly live by the manufacture of linen.

Hirt, Aloys; member of the royal academy of Berlin, professor of archæology in the university of Berlin; particularly distinguished for his knowledge of ancient architecture, and in general as a theoretical architect, as appears from his papers read to the above academy, on the temple of Diana at Ephesus, and on Solomon's temple, on the Roman Pantheon (in Wolf's and Buttmann's Museum of Archæology), also from his *Anfangsgründe der Baukunst* (Berlin, 1804), &c.; but chiefly from his *Die Baukunst nach den Grundsätzen der Alten* (Architecture according to the Principles of the Ancients), Berlin, 1809, with 50 plates, folio. Of his life, we only know that he was born in Donaueschingen, in 1759; that he travelled in Italy, and became the companion of some persons of distinction, returned to Prussia with the countess of Lichtenau, and became the tutor of prince Henry.

Hispania was the name given by the Romans to the whole peninsula of the Pyrenees, now Spain and Portugal. The Greeks denominated it *Iberia*, and it received the name of *Hesperia* (the West), from the Roman poets. Spain was inhabited in the earliest times. The first inhabitants were the Cynetæ or Cynesi on the southern coast, the Tartessi near the pillars of Hercules, and the Sicani and Siculi. The two first nations were probably driven by the Iberians from Gaul to Spain, and the two latter by the Iberians from Spain to Italy. The Iberians, who were distinguished for their love of liberty, their warlike and cruel spirit, were followed by the Celts, of whom a portion remained unmixed, under the name of *Celtici*, while another part united with the Iberians, and formed with them the gallant Celtiberi. To these inhabitants, Phœnician and Greek colonists were afterwards joined, and finally Roman. Those colonists dwelt for the most part on the straits, and were distinguished for civilization and an extensive commerce. The first conquests in Spain were made by the Carthaginians after the first Punic war (about 240 B. C.), first under Hamilcar, and subsequently under Hasdrubal, who founded Carthago Nova (the present Carthagena). The Romans limited the Carthaginians to the river Iber; but Hannibal captured Saguntum (see *Saguntum*), and

thus gave rise to the second Punic war. The armies of Rome, under Scipio, expelled the Carthaginians; but the nations beyond the mountains, the Celtiberi, Carbetani, Vaccæi, &c., continued free, and the northern and western tribes were as yet unknown. These tribes, who had hitherto subsisted on the pay of the Carthaginians, and on the plunder of the southern Spaniards, began a war with the Romans, which ended, 200 years after, with their entire subjugation. Cato was the first (about 196 B.C.) who was successful against them, and T. Sempronius Gracchus forced the Celtiberi to sue for peace. But the avarice, perfidy and barbarity of the Roman generals soon created new wars. The Lusitani took up arms under Viriathus, but submitted, after the Romans had got rid of him by artifice. Immediately after, the Numantian war broke out, which Scipio Africanus terminated, after a fearful battle, by the capture of Numantia (see *Numantia*), 133 B. C. The Romans remained in quiet possession of the eastern and southern coasts, and maintained the respect of the nations in the interior of the south. The famous Sertorius finally subdued the Celtiberi and Lusitani, and compelled them to receive Roman manners and tactics. Augustus first subdued the northern countries in the celebrated Cantabrian war; though single tribes, such as the Vascones and Artabri retained their freedom. At first, the Romans divided Spain into Hispania Citerior and Ulterior, and afterwards into Bætica, Lusitania and Hispania Tarragonensis, and finally into seven distinct provinces. Even in the earliest times, the soil was celebrated for fertility. It abounded in the base and precious metals, which the Phœnicians exported thence. It moreover produced excellent horses and sheep, and was fruitful in wine, oil and grain. (See *Spain.*)

Historical Painting. (See *Painting.*)

Historical Sciences and Historical Literature (see *History, Geography, Chronology, Numismatics, Genealogy, Heraldry, Diplomatics, Antiquity*). The *Bibliotheca Historia-geographica* (more than 9000 articles), published by Enslin, at Berlin, in 1825, is a catalogue of all the valuable works on history, geography and the auxiliary sciences, which have appeared in Germany especially, from 1750 to 1824.

History (from the Greek ἱστορία*); a word, which, with the progress of the science it designates, has received a more and more extensive meaning, until it has come to signify that science, which treats of man in all his social relations, political, commercial, religious, moral and literary, as far as they are the result of general influences extending to large masses of men, and embracing both the past and the present, including therefore every thing which acts upon men, considered as members of a society; its object is to represent the relations in which man exists, and the influences to which he is subject, with truth and clearness.† In investigating these relations, and dispersing the clouds which often envelope truth, history is a science; in exhibiting its treasures of truth, an art. Individuals, events, actions, discoveries, measures, are historical as far as they have a bearing upon the many, in their relations to each other; or as far as they disclose a truth, important with respect to the relations above-mentioned. In other words, man in society is the subject of history; and, as the term *society* may be used in a more or less extensive sense, we have universal histories, which ought to comprise the history of all mankind in its progressive or changing state, if they answered fully to their name; and histories of single countries, tribes, cities, societies, institutions, and even families. But we cannot speak of the history of an individual, unless he is the representative of many, or was so situated that his steps and actions had a decided bearing upon many. The history of Napoleon, for instance, would be very different from his biography. It is evident, then, that the difference between a history and a chronicle, arises by no means from the importance of their subjects. There are chronicles of empires, and histories of cities; the former giving an enumeration of events or actions

* According to Verrius Flaccus, *rerum cognitio præsentium*, the knowledge of things present; so that the idea of narration seems to be a secondary meaning of *history*. The German *Geschichte* (from the verb *geschehen*, to happen), on the other hand, means originally something which has happened, and secondarily the relation of events.

† This definition of *history* does not comprise *natural history*; and, according to the common usage of the two terms, they may actually be considered as totally different; if, however, we should give a definition embracing both, it would be—History is the science which embraces all the objects of *external experience*, including the present and the past; that is, all the phenomena which occur in space or in time. The representation of the present is *description*; the representation of the past, *relation*. From this view of history the Germans derive their meaning of the phrase *historical sciences*, by which they mean all those branches of sciences, whose subjects are derived from experience or from the external world, and are perceived by the *senses*, in contradistinction from the abstract sciences, as mathematics and metaphysics.

only, whilst the latter exhibits the changes which man has undergone in that city, in regard to his social relations. Biography is the description of the life of an individual, always keeping the individual in view. Again, one or another social relation may be selected as the particular subject of a history; and hence we have political history, literary history, histories of religions, inventions, &c. As no science but mathematics affords precise definitions and divisions, the question, What entitles a subject to be considered historical, may be very differently answered by different individuals, or nations, or ages; and a historian may even deviate from his general rule, and relate events or actions which, though not of a decided influence on society, are remarkable or interesting for some other reason; but in so doing, he deviates from the general rule. The interesting nature of a fact, does not properly render it historical, unless it has an influence upon society; for instance, an interesting heavenly phenomenon is not of itself of historical importance, but it becomes so if it exerts, in any way, a wide-spread influence; for instance, if it be considered as an indication of the divine displeasure, and lead a people to take measures to conciliate the offended deity, or if the notions entertained respecting it show the state of science at a certain period. Having thus touched upon the class of facts which fall within the province of the historian, we shall now say a few words upon the mode in which he is to give them. When the historian is called upon for facts, what is the meaning of the demand? Of course, he is to give no wilful misstatements. What then is meant? That he should confine himself to a bare register of events, and make his work a chronological table, or, at best, a book of annals? This might suit the purposes of those who wish to prevent the true causes of events and the true character of periods from being seen, but it would not comport with the character of history. The historian is to give facts, but he is to give them with all their attendant circumstances, showing both the causes from which they sprung and the consequences to which they gave rise; otherwise, he is no better than a chronicler. In the daily occurrences of private life, how much explanation is necessary to enable us to form a just estimate of actions and events! If we say that A killed B, without stating whether in self-defence or with malice prepense, who can estimate rightly the conduct of A? It is the same in history. In the testimony which the historian bears to the character of the past, before the tribunal of posterity, he is bound to state not merely "the truth," but "the whole truth." That Henry IV was killed by Ravaillac May 4, 1610, is a historical fact; but the explanation of the conduct of Ravaillac involves a consideration of the whole political state of France at the time. It is a very common mistake to suppose that a historian, by confining himself to facts, might satisfy all parties, in the same manner as a mathematical demonstration is equally convincing to every one. Take, for instance, the French revolution. There exist several enumerations of all the laws which were passed, and all the memorable events which happened during that period, chronologically arranged. These, of course, if faithfully drawn up, ought to be equally acceptable to royalists and republicans. But is this history? Are these statements of facts such as are required of the historian? He is not to tire us, indeed, by arguments or declamations, but he is bound to give the whole connected series of facts, not the broken links of the chain. Therefore, in this case, he must set forth the causes of the revolution, found in the previous state of France. At this point, of course, different views will immediately arise. Some writers will think they discern the causes of the revolution as early as the time of Louis XIV, in his profligate administration, and concentration of all power in himself, and will show how these causes gradually acquired their fearful energy; whilst others will insist that the revolution was merely the work of a set of factious men. Thus we see how groundless is the expectation of writing history so as to satisfy every body. If the daily occurrences of life are viewed in very different lights by equally intelligent persons, how can it be otherwise with the past! The demand that the historian should confine himself to facts, is so far correct, that he should not color his statements of events to adapt them to his own theories. Nothing is more seducing, and, at the same time, more dangerous, than leading ideas in history, to which the facts have been too often made subservient. This was particularly the case in Germany, at the end of the last, and the beginning of the present century; but the present method of writing history there has become more sound, though that nation, so much inclined to see every thing in a general and impartial point of view, is more easily led astray from the true path of history than others. Proofs of

this fact constantly occur, though not so often, at present, in their best historians. We now come to a more particular consideration of the arduous duties of a historian. If truth is his greatest object, justice is his first duty. He must have the rare power of renouncing his private feelings, and, whilst he investigates or writes as a historian, must elevate himself above his country, sect and age, so as not only to be willing to acknowledge the faults of his own party and the merits of his adversaries, but, what is far more difficult, he must divest himself of the peculiar views of his age, or country, or sect, and be able to enter into those of others, and not measure them by his own standard. If he is a republican, he must not carry his republican dislike of royalty with him when he studies the history of monarchy, but must unbiasedly investigate the monarchy with all its circumstances, and the series of events which affected it, and then judge of its value. He must not carry democratic principles into the study of the middle ages, nor his notions of modern society into his investigations of the character of the ancients. The conclusions which he draws must be those of a philosopher, uninfluenced by the circumstances which immediately surround him. Nothing is more inconsistent with the true duty of the historian, than to measure other times by the conceptions and views of his own age. So much for the duty of a historian. As to his qualifications, he must be endowed by nature both with that power of the poet, which can conceive the character of great men and great periods, totally different from his own, and with that acuteness and soundness of judgment, which can detect truth through the clouds of falsehood and prejudice. He must also have received from nature that unrelaxing zeal, which does not shrink from the most toilsome and long continued labor. As to his acquirements, they must be of the most extensive character. He must be possessed of extensive philological knowledge, as a key to the various sources of information. To the historian of modern times, the principal languages of modern Europe are indispensable. Secondly, he must have an encyclopedian knowledge of the sciences and arts in general (and under this head, philology returns as one of the most important branches of knowledge), because all are essentially connected with the progress of mankind ; and without such knowledge, the historian will not be capable of understanding the multiplied modes of human improvement, and will be liable to present narrow views of the state of society at any given period. A careful examination of all historical sources remains—a labor as necessary as it is gigantic. The Germans, always foremost where zeal and erudition, as well as liberal criticism, are required, have also opened the path in this direction. We admire the vast knowledge of historical writers, displayed, for instance, by Rühs ; but the great end of history seems to us to be particularly promoted by the method followed by professor Ranke, in his contribution to the criticism of modern historians, Berlin, 1824 (*Zur Kritik neuerer Geschichtschreiber*), in which he endeavors to determine the degree of confidence we owe to, and the degree of information contained in, the chief sources for the beginning of modern history. He justly remarks in the preface, "As one would feel on entering a numerous collection of antiquities, in which the genuine and spurious, the beautiful and repulsive, the magnificent and mean, belonging to various nations and ages, are mingled, thus would he feel, who should be at once brought to all the various records of modern history. They speak to us in a thousand voices ; they present the greatest variety of character ; they are clad in all colors. Some strut in a solemn gait ; they wish to represent ; they think they take the path of the ancients. Others strive to draw lessons of wisdom for future ages from the past ; many wish to defend or to accuse ; not a few endeavor to explain events from the hidden springs of conduct which lie deep in the heart. There are some, whose only object is, to relate simply what has happened. Documents, genuine and counterfeit, lie in crowds before us. The most important question is, Who, in this multitude of witnesses, is possessed of original knowledge ; who can really informus ?" A few such critics as Ranke, would contribute greatly to the progress of historical knowledge, and render the same kind of service to this science as the Schlegels have rendered to belles-lettres. The Germans are less successful in historical execution. If they surpass all nations in historical knowledge, they are surpassed by several in historical delineation. In this respect, the English have, in our opinion, taken the lead ; and it is only since the Germans became acquainted with Gibbon, and Robertson, and Hume, that their modern historical writers have improved in the art of historical narration. One reason of this cir-

cumstance is, probably, the want of popular elements in their government, so that they do not acquire the habit of addressing the public in a direct and lively manner, either in speech or writing. Auxiliary to history are *chronology* and *geography*, so often called the *eyes of history; ethnography*, which treats of the customs and characteristics of a nation; *mythology*, as well for the purpose of comprehending the whole character of a people from the beginning, as to find out in its fables, if possible, the corroboration of facts (for instance, that civilization came to Greece from Egypt); *philology*, which has been already mentioned; *numismatics*, or the knowledge of coins and medals, of importance particularly for those ages of which few written documents exist; the knowledge of monuments, and *epigraphics*, or the knowledge of inscriptions, including hieroglyphics; *heraldics*, *diplomatics* (q. v.), a subdivision of which is *sphragistics*, or the knowledge of seals; and, as we have already mentioned, the *criticism of historical sources*, from the ancient papyrus to the modern memoir, and from state-papers down to newspapers. (See the article *Newspaper*.) Besides, it is necessary to be well acquainted with the history of *historiography*, to know what has been written, and the progress and decline of historical writing. Herodotus is to be considered as the father of European history. He tells, with the most unaffected simplicity, all that has been told to him. His work is the childlike beginning of an art; yet, sometimes, even he feels the great call of the historian, in all its dignity, as when, after having mentioned that several persons are each named as the traitor who led the Persians round the mountains at Thermopylæ to the rear of the Greeks, he pronounces, "but it was Ephialtes, and him I write down." However, he has often been overrated by the learned. The Greeks produced other and greater historians, of whom Thucydides was the greatest. The period which began with Herodotus lasted to Procopius and Cassiodorus, or to the fifth century, A. D. In this period, the Romans likewise produced many and excellent historians. When civilization, however, declined in the West, history fled to Constantinople, where it was fostered, at least in some degree. The whole of Western Europe was in the most barbarous state, and the little knowledge that existed had taken refuge in the monasteries, where the deeds of the age were recorded in chronicles, from the 5th century to the 15th. Gregory of Tours (q. v.) opens this series. At the same time, feudalism, which may be called the political form of individuality, produced in France that remarkable branch of literature, the *memoirs*. In the feudal times, the individual acted for himself, and hence the histories of those times are, in a great measure, narratives of the actions of individuals, whilst, in ancient times, the state prevailed over the individual, so that Xenophon and Cæsar, even in describing events in which they were the principal or very important actors, speak in the third person. With the latter, however, it may arise also from a feeling of historical dignity, as Frederic the Great and Napoleon likewise speak of themselves in the third person. The crusades enlarged the territory of European history; and the growth of a third class—the citizens—and the revival of commerce had a salutary influence upon the spirit of the age, and, with the restoration of ancient literature, upon the study of history. In the cities, a new state of society was developed; a struggle for liberty and independent government commenced; and thus a want of something better than the dead chronicles of the cloisters was created. The art of printing was invented; the knowledge of foreign and distant countries was enlarged by commerce, travel and missions; the various national languages were cultivated. The reformation created a new spirit of investigation and thirst for knowledge, and, by degrees, historical writing was more and more studied. Italy, to which we must recur for the beginning of almost all branches of modern civilization, furnishes the first instances of distinguished historians in modern times. Guicciardini, Machiavelli, and others, opened the path, which the writers of France and England soon entered. In Germany, history was long in shackles; the philologists cultivated only Greek and Roman history, the theologians Biblical history, or other portions of history only in a religious point of view, whilst the jurists studied the history of the German empire, merely as an auxiliary to their profession. A better period did not begin until the time which we have already indicated. If liberty finally comes off victorious from the struggle which is now beginning in Europe, a new era for history will begin in that part of the world, because history can truly flourish only under the protection of liberty. Flattery poisons it. The fear of offending established views destroys the power of investigation, and its effects are

very perceptible in particular departments of historical research. Whilst political history began to be cultivated late in Germany, more has been done there for ecclesiastical history than in any other country, because so much liberty of religious investigation exists no where else. We speak not of legal liberty, but of that allowed by public opinion. In England, however, very little has been done for ecclesiastical history, yet that country was the earliest to produce great civil historians. History has several points in common with dramatic poetry; among others, that just mentioned. Dramatic poetry cannot thrive in a despotic government, because it exhibits characters with boldness, whilst lyrical poetry, the element of which is admiration and adoration, may prosper at a court. The high rank and vast extent of history are obvious, embracing, as it does, the picture of man in every stage of improvement, and teaching us how the present age is connected with the past; what we owe our predecessors, and how we should profit by their example; removing that feeling of self-complacency, into which individuals acquainted only with their own confined sphere, or generations unacquainted with preceding ones, easily fall; it shows us that, if we surpass former ages in some branches, they were before us in others. History makes man modest, and yet it elevates him, by showing him the great votaries of virtue, and the height to which his nature may rise. The freer a nation is, and the more its welfare is left to itself, the more necessary is a general study of history. Without it, we cannot properly understand the object of existing laws and institutions; and, instead of developing them farther, if they are salutary, the hand of the ignorant will tear them down; whilst the bad are often left, from the same inability to comprehend their character. History may be divided into, 1. Ancient history, which begins with the first records of mankind, or, if we begin with history which rests on critical grounds, with the first establishment of states and kingdoms, and comes down to the destruction of the Roman empire, A. D. 476; 2. the history of the Middle Ages, which begins with 476, and comes down to the discovery of America in 1492, because this event produced a decided change in commerce, politics and science; others take the reformation as the close of this period; 3. Modern history, from 1492 to our own times. In this, the American declaration of independence, or the commencement of the French revolution, may be considered as making a great epoch, and the subsequent period may be called the *latest history*. Perhaps the American declaration is the most proper dividing point, as the democratic principles were then proclaimed and politically settled, which are so distinct a feature of the most modern time, in contradistinction to the feudal principles of former periods. Future historians will, perhaps, comprise the (so called) *middle ages* and the period extending to the great events last mentioned under one head, and call it the *feudal period*, whilst the following period may be called the *democratic*.—See Meusel's *Bibliotheca historica Struvio-Buderiana* (1 vol., Leipsic, 1782); Rüh's *Entwurf einer Propädeutik des Historischen Studiums* (Berlin, 1811); Wachler's Account of Historical Inquiries and the Historical Art since the Revival of Letters in Europe (2 vols., Göttingen, 1812—1820, in German), and *Lehrbuch der Geschichte* (Manual of History, for the use of higher schools, 5th edit., 1 vol., Breslau, 1828); *Bibliotheca historico-geographica* (Berlin, 1825). Synchronistic tables are of great use in the study of history, and we know of none better than those of Bredow, a German. In what follows, we shall give a chronological view of the outlines of history, with special reference to the latest times. Various modes of division may be adopted in such tables. We trust those used will be found sufficiently convenient. They are, indeed, of comparatively little importance. (For the history of particular countries, see the respective articles.)

A GENERAL CHRONOLOGICAL TABLE.

I. *From the Beginning of History to the Destruction of Troy by the Greeks.*

B. C.	
	[Twilight of history before the deluge of Noah.]
About 3000.	Deluge. Noah.—Increase of mankind.—Patriarchal times (Union of the civil and religious authority in the person of the father of the family or tribe).
About 2500.	Nations on the Nile, Euphrates and Tigris, on the Indus and Ganges.
About 2400.	Ancient Assyria.—Belus.—Haik in Armenia.—Yau in China.
About 2300.	Thebes (Egyptian).—Menes.—
About 2200.	Canals of the Nile.—Astronomy at Babylon.—Buddha on the Ganges.
About 2100.	Busiris in Egypt.—Tchew-Kong in China.
About 2000.	Memphis.—The Pharaohs.—Castes in India and Egypt.—Assyria Major. Ninus. Semiramis.—Abraham the Chaldæan in Palestine.—Persia; Chedorlaomer. Phœnicians. Damascus.—Struggle of the ancient monotheism in India with a new polytheism (Buddha and Brahma; Koros and Pandos).—Emigrations.—The ancient faith takes refuge in distant countries.
About 1900.	Hebrews. Isaac, Jacob. The Edomites. Esau.—The Phœnicians in Argos. Inachus.
About 1800.	The Hebrews in Egypt. Joseph.—Sidon.—Bactra.—The deluge of Ogyges. Phoroneus.
About 1700.	The Hycsos in Phœnicia.—Italy discovered; Iberians, Ausonians, Umbrians. Œnotrus.
About 1600.	Colonies of priests to Europe.—Cecrops in Greece. Worship of Jupiter at Dodona; Caucasians in Thessaly; Deucalion. Deluge.
1500.	Exodus, or flight of the Israelites from Egypt; Moses.—Cadmus in Bœotia.—Danaus in Argos—Laws given to the Israelites on Mount Sinai; Twelve Tribes. Conquest of Canaan.—Joshua.—Judges.—Agriculture in Attica; Ceres.—Corinth; Sisyphus. Panathenæa.
About 1400.	Mœris in Egypt; sole monarchy.—Trojan kingdom.—Crete; Minos I.—Oracle at Delphi.—Tyrrhenians in Upper Italy.—Sesostris; conquests and buildings.—Wu-Ting in China.—Pelops; navigation of the Pontus Euxinus; Phryxus and Helle.
About 1300.	Phrygia; Gordius; Midas.—Theseus; sole monarchy over Attica. Evander the Arcadian in Latium.—Minos II of Crete; laws; labyrinth; Dædalus. Tyre.—Argonauts; Jason, Hercules, Castor and Pollux, Orpheus.—The seven before Thebes.—War of the Epigoni.—Siculi.
About 1200.	Apis in Memphis.—Crishna on the Ganges.—Æsculapius in Thessaly.
1184.	Trojan war; destruction of Troy.—Emigrations. (Continuation of the religious struggles in India.)—End of the fabulous period.—Victory of polytheism. It destroys the patriarchal state, and the monarchy which had proceeded from it, and gives rise, in Asia and Africa, to pure despotism, in Europe to democracy.

II. *From the Destruction of Troy to the Beginning of the Persian War.*

[From 1184 to 501 before Christ.]

1184 et seq.	Building of the pyramids in Egypt; Cheops, Cephrenes. Worship of Apis.—Wu-Wang in China.—Samson; Philistines. Samuel.—Heraclides in the Peloponnesus. Pyrrhus in Epirus.—Colonies in Italy; Patavium, Lavinium, Alba.—
1100.	Æolian confederacy; Smyrna, Mitylene.—Jewish monarchy in Palestine; Saul, David, Solomon. Building of the temple. Wars with Syria.—Ionians in Asia Minor. Hadadezer.—Commerce by caravans; Tadmor built.—Loeman and Surey in India.—Foundation of Utica.—Two kings in Sparta; Procles,

B. C. Eurysthenes.—Gades (Cadiz) founded.—Codrus d. Republic of Athens.—Græcia Magna; Cumæ, Parthenope.

1000. Flourishing period of the Hebrews; commerce with Tyre and Ophir. Division; Judah and Israel. Kingdom of Damascus.—Sesac in Egypt. Dorians in Rhodes. Expulsion of the Heraclides, Bacchis.—Etruscan confederacy.—Homer.—

900. Fall of the Assyrian empire. Sardanapalus (874).—Olympian games at Elis; Iphitus.—Carthage built (885).—Lycurgus in Sparta. Suen-Wang in China.—Caranus founds Macedonia.—

800. Chaldæans in Mesopotamia.—Meroë flourishing.—Reckoning by Olympiads (777). Phul; new Assyrian empire.—Foundation of Rome (754); Romulus.—Æthiopians in Egypt; Sabachus.—First war of Sparta with Messenia (743).—Foundation of Syracuse.—Conquest of Samaria; end of the kingdom of Israel.—Babylonian-Assyrian empire (Esarhaddon).—Media independent; Dejoces.—Numa Pompilius, king of Rome.—Grecian colonies in Italy.—

700. Second Messenian war; Helots.—Chaldæans in Babylon. Twelve monarchies in Egypt.—Conquest of Persia; Phraortes.—Coasting voyages to Taprobane (Ceylon). Carian navigators. Maritime code of Rhodes.—Sole monarchy in Egypt; Psammetichus.—Zaleucus in Locris. Cypselus in Corinth.—Messina, Byzantium, Ostia founded.—Tullus Hostilius, Ancus Martius, Tarquinius I, kings of Rome.—Draco in Athens.—Cyaxares.—Nabopolassar. Nebuchadnezzar.—Victory of the latter over Necho, the Egyptian king, at Circesium. Appearance of the Massagetæ. Invasion of the Cimmerians and Scythians.—Zoroaster in Persia.—

600. Babylonian-Chaldæan empire. Nebuchadnezzar conquers Jerusalem; fall of Judah. Babylonish captivity.—Solon in Athens.—Pythian and Isthmian games. Lesbian bards (Alcæus, Sappho).—Tyre destroyed; New Tyre; commerce concentrates there.—Servius Tullius, king of Rome; Celts in Cisalpine Gaul.—Cyrus conquers the Medians at Pasargadæ; Persian empire.—Pisistratus at Athens.—Water-clocks (Anaximenes).—Crœsus conquered.—Chaldæans in India.—Babylon destroyed. Return of the Jews (Zerubbabel).—Tarquin II, king of Rome.—Phocæans found Massilia.—Cambyses, Persian king.—Conquest of Egypt. (Psammenitus.) Zamolxis in Thrace. Darius I (Hystaspes), Persian king.—Expedition to Scythia and India.—Confucius in China. (End of religious wars.) Pure monotheism survives only in the deserts and mountains of Asia and Europe.—Complete victory of polytheism; and monarchy declines.—Carthaginians in Sicily.—The Alcmæonides expel the sons of Pisistratus from Athens (ostracism); Collatinus and Brutus, chiefs of the aristocracy, expel the Tarquins from Rome. Aristocracy established.—Rome maintains this government against the Tarquins and Etruscans (Porsenna).—

III. *From the Beginning of the Persian Wars to the Reign of Augustus.*

[From 501 to 30 B. C.]

500. Sardis destroyed by the Grecians, Miletus by the Persians.—Persian wars.—Miltiades victorious at Marathon.—Xerxes, Persian king.—Celts under Bellovesus in Upper Italy.—Party struggles in Rome (patricians and plebeians;—tribunes of the people; Coriolanus).—Victory of the Greeks at Salamis and Platæa (Themistocles, Pausanias).—Battle of Thermopylæ (Leonidas).—Defeat of the Carthaginians at Himera. Artaxerxes I, Persian king.—Restoration of the worship of Jehovah at Jerusalem (Ezra, Nehemiah). Twelve tables at Rome.—Sophocles, Æschylus in Greece.

460. Cimon victorious on the Eurymedon; peace of Cimon; deliverance of the colonies in Asia.—Age of Pericles (Herodotus, Euripides, Pindar, Hippocrates, Aristophanes, Socrates).—Peloponnesian war; Alcibiades, Thucydides.—Increase of the popular power in Rome.—Darius II, Persian king.—Diocles in Syracuse.—Carthaginian wars in Sicily (Dionysius).—Veji; (standing army of Rome).—Victory of the Spartans at Ægospotamos (Lysander).—

B. C. Athens conquered; thirty tyrants.—Thrasybulus.—Artaxerxes II, Persian king.—Delhi built.—

400. Cyrus the Younger's expedition into Upper Asia. Retreat of the 10,000 Greeks, Xenophon.—Victory of Conon at Cnidus. Victory of Agesilaus at Coronea.—Brennus with the Celts in Rome. (Allia).—Peace of Antalcides. Theban war (Leuctra, Mantinea; Pelopidas, Epaminondas).—Artaxerxes III, Persian king.—Success of the plebeians in Rome.—Plato; Praxiteles.—Philip, king of Macedonia. Sacred war. (Phocion.)—Sidon destroyed.—Babylonian-Phœnician commerce to the Persian gulf (Gerrha emporium for India).—Commerce of Rhodes with Africa and Byzantium.—

350. Meng-Tse in China.—Indian commerce. (Mart for the caravans at Palibothra).—Voyages of the Carthaginians (Hanno).—Nectanebus conquered.—Factions in Greece.—The Samnite war.—Philip victorious at Chæronea (Demosthenes). Darius III, Persian king.—Alexander king of Macedonia; expedition to Persia and India (victories on the Granicus, at Issus, Gaugamela).—Parthia, Bactria, Hyrcania, Sogdiana conquered.—Alexander in India (Porus).—Macedonian universal empire.—Aristotle.—Decline of the Macedonian empire; division after Alexander's death (governors: Perdiccas, Eumenes, Antigonus, Lysimachus, Ptolemy Lagus).—Wars between the successors of Alexander.—Liberty of the plebeians at Rome.—Empire of the Seleucidæ. Battle of Ipsus. Demetrius Phalereus in Athens.—Agathocles in Syracuse. Cassander in Macedonia. Pytheas discovers Thule.—Macedonian commerce with India through Egypt (Alexandria).—Alexandrian library; Pharos.—Appian way, aqueduct, baths in Rome.—Philosophical sects: Zeno; Pyrrho.—

300. Alexandria and Antioch flourish.—Euclid; Theophrastus.—Colossus at Rhodes. Ptolemy Philadelphus, king of Egypt; museum, Septuagint; obelisk. Canal of Arsinoë; Manetho. Worship of Brahma on the Indus and Ganges.—Demetrius Poliorcetes.—Etolian and Achæan league.—Kingdoms of Pergamus, Bithynia, Pontus and Cappadocia.—Etruria conquered by the Romans.—Pyrrhus is victorious (chariots with scythes; fortified camps).—Roman commerce with Egypt.—Silver coin; gladiatorial games. Lower Italy conquered by the Romans.—First Punic war (Duilius; *columna rostrata*).—Partho-Persian empire.—Bactrian empire.—

250. Arsacidæ.—Sicily, Sardinia, Corsica conquered by the Romans.—Carthaginians in Spain (Hamilcar).—Germans.—Upper Italy conquered by the Romans.—Antiochus III in Syria; Philip II in Macedonia. Roman commercial intercourse with Greece.—Second Punic war (Hannibal victorious at Cannæ).—Marcellus captures Syracuse (Archimedes).—All Sicily conquered by the Romans. The Grecian treasures of art are gradually carried to Rome (Golden age).—Flaminian way; gold coins; Fabius Pictor.—Scipio conquers Spain.—Hannibal defeated at Zama.—Egypt under Roman guardianship (Ptolemy Euergetes; Berenice).—Eratosthenes of Cyrene.—

200. Battle of Cynocephale; Flaminius, Roman general; Greece declared free—Polybius.—Hiong-Nou in the north-west of China (Teuman).—Serica (China) conquered by Bactrians.—Victory of Magnesia; Syria tributary to Rome.—Victory of Pydna (Paulus Æmilius); Macedonia and Epirus conquered by the Romans.—Massinissa in Numidia.—Kingdom of Pontus; Mithridates I (Parthian empire).—Pavement in Rome: Bacchanalia; sumptuary laws.—P. Cato (horticulture).—

150. Third Punic war; Carthage destroyed.—Corinth destroyed.—Roman universal empire.—Maccabees.—Commerce of the world centres at Alexandria.—Pergamus, a Roman province. Judæa free.—Wu-Ti in China. Chinese commerce with India and Persia.—Spain and Lusitania Roman provinces.—Fall of the Roman democracy (the Gracchi). Oligarchy in Rome.—Jugurtha conquered.—Marius defeats the Teutones at Aquæ Sextiæ (Aix) and the Cimbri at Vercellæ (Vercelli).—The equestrian order in Rome becomes a distinct class.

100. Marius rules.—Struggle between Mithridates VII of Pontus and Rome. Cyrene a Roman province.—Admission of the allies to the rights of citizenship. Sylla conquers Athens (fall of Greece); victorious over Marius.—Bithynia conquered by the Romans.—Canary islands (Fortunate islands) discovered.

B. C. Sylla dictator. Mithridates conquered. (Battle of Nicopolis.)—Pontus and Syria Roman provinces.—The Indian era of Vicramaditya. Sacontala.—Sertorius in Spain; Spartacus in Lucania defeated.—Germans in the country of the Celts (Gauls); Ariovistus.—Confederacy of the Suevi.—Catiline, Cicero.—First triumvirate (Cæsar, Pompey, Crassus). Juba, king of Numidia. Cæsar in Gaul, Germany and Britain.—Victory of the Parthians over Crassus at Carrhæ.—Battle of Pharsalia.—Pompey killed in Egypt.—Burning of the Alexandrian library.

50. Cæsar victorious at Thapsus; Numidia conquered by the Romans. Cato of Utica d.—Julian calendar (January 1, 45). Cæsar d. 44.—Second triumvirate (Antony, Octavius, Lepidus).—Battle of Philippi. Brutus and Cassius kill themselves.—Parthians conquered.—Noricum a Roman province.—

30. Victory at Actium. Antony d. in Egypt. Cæsar Augustus (Octavius) emperor.

IV. *From Augustus to the Fall of the Western Empire.*

[From 30 B. C. to 476 A. D.]

30. Virgil, Horace, Dionysius of Halicarnassus.—Cantabria, Asturia, Rhætia, Vindelicia, Mœsia become Roman provinces.—Christ born.—Græcomania in Rome.—Worship of Isis there.—

Buddhism in Thibet, China and Siam.—Marcomanni (Maroboduus).—Judæa Roman province.—Arminius defeats the Romans, and Germany is less influenced by Latin civilization than other countries. Tiberius, emperor. (Silver age.)—Drusus, Germanicus.—John the Baptist.—Roman military colonies on the Danube and on the Rhine. System of defence against the German

A. D. tribes.—

29. Jesus Christ crucified.—Apostles.—Caligula, emperor.—Claudius, emperor.—Prætorians.—Christians (Paul).—Druids in Germany.—Mauritania a Roman province—Thrace a Roman province.—Cherusci, Catti, Frisians, Batavi.—Vannius.—

50. Nero, emperor.—Burning of Rome. Persecution of the Christians.—Worship of Fo in China.—Galba, Otho, Vitellius, emperors.—Vespasian, emperor. Jerusalem taken—Claudius Civilis.—Titus, emperor.—Herculaneum, Pompeii, Stabiæ overwhelmed. Domitian, emperor. Conquest of Southern Britain (Agricola). Northern empire of the Huns in China destroyed.—Nerva, emperor. Goths, Suevi.—Trajan, emperor (*Forum Trajani*).—Ulpian library.—Dacia conquered (Trajan's pillar).—Teutones in Illyria.—

100. Armenia a Roman province.—Adrian, emperor.—(Brazen age.)—Adrian's tomb; Caledonian wall; baths of Agrippa.—Final destruction of Jerusalem.—Bucharia conquered by the Chinese.—Gnostics in Africa.—Temple at Heliopolis.

150. Antoninus, emperor.—Sien-Pi in China.—Plague in Europe and Asia.—Saxons on the Elbe and Eider.—Marcus Aurelius, emperor. Antonine column. Wars between Rome and Parthia.—War against the Marcomanni and Quadi. Commodus, emperor.—Peace with the Marcomanni.—Goths in Dacia. Runic writing.—Licentiousness of the prætorians.—Commerce between Europe and China.—Chinese catalogue of stars (Tchang-Hong).—Catholic church.—Talmud.—

200. Picts' wall.—Corea tributary to Japan.—Alemanni on the Maine.—Alexander Severus, emperor.—Ptolemy of Pelusium.—Eclectics.—Persia (Sassanides; Artaxerxes I, their founder).—

250. Confederacy of the Franks between the Elbe and Rhine. Odin in Scandinavia.—Huns on the Caspian sea.—Chiliasts.—New Platonists.—Thirty tyrants, Gallienus.—Alemannic confederacy.—Palmyra (Zenobia).—Aurelian, emperor. Loss of Dacia.—Palmyra in ruins.—Cultivation of the vine on the Rhine.—Monks in Syria and Egypt.—Manes and the Manichæans.—Ossian.—Probus, emperor.—Diocletian, emperor; division of the imperial power. Era of martyrs, Aug. 29.—Saxons and Franks in Britain.

300. Constantine I, Cæsar in Gaul.—Sapor II, Persian king, conqueror.—Yuen-Ti

A. D. in China.—Constantine converted to Christianity.—Prohibition of sacrifices.—Donatists in Africa.—Indiction of 15 years.—Council of Alexandria.—Corruptions of Christianity (ceremonies).—Constantine I, sole emperor.—Arius and the Arians. Council of Nice.—Vandals in Pannonia.—Christianity in Abyssinia. Byzantium (Constantinople), imperial residence.—Division of the empire (Constantine II, Constantius, Constans). Monasteries in the Thebaïs.—Picts and Scots.

350. Constantius, sole emperor.—Paris, Salian Franks.—Pilgrimages to the holy sepulchre.—Julian, emperor.—Wars with the Persians.—Valentinian in Rome, Valens in Constantinople.—Ostrogoths.—Visigoths.—Beginning of the great emigration of nations.—The Huns pass the Don.—Theodosius in Constantinople. (Iron age.)—Ecclesiastical tribunal at Saragossa.—Council of Constantinople.—(Theodosius, sole emperor after the conquest of Italy.)—Egypt annexed to the Byzantine empire.—Persecution of the pagans.—Division: Eastern empire, Western (Arcadius, Honorius).—Visigoths in Greece (Alaric).—Yezdegerd I, Persian king.—Image worship among Christians. Beginning of the Christian hierarchy.—

400. Emigration of the Germanic tribes. (Rhadagais, Alaric, Hermanric, Ataulphus or Adolphus). Visigothic kingdom in Gaul and Spain.—Varanes V, in Persia.—The German a written language.—Franks pass the Rhine.—The Romans withdraw from Britain.—Armenia taken by the Persians. Pelagians in Africa.—Attila; empire of the Huns from China to Gaul.—Saxons in Britain.—Vandals in Africa.—Christian colonies in Persia.—Maps (Agathodæmon).—Posts in the Eastern empire.—

450. Battle of Chalons.—Merovæus, king of the Franks.—Attila d.; decline of the empire of the Huns.—Kingdom of the Gepidæ on the Theiss—Kingdom of the Burgundians.—Ostrogoths in Pannonia (Theodomir).—Simon Stylites;—Moses of Chorene.—Masorites (Persia).—Euric, king of the Visigoths (laws).—Romans expelled from Spain.

476. Revolt of the foreign soldiers in Italy (Heruli, Rugii, &c.) under Odoacer.—Odoacer, king of Italy.—End of the Western empire. Beginning of the Middle Ages.

V. *From the Fall of the Western Empire to Charlemagne.*

[From 476 to 768 A. D.]

468 et seq. Kingdom of the Franks in Gaul (Clovis) after the battle of Soissons.—Arthur, British prince.—Italy conquered by the Ostrogoths (Theodoric).—Kingdom of the Czechs in Boiohemum; the Boioarii retire to the Danube.—

500. Clovis victorious against the Alemanni and Visigoths.—Benedict of Norcia (Monastic rules, 529).—Wu-Ti in China.—(Commerce with Ceylon.)—Cosmas, the Egyptian navigator to India.—Justinian, emperor of Byzantium; Roman code (civil law).—Angles in Britain.—Frankish dominion over Thuringia, Burgundy, Bavaria and Alemania.—First monastic orders in Germany.—Dionysian era.—*Institutions* and *Pandects* promulgated.—Lombards in Pannonia.—Chosroës I (Noushirvan), Persian king.—Destruction of the kingdom of the Vandals in Africa (Belisarius); North Africa, Sardinia, Corsica annexed to the Byzantine empire.

550. Turkish kingdom on the Irtish and around the Altai.—Narses puts an end to the kingdom of the Ostrogoths; Italy added to the Byzantine empire.—Clothaire, sole king of France.—Saxon Heptarchy in England.—The Gepidæ destroyed by the Lombards and Avars.—The Turks emigrate to the South (Chazars, Petshenegues, Uzans).—Kingdom of the Lombards in Upper Italy (Alboin); feudal government; feudal militia; dukes; duels.—Exarchate; monkish Latin.—Eastern and Western Turkish kingdoms—Visigothic kingdom over all Spain (Leovigild).—Yang-Kien, conqueror in China.—Gregory I, Roman bishop—(Purgatory; mass)—Chosroës II, king of Persia.—Christianity introduced into England (St. Austin).

600. Boniface III, universal bishop.—The pope supreme head of the church.—Byzantine conquests in Asia and North Africa.—Clothaire II, king of the

A. D. Franks. (Mayors of the palace; fiefs hereditary; aristocratic class).—Wends in Carniola, Carinthia, and Stiria.—

622. Mohammed flies from Mecca (Hegira, Islam).—Arabia conquered, Persians defeated.—Caliphate (Abubeker, Omar, Osman).—Koran (635).—Saracens conquer Syria, Phœnicia, Palestine, Persia and Egypt.—Codes of the Visigoths and Lombards.—Normans (Iwar Widfame).—Sclavonians in Russia and Poland.—

650. Ali; Moawiah (Ommiades). Schism in Mohammedanism (Sunnites, Shiites).—Amrou; burning of books.—Pepin d'Heristal, duke of the Franks and hereditary mayor of the palace.—Tournaments among the Saracens.—Northern Africa reduced by the Saracens.—Saracens defeated before Constantinople (Greek fire).—Cairoan built (rice and sugar-cane in Egypt).—Chazars in Tauris; Danes in the Orkneys.—Christianity introduced into Friesland (Willebrod).—Tonsure.—

700. Saracens in Bucharia, Armenia and Asia Minor.—Walid, caliph.—The Saracens (Mousa, Tarik) conquer Spain. Fall of the kingdom of the Visigoths (Roderic, Pelagio).—Posts; tournaments; coins among the Saracens.—Arabico-Indian commerce.—Hiuen-Song, political organization of China.—Charles Martel; defeats the Saracens near Tours.—Masses for money; kissing of the pope's foot.—Conversion of Thuringia and Hesse (Boniface).—Abbey of Fulda. Metropolitan in Mentz.—Destruction of the Eastern Turkish kingdom by the Hoeites.

750. Abul-Abbas; dynasty of the Abassides.—Childeric III dethroned; end of the Merovingians.—Pepin, king of the Franks.—Danes on the English coasts.—Al Mansor, caliph (flourishing period of Arabian science and art).—Bishop Stephen III receives the exarchate; ecclesiastical state: the pope a secular prince. (Anointment of the popes; patrician order in Rome.)—Separation of Spain from the caliphate (Abderhama).—

768. Charlemagne divides the empire of the Franks with his brother Carloman.

VI. *From Charlemagne to Pope Gregory VII.*

[768 to 1073 A. D.]

771. Charlemagne, sole king.—Wars with the Saxons. Rome is conquered; kingdom of the Lombards conquered.—Invasion of China by the Tartars.—Continuation of the wars with the Saxons; (Irmensäule destroyed).—Tithes; Peter's pence; sacred music; cathedral and monastic schools.—*Missi regii.*—Fossa Carolina between the Danube and Rhine.—Haroun al Raschid, caliph.—Africa separated from the caliphate (Aglabites).—Kingdom of Moravia.

800. Charlemagne crowned at Rome. Frankish Roman empire. Saxons baptized. The Eyder the frontier.—General canons of Aix-la-Chapelle; collection of capitularies by Ansegisus.—Decline of the caliphate after Haroun's death.—Egbert of Wessex founds the English monarchy (828).—Kenneth II in Scotland.—Government of the Eunuchs in China.—Polish kingdom (Piast). Ansgar, bishop of Hamburg (831).

843. Treaty of division at Verdun: Italy, France, Germany, three distinct kingdoms: the latter appears in history.—*Jus manuarium* (right of private warfare). German castles.—Markgraves in Thuringia.—Turkish guards of the caliphs.—

850. Mantchoos, Chazars, Varagians become known.—Alfred, king of England.—Ruric, founder of the first Russian dynasty.—Kingdom of Denmark founded (Gorm), of Norway (Harold).—Expeditions of the Normans. Struggles of the Polovtzes, Petchenegues, Varagians (Russians) and Sclavonians.—Magyaric kingdom in Hungary.—Burgundian kingdom.—Anarchy in Italy. Lorraine annexed to Germany.—Discovery of the Faroe islands and of Iceland.—Isidorian decretals.—Cyril converts the Chazars.—Nicholas I (first coronation of a pope).—German books (Otfried). Hereditary counts and dukes in France.—

900. Voyages of the Norwegians to Greenland, from whence they reach (995) the

A. D. coast of America, the since lost Winland.—Expeditions of the Magyars. They conquer Great Moravia.—Kingdom of the Kitans (naphtha fire used in their wars).—Conrad I, king of Germany; tournaments in Germany; cities built; toll on the Rhine.—The Danes seize on the crown of England.—Henry the Saxon, German king. Grand dignitaries of the empire; royal palatinates.—Kingdom of the Fatimites in Africa.—Truce with the Hungarians.—The Hungarians defeated at Merseburg (933).—Government of the emirs in Arabia.—Eastern Africa discovered by the Arabians and colonized.—Otho I, king of Germany (936).

950. Otho, king of Italy. Defeat of the Hungarians on the Lechfeld.—*Lingua Romana* a written language.—Otho, German emperor.—Mines in the Hartz mountains.—Grants to the clergy.—Byzantine customs at the German court, influence on arts (Theophania).—Christianity introduced into Hungary.—Wladimir I the Great, prince of Kiev.—Greek church in Russia.—Hugh Capet, king of France.—Christianity introduced into Prussia (Proper); Adalbert.—Stephen I, king of Hungary.—Sultan Mahmoud (empire of the Ghaznevides).—

1000. Christianity in Sweden (Olaf Skautkonung). Massacre of the Danes in England (Sweyn). Canute II, king of Denmark and England.—The Druses on Lebanon.—Conrad II (king of Germany, of the Franconian dynasty).—Truce of God.—Feudal system.—Russian code of laws (Yaroslaf). Sclavonic school at Novgorod; translation of Greek works into Sclavonic.—Kingdom of the Obotrites (Godeshalc);—Togrul-Beg, a Seljook prince of Chorasan (conquers Balk, Chowaresm, Irak-Adgemi).—Ferdousi, Avicenna.—

1050. Bagdad conquered by Togrul; kingdom of the Seljooks in Central Asia and Persia.—Pilgrimages to the holy sepulchre. School at Bagdad.—Normans in Italy (Robert Guiscard). Lombard commerce in Germany.—Wendish commerce in the ports of the Baltic.—William the Conqueror in England (battle of Hastings, 1066).—Normans in Sicily.—The Comneni in Constantinople.—Gregory VII (Hildebrand), vicar of Christ. Papal power. Benedict X assigns (1039) the election of the pope to the college of cardinals.—Genoa independent.—Medical school at Salerno.—Hospital at Montpellier. Tournaments in France.

VII. *From Gregory VII to Rodolph of Hapsburg.*

[From 1073 to 1273 A. D.]

1073. Saxon struggle for independence (Otho of Nordheim).—The fem-courts.—Celibacy.—Struggle for the investiture; law against simony; legates sent. Papal power the bond of the Christian world.—Henry IV at Canossa.—Kingdom of Iconia (Soliman, 1074).—Turcoman state in Syria (Ortoc).—Kingdom of Bohemia (Wratislaus).—Age of the schoolmen.—The Assassins in Syria and Persia.—Council of Clermont (Urban II, Peter the Hermit).—Icelandic Edda.—Feudal law in England. Doomsday book.

1096. First Crusade. Jerusalem taken by assault. (Godfrey of Bouillon).—Henry I, king of England.—

1110. Genoa a republic.—Dalai-Lama in Thibet.—*Charta libertatum* in England.—Second crusade.—Eastern and Western Seljookian kingdoms.—The commons acquire rights in Germany.—Communes and corporations in France.—Republics in Italy.—John II (Comnenus) emperor of Byzantium.—

1118. Orders of the knights of St. John and knights Templars at Jerusalem.—Concordate of Worms. (Papal ring and staff).—Council of the Lateran.—Kingdom of Mocavides in Eastern Africa.—Lothaire, German emperor by election.—Niudshi in Northern China.—Conrad III of Hohenstaufen, German emperor. (Suabian emperors).—Abelard.—Stephen, king of England.

1150. Third crusade.—Frederic I, German emperor.—Magnetic needle known to the Arabians.—Henry II, king of England (house of Anjou, Plantagenets).—Denmark united (Waldemar I).—Confederacy of Lombard cities.—Saladin, sultan of Egypt (Ayoubite Curds).—Magnetic needle known in Italy.—Ireland conquered by the English.—Saladin conquers Jerusalem.—Walachian-

A. D. Bulgarian empire (Peter and Asan).—Livonia discovered by citizens of Bremen.—Fair at Leipsic (1157).—Mines of Freyburg discovered.—Berlin founded.—Spanish wool exported to England and France.—Flourishing period of the commerce of Northern Germany.—Provençal poetry.—
1190. Fourth crusade. (Richard I, Cœur de Lion, Philip Augustus of France, emperor Frederic).—
1191. Teutonic knights.—Capture of Ptolemais.—The Hohenstaufens in the Two Sicilies.
1195. Fifth crusade.—
1198. Pope Innocent III, sovereign of Rome.—Execution of heretics in Toulouse.
1200. Mohammed II, sultan in Chowaresm.
1204. The crusaders take Constantinople by assault (Latin empire: Baldwin I).
1205. Dynasty of the Patans in Hindoostan (until 1413).
1206. Abouhafs in Tunis and Tripoli (until 1533).—The empires of Nice and Trebisond.—Genghis Khan founder of the empire of the Mongols (d. 1226).
1209. Crusade against the Albigenses (the sixth).
1213. James I of Arragon (Conqueror). England tributary to the pope (John Lackland).
1214. Battle of Bovines.
1215. *Magna Charta.*—The Mongols conquer China.—Transubstantiation and auricular confession; rosary.
1216. Order of the Dominicans.—Henry III of England.
1217. Seventh crusade (Andrew II of Hungary).
1218. Frederic II emperor. Independence of Switzerland.
1222. Constitution of Hungary.
1223. Order of the Franciscans.
1224. Mongols in Russia.
1226. Louis IX (Saint).
1227. Battle of Bornhöved.—Octay, great-khan of the Mongols.
1228. Eighth Crusade (Frederic II).
1229. Inquisition at Toulouse.
1230. The Teutonic knights conquer all Prussia Proper (from 1230 to 1283).—
1232. Courts of the members of the German empire.—Fire-arms in China and India.—Clocks in Egypt.
1234. Decretals of pope Gregory IX.—The Mongols conquer Northern China.
1235. Prohibition of private warfare at Mentz.
1238. Russia tributary to the Mongols. (Battle on the Voronez, won by Batu, khan of the Golden Horde).—Republic of Genoa.
1240. Ninth crusade (Thibaut).
1241. Mongols victorious at Liegnitz (Silesia).—Hanseatic League formed.
1245. Pope Innocent IV enlarges the college of cardinals.—Kayuk, great-khan of the Mongols.
1246. Institution of the feast of *Corpus Christi.*
1247. League of the Rhenish cities.
1248. Last crusade (Louis IX). The Swedes conquer the south-eastern part of Finland.
1249. Louis IX takes Damietta.
1250. Manku, great-khan of the Mongols.—The Cossacks become known.—Baharite Mamelukes in Egypt (until 1382).
1252. Alexander Newsky.—Foundation of Stockholm (1254).
1255. First maritime code (*consolato del mare*).
1256. Order of the Augustines.—Mongol system of conscription in Russia.
1258. Hulaku conquers Bagdad (Mongol-Persian dynasty).—English house of commons.
1259. Koblay or Kublai, great-khan of the Mongols.—Pekin founded (dynasty Yuen).—Suabian law.
1260. Michael VIII (Palæologus), emperor of Nice.—Militia in Arragon.
1261. Michael VIII recovers Constantinople. (New Greek empire of Byzantium).—Corporations in Italy.
1264. German commercial tribunal in Novgorod.
1265. Deputies of towns and boroughs in the English parliament.—Sicily a papal fief (White Horse).—Battle of Evesham in England.
1266. Corporations and guilds in Italy.—Genoa trades to India.
1268. Conradin executed; House of Anjou in the Two Sicilies.—Imperial cities, and

A. D. imperial nobility in Germany.—Paper money in China.—Astronomical tables of Maraga (Nasir-Eddin).—Mongol syllabic writing (1269).—Edward I of England.

1273. Rodolph of Hapsburg, German emperor (d. 1291).—Anatomical chair in Paris (John Pitard). Letters of nobility in France.

VIII. *From Rodolph of Hapsburg to Charles V.*

[From 1273 to 1519 A. D.]

1273. Hereditary succession in Arragon and Catalonia. Ottocar of Bohemia defeated.—Alchemists and theosophists. Glass mirrors. Mohammedan religion in Malacca.—

1282. Sicilian Vespers.—Peter of Arragon, king.—

1283. Albert of Hapsburg duke of Austria.—Prussia conquered (Conrad von Thorberg).—Edward I conquers Wales.—

1291. Capture of Acre (end of the crusades).—

1294. Pope Boniface VIII (*bulla unigenitus*).

1300. Osman I. Empire of the Ottomans in Asia Minor.

1302. Third estate (*tiers état*) in France (deputies of cities); *bulla unam sanctam.*

1305. Clement V (Avignon papal residence until 1378). Immorality of the papal court. Struggle between the secular powers and the papal authority more and more manifest. Wretched state of the Christian church, and call for a "reformation in its head and members."—Invasion of Scotland; Bruce.

1307. Swiss confederacy.

1308. Uri, Schweitz, Unterwalden, form a confederacy for the deliverance of their country.—Iconium conquered by the Mongols.

1309. Three "colleges" of the empire at Spire.—Knights of the cross at Marienburg.—

1310. Knights of Rhodes.—Dante.—

1312. Abolition of the knights Templars (Philip the Fair). Decretals of Clement.—Fire-arms in Spain.—Edward II; battle of Bannockburn.—Louis of Bavaria, German king (battle of Mühldorf, 1322).—Battle on the Morgarten. Perpetual league of Brunnen (1315).—Constitution of pope John XXII (*execrabilis*).—Union of Arragon, Catalonia, Valencia (1319).—Great and Little Poland united (Wladislaus Lokietek).—Philip VI, house of Valois in France.—Orchan, Padishah; Ottoman Porte in Prusa (1326).—Restraints on the aristocracy of the German nobility at Spire. Foundation of the German commons.—Treaty of Pavia. Palatinate and Bavarian lines.—Master singers (their imperial charter, 1378).—German Levantine commerce flourishes.—Organization of Poland. Casimir III (1333).—Battle of Halidown Hill.—Edward III begins the wars for the French crown.—Louis I, king of Hungary (1342).—Re-discovery of the Canary islands (1344).—Flourishing period of the Venetian Levantine commerce (consuls in Aleppo and Alexandria).—Bank of circulation in Genoa.—Charles IV (elected at Rhense, in 1346).—Battle of Cressy.—Pseudo-Waldemar in Brandenburg (1347).—Black death rages.

1350. Trials of witches.—Licentiousness of the clergy.—Imperial law; juridical commentators.—Revolution in China.

1353. Lucerne, Zurich, Glarus, Zug, Berne, join the Swiss confederacy.—Bills of exchange (1354).—Soliman crosses the Hellespont (1355); Turks in Europe.—

1356. Golden bull.—Victory of the Black Prince at Poitiers.—(Peace of Bretigny, 1360).—Peter the Cruel, king of Portugal (1357).—Fire-arms in Brabant.—Adrianople, residence of the Porte, Amurath I (1360).—Pope Urban V; triple crown of the pope (1362).—Janizaries (Sheikh Bekitash) (1362).—Expulsion of the Mongols from China.—New Burgundian house (Philip the Bold)—Tyrol conquered by the Austrians.—Hanseatic league flourishing (1364).—Timour (Tamerlane), great-khan of Dschagatay (1369).—The Stuarts begin to reign in Scotland.—The Ottomans conquer the Walacho-Bulgarian kingdom (1374).—League of the Suabian cities (1376—1389).—Schism of the church. Papal courts of Rome and Avignon (from 1378 to 1417).—Wicliffe, Gower.—Timour conquers Cashgar, Chowaresm, Chorasan and Persia (from

A. D. 1373 to 1384).—Dynasty of the Yagellons in Poland (from 1386 to 1572); Ladislaus V.—Battle of Sempach (Arnold Winkelried, 1386).—Bajazet I, sultan (1389).—Battle at Falköping.—Battle of Nicopolis (1396, between Bajazet and Sigismund of Hungary).—Timour in Bagdad, Teflis, Moscow and Delhi.

1397. Scandinavian union at Calmar; Margaret.—Richard II deposed; Henry IV of Lancaster.

1400. Huss preaches in Cracow.—Timour victorious over Bajazet at Ancyra (1402).—Hungarian Insurrection established. Deputies of cities in Buda (Magnates and estates).—The Portuguese double cape Boiador.—Mohammed I, sultan (1413).—Henry V of England.

1414. Council of Constance (until 1418).—Huss burnt (Hussites).—English invasion of France (battle of Agincourt).—The electorate of Brandenburg given to Frederic of Hohenzollern (1415).—Henry the Navigator.—Porto-Santo and Madeira discovered.—War of the Hussites (John Ziska) (1415).—Amurath II, sultan.—Henry VI of England; siege of Orleans raised (Joan of Arc) (1429).—Council of Basle (1431 to 1443).—Florence under the Medici. Cosmo (1434).—Chaucer fl.—

1436. Art of printing (John Guttenberg).—

1440. Frederic III, Austrian dynasty on the imperial throne of Germany.—Posts are established.—Scanderbeg in Albania (Epirus) (1443—1446).—Battle of Varna (1444).—Battle of St. James on the Birs.—Standing army in France, Uniform (1445).—Pope Nicholas V (classical literature in Rome; Vatican library) (1447).—Western Africa discovered by the Portuguese.—Concordates at Rome and Vienna with the German nation.—House of Oldenburg in Denmark; Christian I.—The English expelled France.—War of the Roses in England (York and Lancaster) (1452—1485).—Mohammed II, sultan.—

1453. Constantinople conquered by the Turks (Constantine XIII, the last of the Palæologi, dies at the gates of Constantinople, with arms in his hand). End of the Eastern empire. Revival of learning in Europe by the fugitives from Constantinople.—Sale of papal indulgences.—Bohemian Brethren (1457).—Cape de Verde islands discovered (Cada Mosto). Louis XI of France.

1462. Ivan Basilowitz, founder of the greatness of Russia.—Peace of Thorn (division of the territories of the Teutonic knights).—Charles the Bold of Burgundy.—New kingdom of the Turcomans in Persia (Usong-Hassan).—Steno Sture, administrator of Sweden.—Sale of indulgences renewed.—The Portuguese pass the equator.—Victories of the Swiss over Charles of Burgundy at Granson and Morat (1476).—Extension of the art of printing (book-privileges; catalogues).—Mails on horseback in France.—Standing army in Hungary.—Pedal harpsichord. Notes in music.

1477. Charles the Bold falls at Nancy; Burgundy comes into the possession of Austria (Maximilian and Maria).—End of the Tartar dominion in Russia. Ivan Basilowitz conquers Novgorod. (Decline of the Hanseatic commerce with Russia.)—Castile and Arragon united (Ferdinand and Isabella). Inquisition in Spain, 1480.—Richard III; battle of Bosworth. House of Tudor in England (Henry VII). Union of York and Lancaster.—Royal power firmly established in Western Europe. Decline of feudal power.—Discovery of the cape of Good Hope by Diaz.—The Moors expelled from Granada (1491).

1492. Discovery of America (Columbus). Maps (Conrad Sweynheim).—Powder mines (Navarro).—Terrestrial globes (Martin Behaim). Papal demarcation of the Portuguese and Spanish discoveries.—Algebra through the Arabians. Book-keeping by double entry.—Venereal disease introduced into Europe.

1495. Peace of the empire at Worms. Private warfare abolished.—European balance of power.—North America discovered by the Cabots.—Discovery of the passage to the East Indies (1498, Vasco de Gama).—Louis XII of France.—Inquisition in Seville.

1500. Discovery of Brazil (Cabral).—Change in the direction of commerce, which becomes a more important element of politics.—Reign of the Sophi in Persia (Ishmael Shah) (1503).—Slave trade.—Continuation of the discoveries and conquests of the Spaniards and Portuguese in Africa and America.—League of Cambray.—Thirteen Swiss cantons confederated.—Henry VIII of Eng-

A. D. land.—Pope Leo X. St. Peter's church.—Flourishing period of the fine arts (1513) (Michael Angelo, Correggio, Titian, Leonardo da Vinci).—Savonarola and the Mystics.—Francis I, king of France (expedition over the Alps; battle of Marignano, 1515).—Charles I (V) king of Spain.—Watches invented in Nuremberg; air-guns.—Posts in Germany (1506).—

1517. The abuse of indulgences, and the licentiousness of the clergy, bring on the reformation.—Luther in Wittenberg.—Zuinglius teaches in Switzerland.—The Ottomans conquer Egypt.

1519. Charles V, German emperor. Elective capitulation.—The Sherifs become kings of Morocco.—Cortes discovers Mexico.—End of the Middle Ages; beginning of Modern History.

IX. *From Charles V to the Beginning of the Thirty Years' War.*

[From 1519 to 1618 A. D.]

1519. At no period were more distinguished monarchs seated at the same time upon the thrones of Europe, than at the beginning of modern history: Charles V, Francis I, Henry VIII, Leo X, Emanuel of Portugal, Solyman II, Sigismund I, and Ivan II.—Massacre at Stockholm (Christian, 1520).—First war between France and Spain (1521—1526).—Edict of Worms.—Anabaptists.—Conquests of Albuquerque in the East Indies, Malacca and the Indian islands. Magellan circumnavigates the world, but Cano alone returns with one vessel to Spain.—The Turks conquer Rhodes (first use of bombs).—Knights of St. John at Malta.

1523. Abolition of the union of Calmar; Gustavus Vasa.—Swiss religious divisions.—War of the peasants in Germany. Thomas Münzer.—Dispute respecting the Lord's supper. Reformed or Calvinistic church.—Attempts of the Spaniards to discover a north-west passage.—Empire of the descendants of Timour in India (sultan Babur).—Battle of Pavia (1525).—Hungary and Bohemia fall to Ferdinand of Austria (1526).—Lutheranism in Sweden and Denmark.—Second war between Spain and France (from 1527 to 1529). Peace of Cambray.—Augsburg confession (Melanchthon).—Smalcaldic league.—Post-offices in England.—Conquest of Peru (Pizarro) (1532).—Papal power abolished in England (1533).—Union of Denmark and Norway.—Ivan II, czar of all Russia (1533).—Brittany annexed to France.—Anabaptists in Munster (John of Leyden, 1534).—Third war between France and Spain (1535—1538).—Conquest of Chile and Guatemala.—Wales annexed to England.—Mennonites.—Roman school of painters (Raphael), German (Albert Dürer).—The Bible printed in English; monasteries suppressed in England.

1540. Jesuits. (Ignatius Loyola).—Continuation of the discoveries and conquests of the Portuguese and Spaniards in Asia, Africa and America.—Fourth war between Spain and France (from 1542 to 1544).—Copernicus (died 1543).—Peace of Crespy (1544).

1545. Smalcaldic religious war. Maurice of Saxony elector (1548). Imperial interim of Augsburg.—New French war (Henry II) from 1552 to 1556.—Edward VI of England.—The English discover the passage by sea to Archangel (Richard Chancellor); decline of the Hansa.—Mary of England.—Kazan and Astrachan Russian provinces (1552 and 1554).

1555. Religious peace of Augsburg (Protestantism tolerated). Philip II king of Spain (abdication of Charles V) (1555).—War between Spain and France (from 1557 to 1559). Parma's victory at St. Quentin).—Elizabeth, queen of England (1558).—Factions in France (Guises and Bourbons).—Religious struggles in France.—Renewal of the council of Trent (1562).—War between Sweden and Denmark (from 1563 to 1570.—Insurrection of the Low Countries against Spain (Gueux) (1566).—Attempts of the English to discover a north-west passage (Frobisher).—Jermac Timofejew shows the Russians the way to Siberia.—Inquisition in Spanish America.—Test act (1572).—Poland an elective monarchy; extinction of the house of Yagellon. Massacre of St. Bartholomew's at Paris (1572), peace of Rochelle (1573).—Stephen Bathori

A. D. king of Poland (Cossacks).—The League of the Catholics (Henry Guise).—Sir Francis Drake circumnavigates the world, and re-discovers West Greenland.—Sebastian of Portugal is reported to have fallen in the battle of Alcasar; with him and his uncle Henry the dynasty of Aviz becomes extinct, and the greatness of Portugal ends (1578).

1579. Union of Utrecht; confederation of the United Provinces (William of Orange).—Commerce of Holland and Hamburg (after the decline of the commerce of Antwerp and the Rhenish cities).—Portugal is conquered by Spain (Alva) (1581).—Pope Sixtus V (1585).—League of the seven Catholic Swiss cantons at Lucerne (1584).—Raleigh discovers Virginia; first English attempts at colonization in N. America.—Mary Stuart beheaded (1587).—Destruction of the Spanish armada (1588).—Henry IV; house of Bourbon in France (1589).—States General in Holland.—Edict of Nantes; Sully (1598).—Touran annexed to Russia.—Gregorian calendar (Oct. 5, 1582).—Construction of highways in France.—Peace of Vervins (1598); decline of Spanish greatness.—Philip II d. 1598.—

1600. English East India company.—James I; house of Stuart on the English throne (1603).—Charles IX, hereditary king of Sweden (1604).—Union of Heidelberg.—Truce of Antwerp; independence of Holland acknowledged (1609).—Expulsion of the Moors from Spain.—First permanent settlement in North America by the English; Jamestown, 1607.—Extension of the Dutch settlements in Africa and Asia, at the expense of Portugal.—New York discovered by the Dutch (1609); New Netherlands.—Henry IV conceives the plan of a European confederation; murdered by Ravaillac (1610). Louis XIII king of France.—Catholic league in Germany.—The telescope invented.—Gustavus Adolphus, the great king of Sweden (1611).—Hudson discovers the bay called after him (1607).—Quebec founded (1608); permanent French colony in Canada.

1613. Michael Fedorowitz, czar of Russia (house of Romanoff).—Swedish-Polish war; Livonia annexed to Sweden (from 1617 to 1629).—

1618. Insurrection of the Utraquists in Prague.—Thirty years' war.—

X. *From the Beginning of the Thirty Years' War until the Reign of Louis XIV in France.*

[From 1618 to 1661 A. D.]

1619. Synod of Dort.—Ferdinand II, German emperor.—Whigs and tories.—Settlement of New England (1620).—War between Spain and Holland (1621—1648).—Battle at the White mountain; Frederic elector palatine abandons Bohemia (1620), and is put under the ban of the empire. Bavaria receives the palatinate.—Richelieu in France (1624—1642).—Danish war (1625—1629).—Charles I of England.—Bacon d. (1626). War for the inheritance of Mantua (1627—1631).—Capture of Rochelle (subjection of the Huguenots).—Petition of rights (1628).—Edict of restitution (1629).—Gustavus Adolphus lands on the island of Rügen.—(Battles of Leipsic, Lützen, Nördlingen).—War between France and Spain (1635—1659). Peace of Prague.—Maryland settled (1634).

1640. Portugal independent; house of Braganza.—Long parliament (1640—1653). Power of the house of commons; Independents.—Civil war in England begins.—War between Denmark and Sweden (1634—1645).—

1644. Mantchoos in China.—Battle of Marston Moor.—

1648. Peace of Westphalia. Sweden powerful in the North, France in the West; Germany broken.—Fronde in France.

1649. Charles I beheaded. English commonwealth. Oliver Cromwell.

1651. Louis XIV, king of France (Mazarin).—Navigation act.—War between England and Holland (1652 to 1654).—

1653. Cromwell lord protector of England.—Charles X. House of Deux-Ponts on the Swedish throne.—Peace of Westminster.—War between Sweden and Poland (1655—1660).—War between England and Spain (1656—1658).—

A. D.

1657. Treaty at Wehlau; Prussia a sovereign power (Frederic William, elector since 1640).—War between Sweden and Denmark (1657—1660).—

1659. Peace of the Pyrenees.—Aureng-Zebe.

1660. Restoration of the Stuarts (Charles II).—Revolution in Denmark; Frederic III; hereditary monarchy.

1661. Louis XIV assumes the government.—Growth of the British and French power in America.

XI. *From the Reign of Louis XIV to the War of the Austrian Succession.*

[From 1661 to 1740 A. D.]

1661. Paris the centre of literature and taste. Golden age of France. Louis XIV concentrates the powers of the government in himself, and begins a course which results in the revolution.—War between Hungary and Turkey (from 1661 to 1664).

1663. Permanent diet at Ratisbon.—War between England and Holland (1664 to 1667).—New York taken by the English.—War between France and Spain for the devolution of Flanders (1667 to 1668).—Triple alliance against France.—Decline of Persia (Soliman Shah).—Turks conquer Candia (Kiuprili).—Cabal ministry in England.—Mercantile system.—War between France and Holland (1672—1678). Restoration of the hereditary stadtholdership (William III of Orange).—First settlement of S. Carolina (Port Royal, 1670). War between Sweden and Prussia (1674—1679).—Peace of Nimeguen (1678).—Peace of St. Germain and Fontainebleau (1679).—William Dampier's voyage round the world (1679—1695).—Quakers in Pennsylvania (William Penn) (1682).—Propositions of the Gallican church.—War between Turkey and Hungary (1683—1699).—Relief of Vienna (Sobiesky).—James II of England.—Revocation of the edict of Nantes (1685); emigrations of Protestants (*réfugiés*); French fashions, language and industry in Germany and England.—Dragoonades.—Crown of Hungary hereditary in the house of Austria. War between France and Germany (1688—1697).—First German periodical (Thomasius).—English revolution.—

1689. James II abdicates (William III of Orange and Mary proclaimed).—Bill of rights.—Peter I, czar and autocrat of Russia.—British funding system (national debt).—Continental connexions of England.

1692. Hanoverian electorate (the 9th).

1697. Peace of Ryswick.—Charles XII of Sweden.—Battle of Zentha (Eugene of Savoy). Last attack of the Turks against the Christians of the West.—Augustus II of Poland.

1698. Treaty of partition of the Spanish monarchy; the elector of Bavaria intended king of Spain.

1699. Death of the elector of Bavaria; the testament of Porto-carrero gives the Spanish succession to the house of Anjou.—Peace at Carlowitz; the Turks cede Transylvania and Sclavonia to Austria, Morea to Venice.—Christian V of Denmark d.; Frederic IV, king.

1700. Northern war of Poland, Russia and Denmark against Sweden.—Charles II of Spain d. (Austrian dynasty extinct on the throne of Spain.)—Philip V of Anjou, king of Spain (Bourbon dynasty).—Peace of Travendahl. Battle of Narva.

1701. Prussia a kingdom; Frederic I.—War of the Spanish succession.—Act of settlement.—Eugene goes to Italy. (Battles of Chiari and Capri.)

1702. Louis XIV acknowledges James II as king of England; the maritime powers take part with Austria.—William III of England d.; Anne, queen.—

1703. Peter III of Portugal joins the alliance with Austria; Charles III of Spain and Sardinia becomes the ally of Austria.—Dampier's second voyage round the world (1703 to 1706).—The Methuen treaty.

1704. Battles of Schellenberg and Blenheim (Eugene and Marlborough).—Charles III goes to Spain; the English take Gibraltar.—Charles XII of Sweden causes Stanislaus Leczinsky to be elected king of Poland, and drives the Saxons from Poland.—Locke d.

1705. Cöhorn d.—Joseph I, emperor.

1706. Charles III goes to Spain; Barcelona taken. The Austrians masters of Italy

A. D. through Eugene.—Victory of Ramillies.—Peace of Altranstadt; Augustus II renounces the crown of Poland. Patkul sacrificed to the king of Sweden.—Union of England and Scotland. Parliament of Great Britain.

1707. Continuation of the war in Spain (Berwick victorious at Almanza).—Aureng-Zebe, the greatest Mongol ruler of Hindoostan, d. The Seiks and Mahrattas shake the empire of his successors.—Vauban d.

1708. Battle of Oudenarde; Lisle taken.—Union of the English East India companies.—Dampier's and Woods Rogers's voyage round the world (1708—11).

1709. The emperor enters Mantua; victory of Malplaquet. Eugene, Marlborough and Heinsius dictators; France exhausted.—Battle of Pultawa. Preponderance of Sweden in the North ends; superiority of Russia. Charles XII takes refuge among the Turks.—Stereotype printing in Leyden.

1710. The duchess of Marlborough's gloves overthrow the whigs in England.—Vendôme captures Madrid.

1711. War between Russia and Turkey; the peace of the Pruth saves Peter's army.—The senate supreme tribunal in Russia.

1712. The German provinces of Sweden conquered.—A French colony in Mauritius.—The crown prince of Saxony becomes Catholic.

1713. Peace of Utrecht (Great Britain receives Acadia, Hudson's bay and Newfoundland; Portugal, the countries from cape North to the Marañon; Prussia, Guelderland for Orange; Sardinia, Sicily; and the summits of the Alps become the frontiers of France; Holland receives the *Barriers* in the Netherlands; Spain gives up Gibraltar and Minorca, and accedes to the Assiento treaty).—Steenbock surrenders with his army. Charles XII returns from Bender to Sweden.—Clement XI. Constitution; *Unigenitus* (against the Jansenists).—French colony of cape Breton.—Perpetual league of the Catholic cantons with France.—Frederic William I of Prussia reforms the kingdom.

1714. Peace of Rastadt. Austria receives Lombardy, Naples and Sardinia, and the Spanish Netherlands with the barriers.—Queen Anne of England d. George I, elector of Hanover, ascends the British throne. Whigs again in power.—Fall of the princess Orsini.

1715. The Turks take the Morea from the Venetians.—Inoculation for the small-pox at Oxford. Battle of Preston Pans.—Barrier treaty of the Dutch with Austria.—Louis XIV d.; his grandson Louis XV king, under the guardianship of Orleans.—Plan of Alberoni.—The stadtholdership in Holland gradually declines.—Mercurial thermometer (Fahrenheit).

1716. War between Turkey and Austria. Battle of Peterwaradin.—Septennial parliaments in Great Britain.—Leibnitz d.

1717. Triple alliance between Great Britain, France and Holland. Sardinia given by the maritime powers to Austria instead of Sicily.—Eugene takes Belgrade.—John Law and the Mississippi scheme.—Scotch free-masonry, piano-fortes and potatoes in the north of Germany.

1718. Peace of Passarowitz, by which the Turks retain the Morea, but cede the Bannat, Servia, and part of Bosnia, to Austria.—Alexis, heir apparent of Peter, put to death.

1719. Charles XII killed before Fredericshall.—Ulrica Eleonora confers the crown of Sweden on her husband Frederic of Hesse-Cassel.

1720. Gœrtz beheaded.—Alberoni exiled from Spain, and this power obliged to conclude peace.—France bankrupt; Law leaves France.

1721. Peace of Nystadt, which leaves Sweden only a part of Pomerania and Wismar in Germany.—Treaty of Madrid between Spain and France and the maritime powers.—Peter I, emperor; abolition of the patriarchate in Russia, and foundation of the holy synod.—Walpole in England.—James Roggeween's voyage round the world (1721—1723).

1722. Pragmatic sanction.—Ostend company.—Russian law of succession.—Mahmoud on the throne of Persia (the Afghan dynasty).

1723. Louis XV of age; cardinal Dubois, the duke of Orleans, and, finally, Bourbon, his ministers.—Enlistments of foreigners common in Europe.—Peter the Great receives the Persian provinces Dhagestan, Shirvan and Ghilan, with the cities of Baku and Derbend.

A. D.

1724. Philip V of Spain resigns his crown to his son Louis, but resumes it after the death of the latter.

1725. Peter the Great d.; his wife, Catharine I, empress; Menzikoff.—Marriage of Louis XV with the daughter of Stanislaus Leczinsky; the Infanta, six years old, is sent back.—Division in the French church, on account of the bull *Unigenitus* and the Jansenists.

1726. Cardinal de Fleury, prime minister; France regains her influence in Europe.

1727. Catharine I d.; Peter II, emperor of Russia.—Fall of Menzikoff; Dolgorucki.—Frontier treaty between Russia and China.—George II, king of Great Britain.—Newton d.

1728. Gold mines of Brazil discovered.—Afghans expelled from Ispahan.—Moravians (Zinzendorf).

1729. Peace of Seville.

1730. Peter II d.; Anna, empress.—Fleury decides the contest of the Jansenists and of the bull *Unigenitus*; resistance of the parliament.

1731. English colony in Honduras.—Treaties of Vienna.

1732. Orange treaty of succession.

1733. War for the Polish crown. The French invade Germany and Italy.—Georgia settled.

1734. Russia and Austria give the Polish crown to Augustus III.—Battles of Parma and Guastalla.

1735. Preliminaries of Vienna (Augustus remains king of Poland. Stanislaus receives Lorraine during his life, after which it reverts to France. Francis Stephen indemnified by Tuscany. Don Carlos king of the Two Sicilies; Parma and Piacenza remain Austrian).—Kien-Long, emperor of China.—Turks beaten by the Persians.

1736. War of Russia and Austria against the Turks; Münich.—Marriage of Maria Theresa of Austria with Francis Stephen of Tuscany.—Kouli Khan ascends the throne of the Sophis (whose race he extirpates), under the name of Schah Nadir.—Theodore Neuhof, king of Corsica.—Eugene of Savoy d.

1737. The house of Medici becomes extinct; Tuscany comes into the possession of the duke of Lorraine.

1738. The Russians discover Tschoukotskia.—Solar microscope of Lieberkühn.—Vaucanson's automata.—Herculaneum and Pompeii discovered.

1739. Peace of Belgrade, by which Servia, Little Walachia, Orsova and Bosnia are restored to the Turks.—Negotiations at the Pardo.—War between Spain and England. Admiral Vernon takes Porto Bello.—Schah Nadir conquers Hindoostan, and carries away the treasures of the Great Moguls. Fall of the empire of the Great Moguls, and division among the governors; Delhi alone remains to the descendants of Baber.

XII. *From the Beginning of the Austrian War of Succession to the Declaration of the Independence of the U. States.*

[From 1740 to 1776, A. D.]

1740. Maria Theresa ascends the throne of the Austrian hereditary states, according to the pragmatic sanction, after the death of Charles VI.—Frederic the Great (of Prussia) invades Silesia.—Anne of Russia d.; Ivan IV, emperor; Biron rules.

1741. France declares for the elector of Bavaria, who claims the Austrian states. The maritime powers and Sardinia for Austria.—Ivan IV dethroned; Elizabeth, empress.—Behring and Tschirikof's voyage; the Aleutian islands discovered.

1742. Silesia and Glatz ceded to Prussia.

1743. Cardinal de Fleury d.—Austria successful against Charles of Bavaria. German emperor.—Peace of Abo.

1744. English naval successes over the French. The former rule on the Mediterranean.

1745. Charles VII (of Bavaria) d., Francis Stephen, husband of Maria Theresa, becomes German emperor. Second Silesian war concluded by the peace of Dresden, and Silesia remains in the hands of Prussia.—The English Pretender

A. D. victorious at Preston Pans, and enters England.—The New Englanders take Louisburg and Cape Breton.

1746. Cumberland defeats the Pretender at Culloden.—Great earthquake in Lima.

1747. The prince of Orange again at the head of the government, as *stadtholder*.—The French successful in the Netherlands, and unsuccessful in Italy.—Schah Nadir d., and internal troubles distract the Persian empire.

1748. Peace of Aix-la-Chapelle ends the war of the Austrian succession (Maria Theresa retains her hereditary estates with the exception of Parma, given to don Philip, and part of Milan annexed to Sardinia; England restores Cape Breton, France Madras. The Assiento treaty remains in force for four years longer.)—Bestuschef's uncontrolled power in Russia (until 1757).—The Waldenses in Savoy.

1749. Halifax founded in Nova Scotia (indirect cause of the seven years' war).—Witches executed in Würzburg.—Empire of Afghanistan (Ahmed Abdalli).

1750. Joseph Emanuel, king of Portugal; Pombal, minister.—Jaghire comes into the possession of the English East India company.—Discovery of the Russian Northern Archipelago (Andreanovian islands).—Mulhar Rau Holcar founds a Mahratta state in Malwah and Guzerat.—Frontier treaty at Buen-Retiro respecting the conquests in South America.

1751. Adolphus Frederic, king of Sweden (house of Holstein).—French *Encyclopédie* (D'Alembert, Diderot).—The Dovas in Northern Annam seize the government and expel the Chuas.

1752. Doctrine of electricity.—Physiocratic system.—Lightning rods (Franklin).—The Peguans subject the empire of Birmah.—The new style introduced into Great Britain, September 3.

1753. Spanish concordate with the pope.—The inquisition becomes less bloody.—Exile of the parliament of Paris.—Alompra, a Birman. delivers his country from the Peguans, and appears as a great conqueror. By the peace of Calberga (Hindoostan), France receives the four Northern Circars.

1754. Richard Wall, Spanish minister.—Paoli chief in Corsica.—Beginnings of the war between the French and English in America; acts of violence on the Ohio.—Washington takes a party of French.—Wolf d.—Quakers in North America abolish the slave trade.

1755. Naval and colonial war between England and France (until 1762).—Defeat of Braddock at fort Duquesne.—Earthquake in Lisbon.

1756. Pitt (Chatham) at the head of the ministry (until 1761).—Violations of the rights of neutrals by the English.—Conquest of Minorca.—Third Silesian or seven years' war.—Alompra conquers Pegu.—The army of the Jesuits beaten by Spaniards and Portuguese, and the order expelled from Paraguay.

1757. Frederic the Great victorious at Prague, Rosbach and Leuthen; defeated at Kollin.—Conquest of the 24 Perganahs by the British East India company.

1758. Jesuits expelled from Portugal, on suspicion of attempting the life of the king.—Union of Versailles (Choiseul and Stahremberg).—The Dutch subdue the two chief sovereigns of Java.—Victory of the English at Plassey (Hindoostan); conquest of Goree (West Africa), and Cape Breton (North America).

1759. Ferdinand VI king of Spain d.; Charles III of Sicily ascends the throne, and gives the crown of the Two Sicilies to his son Ferdinand.—The British take Guadaloupe and Quebec; Hawke destroys the French fleet off Belleisle.—British empire in India firmly established by the capture of Surat.

1760. Canada falls into the hands of the British.—George II d.; George III king.—Discovery of the island Kodiak.—Famine in Bengal.—Alompra, founder of Birman greatness, d.; the throne remains in his dynasty.—Hyder Ali founds the kingdom of Mysore.

1761. Chatham succeeded in the ministry by Bute.—Dupleix and the French lose their influence in the East Indies.—Bourbon family compact.

1762. Spain declares war against England; Rodney takes Martinique, Pocock and Keppel Havana, in the Indian ocean Manilla; Spain attacks Portugal without success.—Empress Elizabeth d.; Peter III declares for Frederic II, but Catharine II ascends the throne, and Peter d.

1763. Peace of Paris terminates the naval war (Great Britain receives Canada, Nova Scotia, Cape Breton, Senegal, with Tobago and other West India islands; Spain cedes the Floridas to Britain, and St. Sagramento to Portugal). England

A. D. mistress of the seas.—The seven years' war concluded by the peace of Hubertsburg, based on the *statu quo*.—Principle of the European balance of power.—Resignation of Bute.—Grenville ministry.

1764. Abolition of the Jesuits in France. Stanislaus Poniatowsky elected king of Poland. Disturbances in Poland, on account of the Dissidents.—Russians occupy the island St. Laurence.—Jesuits expelled from France. John Byron's circumnavigation of the world (1764—1766).

1765. Joseph II, emperor of Germany and co-regent of Austria, with his mother; his brother Leopold receives Tuscany.—Stamp act; opposition in the colonies; Virginia resolutions; colonial congress at New York; non-importation agreements.—The English dethrone the nabob of Bengal, and annex Bengal, Bahar and the Circars to their territory.—Ali Bey makes himself master of Egypt.—The Hat faction overthrown in Sweden; the Caps rule.

1766. Christian VII king of Denmark (Struensee and Brand).—Rockingham administration.—Stamp act repealed, with a reservation of the right of taxation by parliament.—Grafton and Chatham, ministers.—Lorraine again annexed to France.—William V stadtholder (Orangemen and Anti-Orangemen).—Wallis's, Carteret's, De Pagés' and Bougainville's voyages round the world (from 1766 to 1769).

1767. Duty on certain articles of merchandise imported into the North American colonies.—Jesuits expelled from Spain (Aranda, Campomanes).

1768. Colonists in the Sierra Morena (Olavides).—Confederation of the Catholics against the Dissidents at Bar.—War between Turkey and Russia.—Massachusetts circular; Disturbances in Boston; British troops arrive.—Corsica annexed to France.—[Napoleon born, August 15, at Ajaccio].—Frederic the Great restores order and prosperity to Prussia, exhausted by the war.

1769. Clement XIV (Ganganelli) pope.—Heraclius in Georgia, Ali Pacha in Egypt, and the Mainotes in the Morea, support Russia; the Turkish fleet destroyed at Tchesme and Monembasia.—France cedes Louisiana to Spain.—Cook's first voyage round the world.—Bruce's travels in Africa.—Non-importation becomes general in the North American colonies.

1770. Crimea declares itself independent.—Flight of the Oelöt (Calmucks) from Russia.—France sells the Falkland islands to Spain; countess du Barry rules with Aiguillon and Terray over France.—Opposition of the parliaments.—Lord North's administration. Boston massacre. Duties repealed, excepting that on tea.

1771. Surprise and arrest of the king of Poland near Warsaw.—Spain cedes the Falkland islands to the English.—Parliaments in France abolished.—Plague in Russia.

1772. First partition of Poland: Russia takes the country between the Düna, Dnieper and Drush; Austria takes Gallicia; Prussia takes Western Prussia and as far as the Netze.—Revolution in Denmark (the queen Juliana overthrows Struensee and Brand, and causes them to be executed).—Swedish revolution (royal authority restored, the Caps overthrown).—Warren Hastings, governor-general of the East India company's possessions.—Cook's second circumnavigation of the world.—Committees of correspondence in the colonies.

1773. Treaty of Holstein (the Gottorp portion of Holstein is ceded to Denmark by Russia, Oldenburg to Lübeck, and is created a German duchy).—The tea thrown overboard at Boston.—Florida Blanca minister in Spain (until 1792). Clement XIV (Ganganelli) abolishes the order of Jesuits, which remains in Russia only. [Victory of the temporal power over the ecclesiastical power].—Insurrection of Pugatscheff.—Ali Bey of Egypt defeated (at Salahia) and taken prisoner.

1774. The Russians compel the Turks to conclude a peace. (Crimea remains independent, and the country between the Bog and Dnieper, with Asoph, is ceded to Russia).—Louis XV, king of France, d.; his grandson, Louis XVI, king. Vergennes, minister (from 1774 to 1787). Turgot, minister (till 1776).—Boston port bill. Provincial assembly of Massachusetts.—First continental congress at Philadelphia (September 5th).—The power of the stadtholder increased.—Steam engine (Watt and Boulton).—Pius VI (Braschi) pope.

1775. Hostilities in America. Battle of Lexington (April 19). Capture of Crown Point and Ticonderoga. American troops besiege Boston. Battle of Bunker hill.

A. D. Second congress. Articles of confederation. Washington, commander-in-chief.—The English acquire Benares.

1776. War between Spain and Portugal on account of St. Sagramento. The English, compelled to evacuate Boston, occupy New York.

XII. *From the Declaration of the Independence of the U. States to the Beginning of the French Revolution.*

[From 1776 to 1789 A. D.]

1776. Declaration of independence of U. States, July 4. Battle of Trenton. Hume d.—Cook's third voyage round the world.—Adam Smith's *Wealth of Nations.*

1777. The Porte cedes Bukowina to Austria.—Joseph, king of Portugal, d.; Maria Francisca, queen. Don Pedro co-regent; fall of Pombal. (Restrictions on freedom of opinion in Portugal.)—Battles of Princeton, Brandywine, Germantown. The English occupy Philadelphia.—Surrender of Burgoyne at Saratoga (Oct. 17).—Necker, minister of finances in France.

1778. War of Bavarian succession (between Frederic the Great and Austria).—France concludes treaties of commerce and amity, and of alliance, with the U. States.—Battle of Monmouth.—Peace of Pardo; Portugal cedes St. Sagramento, Annaboa, and Fernando Po, to Spain.—Potemkin powerful in Russia (until 1791.)—Voltaire d.—Cook d. at Owhyhee.—Invasion of Georgia by the English.

1779. Peace of Teschen (Austria receives the Innviertel).—Disasters of the English in the West Indies and on the Senegal.—Spain engages in the American war.

1780. Armed neutrality of the maritime powers.—Victory of the English at St. Vincent (admiral Rodney).—Great Britain declares war against Holland.—Maria Theresa d.; Joseph II governs the Austrian states. His edict of toleration.—Battle of Camden.—Treachery of Arnold.—Lessing d.

1781. Conquest of the Dutch colonies in the West and East Indies.—Abolition of the Barrier treaty.—Necker retires from the ministry; Calonne, comptroller-general.—Battles of the Cowpens and of Eutaw springs; lord Cornwallis surrenders at Yorktown (October 19th).

1782. Lord North's administration overthrown; Rockingham, Shelburne, Fox, and the younger Pitt.—The British defeat the French near Guadaloupe, but lose Minorca.—Gibraltar defended by Elliot (floating batteries of the French). In the East Indies, Hyder Ali subjected.—The Spaniards abandon Oran and Masalquivir.—Independence of the Irish parliament.—Preliminaries of Paris (November 30).

1783. Heraclius, czar of Georgia, submits to Russia.—Incorporation of the Crimea with Russia (Russian maritime power on the Black sea).—Hyder Ali d.; his son, Tippoo Saib, succeeds.—Peace of Versailles (Sept. 3). Great Britain acknowledges the independence of the U. States, cedes Tobago and Senegal to France, the Floridas and Minorca to Spain, and retains Negapatam.—Balloon (Montgolfier).

1784. Financial distress in France at its height; the debt is nearly 6000 million livres, the deficit annually 80,000,000, and after 1787, 111,000,000.—Peace of the English with Tippoo Saib.—The province of Holland suspends the stadtholder from the dignity of commander-in-chief; in Utrecht is formed the Anti-Orange assembly of cities.—Dispute respecting the Scheldt. (The Dutch extinguish the claims of Joseph II by paying 10,000,000 of guilders).—Sweden purchases St. Bartholomew.—Wilson's voyage round the world.

1785. Illuminati in Bavaria.—Project for the exchange of Bavaria for the Netherlands.—League of German princes (Frederic the Great's last act).—Formation of the Sierra Leone society.

1786. Frederic the Great d.; his profligate and weak-minded nephew, Frederic William II, succeeds him.—Congress at Ems.—Dutch revolution; the patriots reject the idea of a stadtholder; the wife of William V is arrested on her journey to the Hague.—Troubles in the Austrian Netherlands on account of the reforms of Joseph II.—Treaty of commerce between England and France.—La Perouse's voyage of discovery.—Cagliostro. Magnetism. Wöllner, favorite of the king of Prussia.—Shays's insurrection in Massachusetts (1786 and 1787).

A. D.

1787. Plan of taxing the privileged orders in France. Meeting of the notables; the states-general demanded.—The convention for forming a constitution for the U. States, adopts the federal constitution.—The duke of Brunswick enters Holland with 20,000 Prussians; it is conquered in 20 days, and the stadtholder reëstablished in his authority.—War with the Turks.—William Bligh circumnavigates the world (1787—1790).

1788. The French minister Brienne incapable of quieting the storm.—Charles IV, king of Spain.—War between Russia and Turkey, and between Russia and Sweden.—Establishment of the colony of New South Wales; Botany Bay.—The federal constitution adopted by the state conventions.

XIII. *From the Beginning of the French Revolution to the Second Restoration of the Bourbons.*

[From 1789 to 1815 A. D.]

1789. Beginning of the French revolution; constituent assembly; the third estate acquires the preponderance (abbé Sieyes); Necker again minister; Bastile taken (July 14); feudal system abolished (August 4); origin of the clubs. (Orleans, Mirabeau.) The 5th and 6th October.—Corsica united with France.—Coburg and Suwaroff defeat the Turks; Laudon takes Belgrade; the Russians obtain Bender, Akermann and Choczim.—Troubles in the Netherlands (Van der Noot, Meersch); in Hungary; Prussia and the maritime powers determine to assist the Turks.—Washington, first president of the U. States (till 1797). First congress under the federal constitution meets at New York (March 4).

1790. France divided into 83 departments; confiscation of goods abolished; *lettres de cachet* abolished; war and peace belong to the nation; membership of the national guards essential for citizenship; abolition of hereditary nobility; sale of the church lands; civil constitution of the clergy; creation of justices of the peace and family courts; useful inventions made the property of the inventor. Necker dismissed September 4. Confederation of the *Champ-de-Mars*, July 14. Beginning of emigration. Patriotic donations amount (July 31) to 12,500,000 francs.—Franklin d.—Joseph II d.—Termination of the dispute between Spain and Great Britain respecting Nootka sound (the Northwest coast, British).—War with the Indians; general Harmar defeated. First census of the U. States; 3,929,536 inhabitants.—Troubles in Hungary and the Netherlands quieted.

1791. Mirabeau d.; the church of St. Généviève converted into the Pantheon; decree that no member of the constituent assembly should be reëligible to the next national assembly; issue of 600,000,000 of assignats; the king and family attempt to escape, arrested at Varennes; constitution of Sept. 3, 1791 (limited monarchy); first session of the legislative assembly; the property of the princes and other emigrants confiscated; insurrection at St. Domingo.—Poland receives a new constitution, the elective monarchy made hereditary.—Vermont admitted into the Union.—General St. Clair defeated by the Indians.

1792. In France, property of the emigrants declared national; guillotine; war against the king of Bohemia and Hungary; August 10, the king suspended; August 13, king and family carried to the Temple; the massacre of the 2d and 3d of September; Louvre national museum; national convention; substitution of *citoyen* and *citoyenne* for *monsieur* and *madame*. September 21, abolition of royalty, moved by Collot-d'Herbois; September 28, the French republic declared one and indivisible; emigrants banished for ever under pain of death. Manifesto of the duke of Brunswick.—Cannonade of Valmy (Kellerman).—The allies driven out of France. Dumouriez victorious at Jemappes. Montesquiou occupies Savoy, Custine Mentz. Savoy annexed to France.—British sinking fund increased.—Intercourse of Russia with China by the ancient route through Kiachta restored.—Kentucky admitted into the Union.

1793. Louis XVI, 38 years old, having reigned over 18 years, beheaded, Jan. 21 (of 714 votes 428 were for death; Malesherbes and Tronchet defend him); constitution of 1793; May 31, the Mountain party victorious over the Girondists; terrorism,

A. D. revolutionary tribunal, committee of public safety (Robespierre). War against England and Holland. The German empire, Great Britain, Prussia, Holland, Portugal, Spain, Sardinia, the Two Sicilies, and the pope, against France; insurrections in Vendée, Lyons, Bordeaux, Marseilles; Toulon taken by the English, and Louis XVII declared king. Eleven armies created by a levy *en masse*; Jourdan defeats the Austrians at Fleury, Pichegru takes possession of Holland; Lyons taken; Toulon recovered (Napoleon Bonaparte lieutenant of artillery). Forced loan of two *milliards* of francs applicable to the rich only; law of the maximum. Marie Antoinette executed, October 16; Philip Égalité (Orleans), November 6. Marat killed by Charlotte Corday, July 13; telegraph (Chappe); uniformity of weights and measures; first discussion of the new code, presented by Cambacérés; every workman receives two francs for each session of his section in Paris; women obliged to wear the tri-colored cockade.—Alliance of Spain and Great Britain at Aranjuez.—Second partition of Poland (the republic hardly retains one third of her territory).

1794. French arms every where successful on land, but the English by sea. In France terrorism continues. January 4, slavery abolished; Robespierre, the Incorruptible, dictator until the revolution of 9th Thermidor (July 27), executed July 28; the more moderate party rules; *maximum* abolished; the revolutionary tribunal remodeled.—Conquest of the Netherlands. The minister of the U. States receives the fraternal accolade from the president of the convention; clubs suppressed, and Jacobins dispersed; primary schools established.—Insurrection in Poland; Kosciusko is taken prisoner at Maciewice by the Russians. Suwaroff storms Praga the suburb of Warsaw; 14,000 persons massacred.—Indians defeated by general Wayne. Insurrection in Pennsylvania. Jay's treaty.

1795. New revolution in Paris; struggle of the Jacobins against the moderate party continues; the former subjected. Third constitution (five directors at the head of government; councils of the ancients and of the five hundred). Depreciation of the assignats and mandats. Peace with Tuscany, Prussia (at Bâle), Spain and Hesse-Cassel; defeat of the emigrants at Quiberon.—The prince of peace (Godoy) favorite in Spain.—Disturbances in Ireland.—Revolution in Amsterdam and Leyden (January).—The stadtholder flies to England; his office abolished; peace between Holland and France (Flanders, Maestricht and Venloo ceded to the latter).—Third and final partition of Poland, October 24.

1796. Jourdan and Moreau pass the Rhine; the archduke Charles victorious; famous retreat of Moreau.—Bonaparte general in Italy, conquers all the northern part, except Mantua, and forces Sardinia to a peace. Hoche restores tranquillity in Vendée; Corsica retaken from the English; attempted landing in Ireland unsuccessful. Peaces and armistices concluded between France and the German princes and the pope.—Association of Northern Germany.—Naples neutral.—Alliance of Spain with France at St. Ildefonso.—Confusion of the Dutch finances; national assembly at the Hague.—Catharine II d.; Paul I, emperor of Russia.—Tennessee admitted into the Union.

1797. Bonaparte victorious over three Austrian armies, conquers Mantua, and obliges the pope to conclude the peace of Tolentino. Hoche and Moreau pass the Rhine. Preliminaries of peace at Leoben. Ligurian and Cisalpine republics established. Old Venetian government dissolved. Revolution of 18th Fructidor. Bankruptcy under the name of *consolidated third*. Peace of Campo-Formio (Austria receives, in exchange for the Netherlands and Lombardy, Venice, Modena, the Brisgau). Congress of Rastadt. Bonaparte, returning from Italy, is received by the directory with great distinction. Naval battle at St. Vincent.—Mutinies in the British navy.—Suspension of specie payments by the bank of England (without serious consequences).—Passwan Oglu at Widdin.—New commercial treaty between Russia and Great Britain.—John Adams second president of the United States. Treaties with France declared to be no longer binding.

1798. General seizure of English merchandise; forced loan of 80 millions of francs for the descent upon England.—Roman republic.—The Rhenish frontier the basis of peace. Geneva annexed to France; revolution in Switzerland. Maritime edict of Nivose 29.—Bonaparte sails from Toulon, destination unknown;

A. D. takes Malta; invades Egypt. Nelson destroys the French fleet at Aboukir. New coalition against France.—The French enter Tuscany, Lucca and Naples.—Rebellion in Ireland suppressed by lord Cornwallis (the French general Humbert taken).—Democratic party victorious in the Hague; Batavian republic, one and indivisible.—New Helvetic, Lemanic (Geneva) and Rhodanic (Avignon) republics.—The Russians and Turks conquer the Ionian Islands.—Paul assumes the title of protector of the order of Malta; Odessa begins to flourish.

1799. The archduke Charles is victorious in Germany; Jourdan retreats behind the Rhine. Charles enters Switzerland; Suwaroff in Italy; the English land in Holland. Revolution of 30th Prairial. Massena victorious in Italy; the British unsuccessful in Holland.—Paul secedes from the coalition, and Suwaroff returns to Russia, Oct. 7. Bonaparte returns to France, informed of the disasters of his country by his brother Joseph. Revolution of the 18th Brumaire (fourth constitution). Bonaparte first consul for 10 years. He reëstablishes order.—Northern convention; difficulties between Denmark and Great Britain; the English take Seringapatam; Tippoo Saib falls before the gates of his capital, and Mysore is divided among the conquerors.—Republic of the Seven Islands.—Washington d.

1800. Restoration of civil and military order in France. Armaments. Army of reserve at Dijon.—List of emigrants closed.—Beginning of the campaign on the Rhine (Moreau). The army of reserve passes the St. Bernard.—Bonaparte victorious at Marengo; Moreau at Hohenlinden. Malta taken by the English. Act of union with Ireland passed.—Convention between the U. States and the French republic.—Attempt against the life of the first consul (infernal machine).—Northern convention for the restoration of the armed neutrality.—Pius VII (Chiaramonti) pope.

1801. Revolution in Switzerland. Egypt evacuated. Peace of Luneville (the Adige becomes the frontier between the Cisalpine republic and Austria, the left bank of the Rhine and Piedmont remain French; Tuscany ceded to Parma, as the kingdom of Etruria).—Prussia joins the northern convention.—Peace with Sicily, Portugal, Russia.—Concordate with the pope. Expedition of 25,000 French troops to St. Domingo, destroyed by disease and the Negroes.—War between Spain and Portugal.—Nelson victorious at Copenhagen.—Prussians take possession of Hanover.—Restoration of the Catholic worship in France.—Pitt retires from the ministry; Addington minister.—Preliminaries of peace at London.—Peace of Madrid (Portugal and Spain), of Paris (Russia with France and Spain).—Congress of Amiens.—Constitutions in Holland, Switzerland and Lucca.—Union with Ireland effected. First imperial parliament.—The vizier of Oude taken under the protection of the English; the nabob of Arcot pensioned; the Carnatic conquered by the British.—Paul I strangled. Alexander I, emperor and autocrat of Russia. Georgia a Russian province.—Thomas Jefferson third president (till 1809). War against Tripoli.

1802. Peace of Amiens with the English, who of all their conquests retain only Ceylon and Trinidad; republic of the Seven Islands acknowledged. Peace with the Porte; France acquires the right of navigation on the Black sea. Legion of honor. Bonaparte consul for life, president of the Italian republic.—Piedmont French.—Amnesty of the emigrants.—Treaties of indemnification with Russia, Prussia, Würtemberg, Orange and Austria.—The Valais an independent republic.—Liguria receives a new constitution.—Peace between Spain and Portugal at Badajoz; Olivença remains Spanish.—Russian senate restored.—War in Hayti.—Ohio admitted into the Union.—Louisiana ceded by Spain to France.

1803. Bank in France. France interferes in the Helvetic disturbances; act of mediation. New maritime war. France occupies Hanover. Beginning of the continental system.—Louisiana purchased by the U. States for $15,000,000.—Recess of the deputation of the empire (Germany cedes to France 25,500 sq. miles, with 4 millions of inhabitants; almost all the imperial cities and the spiritual principalities abolished; 4 new electors created: Salzburg, Würtemberg, Baden and Hesse).—Peace between the English and the Mahrattas (the Great Mogul pensioned; the East India company acquires Delhi, Agra, &c.)

1804. Conspiracy against Bonaparte (Pichegru, Georges, Moreau). Duke d'Enghien shot.—Napoleon Bonaparte, emperor of the French (anointed and crowned,

A. D. Dec. 2). Great preparations in Boulogne for a descent upon England.—Austria a hereditary empire.—Pitt minister.—Kant d.—Establishment of the colony of Van Diemen's Land.—Sannikof discovers New Siberia.

1805. Genoa and Parma united with France. Coalition of Austria and Russia against France. Napoleon in Vienna. Peace of Presburg; takes from Austria Venice, Tyrol, Breisgau, &c.; Tuscany receives Würtzburg in exchange for Saltzburg.—Nelson victorious at Trafalgar against the French and Spanish fleet; killed in the action.—Lucca granted as a hereditary principality to Napoleon's sister Eliza, and her husband Bacciochi.—Schimmelpennink pensionary of Holland with dictatorial power.—Schiller d.—Negro state of Hayti; Dessalines emperor, under the name of James I.

1806. Holland a kingdom under Louis I, Napoleon.—Berg and Cleves given to Joachim Murat, brother-in-law of Napoleon, Naples to Joseph, brother of Napoleon. The former king retires to Sicily, where he is protected by the British (Collingwood). Eugene Beauharnais declared viceroy of Italy and successor of Napoleon on the throne of Italy.—German empire dissolved. Napoleon protector of the confederation of the Rhine. Maximilian I, king of Bavaria; Frederic I, king of Würtemberg; Charles Frederic, grand-duke of Baden; Louis, grand-duke of Hesse; Dalberg, prince-primate.—Imperial family statute.—The idea of the grand empire developed.—Prussia takes possession of Hanover; England declares war against Prussia. Napoleon marches to Germany; victorious at Auerstädt and Jena. Napoleon's decree of Berlin, declaring the British islands in a state of blockade.—Saxony a kingdom.—Dessalines killed.—Pitt d. Jan. 3; Fox, minister, d. Sept. 13.—Turkish war.—The British conquer the cape of Good Hope and Buenos Ayres, but evacuate the latter.—Disturbances in South America.—American vessels captured by British cruisers; the latter forbidden to enter American ports.

1807. War between France and Russia.—Battles of Eylau and Friedland. Peace of Tilsit.—Prussia loses half her territory, which her enemies and allies divide. Elector of Hesse and duke of Brunswick deprived of their prerogatives of sovereignty. Kingdom of Westphalia under Jerome, brother of Napoleon, and duchy of Warsaw founded. Confederation of the Rhine extends to the Baltic. Great continental system (British orders in council; Milan decree). The British bombard Copenhagen and take the Danish fleet.—Attack on the American frigate Chesapeake. Embargo laid by the government of the U. States.—Ragusa united with Italy. The French enter Spain and Portugal. The house of Braganza flees to Brazil.—*Code Napoléon*.—The constitution of the Mulattoes (Petion) and of the Negroes (emperor Henry) in Hayti.—Abolition of the slave-trade by the English parliament.—Revolution in Constantinople: Selim III dethroned; Mustapha IV, Padishah.—The Wahabites in Mecca and Medina.—The English obtain possession of Surat and other districts.—The English again conquer Buenos Ayres and again abandon it.

1808. War between Russia and Sweden.—Revolution at Aranjuez. Napoleon dethrones the Bourbon dynasty of Spain. Joseph Napoleon, king of Spain; Joachim Murat, king of Naples; Berg is subsequently given to the prince royal of Holland.—Congress of Erfurt.—Revolution in Constantinople; Mahmoud II, Padishah.—The French arms unsuccessful in Spain. The emperor goes thither himself.—Abolition of the inquisition and feudal privileges.—The Wahabites spread over Western Asia.—Insurrection in Venezuela.

1809. War in Spain continues.—Austria declares war against France. Napoleon in Vienna. Battles of Aspern and Wagram. Peace of Vienna (Austria loses Illyria, which, with Dalmatia, is erected into a state under the protection of France; Western Gallicia and the salt mines of Wieliczka ceded to Warsaw; Tarnopol to Russia; Saltzburg, &c., to Bavaria.) Napoleon arbitrator of Europe.—Abolition of the temporal power of the pope; Valais annexed to France; the Ionian republic French.—Revolution by the Swedish aristocracy; Gustavus IV deprived of the throne; Charles XIII, king. Peace with Russia at Fredericshamm, by which the Swedes lose Finland, Åland, and part of the Lappmark.—The prince of Holstein-Augustenburg chosen successor to the throne.—Madison fourth president of the U. States. Embargo repealed; non-intercourse law.

1810. The Spaniards confined in Cadiz; Wellington English commander in Portu-

A. D. gal.—The pope excommunicates Napoleon (is carried to France; the States of the Church and Tuscany incorporated with France; Rome becomes the second capital of the empire).—Napoleon repudiates Josephine and marries Maria Louisa, daughter of the emperor of Austria.—Decree of Trianon: Louis deprived of Holland, which is incorporated with France, as is also the north-west of Germany, the mouths of the Ems, Jahde, Weser and Elbe; a new hereditary nobility in France; the imperial university established.—The prince of Augustenburg d.; Charles John Bernadotte elected Swedish crown-prince.—Revolution in Caracas, Mexico, Southern Peru and Buenos Ayres.—Affair of the Little Belt.

1811. Unsuccessful negotiations between Russia and France.—Prince of Wales is made prince regent. King of Rome (son of Napoleon) born.—War in Spain carried on with various success.—Declaration of independence of the seven provinces of Venezuela (July 5). Bogota (New-Granada) declares itself independent. The government of the U. Provinces of the Rio de la Plata (Buenos Ayres) frees the Indians from tribute.—Mohammed Ali, pacha of Egypt.—Louisiana admitted into the Union.

1812. Napoleon marches to Russia. An army of 500,000 men passes the Niemen. Austria and Prussia allies of France. Alexander makes peace with the Turks; acquires Bessarabia and part of Moldavia. French enter Moscow, which is burnt September 16. Disastrous retreat of the French, and destruction of the army. Not more than 10,000 men in a fighting condition reach the frontier. York, Prussian general, goes over to the Russians. Napoleon in Paris, organizes a new army.—War between U. States and Great Britain. Invasion of Canada by the Americans; disasters in Canada; naval successes.—New constitution in Spain.—Russia acquires many provinces in Asia.—Mohammed Ali takes Mecca and Medina from the Wahabites.—Dictatorship in Venezuela.—Invasion by Spanish troops under Monteverde.—The dictator, Miranda, flees. Venezuela conquered.

1813. Prussia joins Russia. *Levée en masse* in Prussia. The duchy of Warsaw dissolved. Bernadotte declares against France. Napoleon victorious at Lützen and Bautzen, but with great loss. Austria joins the allies. Bavaria and other members of the Rhenish provinces begin to desert the French. Battle of Dresden. Moreau d. Many battles; one of the greatest in history at Leipsic (Oct. 16, 17, 18 and 19). Kingdom of Westphalia dissolved. The Orange party recalls the stadtholder William V, as sovereign; Holland conquered.—Wellington victorious in Spain. King Joachim of Naples treats with Austria against France.—Simon Bolivar drives the Spaniards from Caracas.—Civil war in New Granada.

1814. Quadruple alliance.—Battle of lake Erie. The allies enter Paris, March 31. Napoleon abdicates and goes to Elba.—The Bourbons restored. Louis XVIII. France is promised a constitution. First peace of Paris. France reduced to her old limits; retains, however, Avignon, part of Savoy and the Netherlands; Great Britain retains the Cape of Good Hope, Mauritius, Tobago, St. Lucie, Essequibo and Demerara, Malta, Heligoland and the protectorship of the seven Ionian Islands. The pope, the king of Sardinia, the grand-duke of Tuscany, the duke of Modena, the elector of Hesse-Cassel, the dukes of Brunswick and Oldenburg take possession of their states. Ferdinand of Spain, previously released, enters Spain, solemnly promises a constitution, but breaks his word.—Norway is given to Sweden, revolts and chooses a Danish prince king, but Bernadotte suppresses the revolt, and Norway is made a distinct kingdom with a liberal constitution under the same monarch as Sweden.—Battles of lake Champlain and Plattsburg. Treaty of Ghent between Great Britain and the U. States (Dec. 4). Monarchs visit London. Congress at Vienna. Restoration of the Jesuits by the pope. The returned emigrants show that they have not lost their former arrogance and their unfitness for government.—General Bolivar beaten by the Spaniards under Boves; he retreats to Carthagena.—Creek war; general Jackson takes Pensacola.

1815. Battle of New Orleans; (general Jackson. Jan. 8). Napoleon returns from Elba March 1, and enters Paris March 20.—Louis XVIII flees to Ghent, and Napoleon declares that he will respect the peace of Paris. The king of Naples (Murat) declares for Napoleon, but an Austrian army dethrones him, and

A. D. the king of Sicily returns.—Decrees of the congress of Vienna: Austria and Prussia return to their state before 1790; the kingdom of Poland constituted under the protection of Russia; Saxony divided (part to Prussia), Genoa given to Sardinia; Parma is given to Maria Louisa; the old constitution of Switzerland, with some modifications, restored; the Germanic confederacy established.—War against Napoleon; battle at Ligny, at Waterloo (June 18), English (Wellington) and Prussians (Blücher) entirely victorious.—English and Prussians take Paris. Napoleon abdicates in favor of his son, and the chambers accept the abdication. He throws himself on the mercy of the English, who confine him, as the prisoner of the allies, in St. Helena.

XV. *From the second Restoration of the Bourbons to the French Revolution of 1830.*

[From 1815 to 1830 A. D.]

1815. Monarchs firmly united against the people; Louis XVIII restored a second time by foreign arms. He cedes Savoy, Landau and Saar-Louis, and pays 700,000,000 francs; France is occupied by 150,000 allied troops until quiet is restored.—Holy alliance Sept. 26; principle of legitimacy under the cloak of religion.—Joachim Murat returns to Calabria, is shot Oct. 15.—Republic of the Ionian Islands proclaimed.—Poland receives a new constitution.—The United States of Buenos Ayres declare themselves independent.—General Morillo lands with a new Spanish army at St. Martha; conquers Carthagena.—All Ceylon reduced by the British (end of the kingdom of Candy).—The British receive, by the peace with Nepaul, the country between the Setlege and the Jumna.—Revolution in China suppressed after much bloodshed.—The American squadron under Decatur forces Algiers, Tunis and Tripoli to accede to terms of peace.

1816. British and Dutch bombard Algiers, and force it to accede to a peace.—The British cede Batavia and the Spice islands to the Dutch for Cochin.—Indiana received into the Union.—Bolivar beaten by Morillo.—The Independents in Venezuela successful.—Bolivar commander in chief.—Congress of the provinces of La Plata at San Miguel de Tucuman. Declaration of independence.—Don Juan Martin de Puyrredo director-general with dictatorial power.—Mission of general San Martin for the delivery of Chile.—

1817. Prohibition of the slave-trade to the French colonies.—Several powers conclude concordates with the pope.—Spain accedes to the Acts of the congress of Vienna.—Treaty between Spain and England respecting the abolition of the slave-trade.—Rajah of Nagpour becomes tributary to the British.—Declaration of independence of Chile. Bolivar chief of Venezuela; victorious over the Spaniards.—The Brazilians take Montevideo.—Campaign against Peru.—The partisan leader Artigas.—Monroe fifth president (till 1825). Mississippi received into the Union.

1818. Congress of Aix-la-Chapelle: confirmation of the holy alliance. The foreign troops leave France.—Charles XIII d.; Charles John (Bernadotte) king of Sweden.—End of the Mahratta war; the state of the Peishwar dissolved; Holcar loses half of his dominions, and becomes tributary to the British; Scindiah humbled. The British masters of all the East Indies with the exception of Nepaul and the states of the Seiks and Scindiah, whose power, moreover, is broken.—Movements among the liberalists in Germany; carbonari in Italy; party struggles in France.—Illinois received into the Union. Seminole war; general Jackson.—Internal commotions at Buenos Ayres.—Chile entirely freed, by San Martin's victory on the Maypo.—O'Higgins supreme director.—Lord Cochrane admiral.—

1819. Trials of the liberals in Germany. Congresses at Carlsbad and Vienna.—Relations of the revolted states of South America with the U. States, Great Britain and Brazil.—Venezuela and Caracas united under the name of the *republic of Colombia*. Bolivar president.—Alabama admitted into the Union. Arkansas territory organized.

1820. Military insurrection in Cadiz; constitution of the cortes of 1812 proclaimed;

A. D. the king obliged to accept it. Abolition of the inquisition, liberty of the press, dissolution of the monastic orders, attention to schools, the immediate consequences of the revolution.—Portugal and Naples adopt similar constitutions in a similar way, viz., by military insurrection.—Congress of Troppau. The holy alliance determined to support its principles.—Duke of Berry assassinated.—Expulsion of the Jesuits from Russia.—George III d.; George IV succeeds.—Trial of the queen of Great Britain.—Henry, emperor of Hayti, d.; all the island submits to Boyer.—Maine admitted into the Union. Slave-trade declared piracy by congress.—Campaign in Peru (siege of Lima).—The possessions of Spain in Colombia reduced to Puerto Cabello and Maracaibo.—Morillo returns to Spain.—Struggle of parties in Buenos Ayres.

1821. Napoleon d. at St. Helena, May 5, after having dictated his memoirs.—John VI returns from Brazil to Portugal, and adopts the constitution.—Revolution in Brazil.—Congress of Laybach.—The Austrians enter Naples, and destroy the new order of things.—An insurrection in Alessandria induces Victor Emanuel to abdicate; Felix, his brother, king. The Austrians occupy Piedmont. Prince Carignano.—Insurrection in Moldavia and Walachia by the Hetæria (Alex. Ypsilanti).—His defeat at Dragashan; carried prisoner into Austria.—Insurrection in Greece.—Execution of the patriarch at Constantinople.—Russian ukase respecting the north-west coast of America.—The Greeks take Tripolizza.—Yellow fever in Barcelona.—Guatimala independent.—Brazil acknowledges the independence of the South American republics.—Peru independent.—Florida ceded to the U. States. Missouri admitted into the Union.

1822. Disturbances in Spain promoted by the clergy; army of the faith.—Troubles in Ireland.—Boyer enters the city of St. Domingo, and becomes master of the whole island.—Ali Pacha taken by the Turks and strangled.—Riego enters Madrid.—New British navigation act.—Eruption of Vesuvius; a new volcano on the island of Oomnak.—Bolivar conquers Quito.—Mexico declares itself independent; Augustine Iturbide emperor.—State of Dr. Francia in Paraguay.—The English minister Londonderry kills himself; Canning minister of foreign affairs.—First national congress of the United States of South America.—Brazil separates from Portugal; Peter I, emperor.—Greek congress at Epidaurus.—Destruction of Scio by the capudan pacha.—Turks in the Morea defeated.—Success of the fire-ships off Scio. Nauplia surrenders to the Greeks. Disturbances at Constantinople.—Congress at Verona (principle of "armed intervention").—The U. States sends ministers to the Spanish republics.—Hieroglyphics deciphered (Champollion).

1823. The ministers of the Great Powers leave Madrid; Russia declares herself openly. France undertakes to support the king of Spain. French enter Madrid, May 24. This encourages Don Miguel to plant the standard of absolutism in Lisbon. The cortes of Spain conduct the king to Cadiz; the duke of Angouleme delivers him. In Portugal, the party of the queen victorious against the liberals; constitution abolished.—Manuel expelled from the chamber of deputies.—Irish disturbances continue.—Pius VII d.; cardinal Genga succeeds as Leo XII.—The Austrians leave Naples.—The struggle continues in Greece, both parties feeble.—Sincapore increases in commercial importance.—In Africa, the Ashantees repelled by the British. British and Italian travellers penetrate into the interior of Africa (Denham, Clapperton, Dr. Oudeney, Belzoni).—Flourishing condition of the U. States.—Confusion continues in South America.—Iturbide overthrown in Mexico, banished to Italy; republic established. In Colombia, the last hold of the Spaniards, Puerto Cabello, falls. In Peru, Bolivar acquires the direction of affairs, and, in Lima, is elected commander-in-chief of Peru. Disturbances in Brazil are suppressed, and Monte Video, under the name of *Cisplatina*, forms a part of the great empire. The national convention in Mexico pronounces the union of all the Mexican provinces in one confederacy, on the model of the union of the Anglo-American states.

1824. Rebellion of the Infant Miguel at Lisbon. The king flees on board the British admiral's vessel in the Tagus. Internal peace is restored, don Miguel exiled, the queen put in a convent: the fermentation continues.—In Spain, peace is preserved by French arms only, and it is stipulated by treaty, that the French

A. D. army shall remain in Spain until January 1, 1826. But the Camarilla and Apostolic Junta demand religious and political persecution. August 3, a constitutional corps lands at Tarifa, but is defeated August 19. Only 25,000 French remain, and occupy Cadiz, Barcelona, Saragossa, Vittoria, &c.—In France, unsuccessful opposition of the chambers to the ministry.—Birmese war.—The king of the Netherlands cedes the Dutch East India colonies on the continent, with Malacca, to the British, in exchange for the British Sumatra and Bencoolen; the sultan of Palembang cedes his territory to the Netherlands, and receives a pension.—In Germany, new prosecutions against the liberals.—The Russian south-west company is founded.—Gonsalvi d.—Lord Byron in Greece.—Mohammed Pacha repels the Wahabites.—Iturbide returns to Mexico, but is taken and executed. Mexican confederacy.—The Spaniards drive the Colombians from Lima, but their army in Upper Peru is defeated at the battle of Ayacucho, December 9.—Disturbances in Brazil suppressed. The emperor swears to the new constitution.—Lafayette in America.

1825. Portugal acknowledges the independence of Brazil, August 29. The ultra party, in spite of the amnesty, causes troubles in that country and in Spain. Change of ministers; insurrections break out.—The civil list, indemnification of emigrants and three per cents occupy the French chamber; Villéle prevails. Independence of Hayti acknowledged. Charles X crowned at Rheims, May 29.—Great Britain acknowledges the South American republics, January 1. Great crisis.—Scarcity of money at London and Paris, felt all over Europe and the U. States.—Alexander I died December 1, at Taganrock; Cesarovitch Constantine declared emperor, but he renounces in favor of his brother Nicholas. Disturbances in consequence at St. Petersburg.—Ibrahim Pacha, son of the pacha of Egypt, devastates the Morea. Reshid Pacha advances to Missolonghi, which is defended with heroism. By sea, the Greeks are generally victorious.—Birmese war continued; the British march up the Irrawaddi, take Prome.—Beginning of the insurrection in Java.—Bolivar dictator of Peru, conquers Cusco.—Upper Peru declares itself independent, under the title of *Bolivia*.—Dispute between the provinces of La Plata and Brazil, respecting Cisplatina; December 10, the emperor declared war against the U. Provinces, after hostilities had been commenced.—J. Q. Adams, sixth president of the U. States.

1826. John VI of Portugal d.; his will appoints the Infanta Isabella Maria head of the regency, which don Miguel acknowledges, April 7, at Vienna, and the emperor Pedro I confirms. The latter renounces the crown of Portugal in favor of his daughter Maria da Gloria, a child seven years old, and gives a liberal constitution, July 31. The monks and nobility oppose the charter; insurrections break out, and, October 9, don Miguel is proclaimed absolute king; but he swears to observe the constitution, October 30, and is contracted with Maria da Gloria. Chaves and Silveyra attack the regent, and Canning sends 15,000 men to assist her.—Spain torn by the apostolic party.—In France, the Jesuits (Congregation) and the absolutists become bolder.—In the Netherlands, troubles respecting the ultramontane principles.—Adams and Jefferson die, July 4.—Congress of Ackerman settles the disputes between Russia and Turkey. Great conflagration in Constantinople; European soldiers. Missolonghi taken by the Turks, April 23, but her heroic defence attracts the attention of all Europe. Factions distract Greece.—In East India, the rajah of Bhurtpore subjected; the Birmans compelled to conclude a peace with the British before their capital, by which Aracan and the south-western coast become British, and Assam and the Garrow princes are delivered from the Birmans.—The Chinese fight against the revolted Tartars in Mongolia.—Great Britain closes the ports of the West Indies.—Chiloe and Callao, the last places which the Spaniards held on the continent of America.—Congress of Panama.—The credit of the South American republics declines.—Paez revolts against Bolivar, who enters Caracas and quiets the country.—New Holland becomes more known by travels in the interior.—

1827. The English army restores tranquillity in Portugal.—In France, the ministry unpopular, the law relating to the jury passed, but not the law against the press. National guards abolished. France favorably disposed towards

A. D. Greece; sends a fleet to Algiers.—The Congregation grows powerful.—Lord Liverpool succeeded by Canning, as prime minister.—The pope confirms a new monastic order.—The Persians, in the war with Russia, are defeated at all points. Abbas Mirza defeated, and the fortress of Abbas Abad taken. The Russians advance in Aran, conquer Erivan, &c., and, in the peace, Persia is obliged to cede Aran, &c., and pay 18,000,000 rubles.—Cochrane arrives in Greece, but cannot prevent the fall of Athens. The Greeks, in great danger, implore the aid of the European powers.—The Tartar insurrection against China continues. Paez submits to the liberator. Counter revolution in Peru, which overthrows all the institutions of Bolivar.—The treaty of pacification, in favor of Greece, between England, Russia and France, is signed.—Capo d'Istria is elected president of Hellas.—The Carlists in Spain (called now *Agraviados*), demand the restoration of the inquisition, and excite an insurrection in Tarragona.—The Warspite, the first English ship of the line which sailed round the earth, returns.—The king of the Netherlands signs the concordate with the pope.—Canning d. Goderich administration.—Earthquake at Tokat.—Captain Parry returns from the North sea, without having found the desired passage.—In the battle of Navarino, October 20, the English, Russian and French fleets destroy the Egyptian fleet.—Clapperton dies.

1828. Capo d'Istria lands in Greece. He establishes the Panhellenicon at Napoli.—Abolition of the test and corporation acts. Wellington's administration.—Don Miguel arrives in Lisbon, dissolves the chambers, summons the cortes, which proclaims him absolute monarch. The constitutionalists, who march from Coimbra, are defeated. The English leave the forts at Lisbon. The Brazilian ministers at London and Vienna protest against the usurpation of don Miguel.—The Russian cabinet declares that it must have satisfaction for itself from the Porte, but as to Greece, it agrees with France and England. Declaration of war, April 26.—The Russian campaign begins; the Russians are victorious at first, and enter Varna, but, in October, begin their retreat from before Shumla; general Wittgenstein, the commander-in-chief of the Russian forces, establishes his head-quarters in Jassy. All Bulgaria, with the exception of Varna, is abandoned by the Russians; the siege of Silistria raised; the heavy artillery abandoned.—A division of French troops under Maison lands in Morea; Ibrahim Pacha concludes, with admiral Codrington, a convention to evacuate Morea, which he does in October.—Peace between Peru and Bolivia.—Bolivar, dictator of Colombia, June 13: his proclamation of September 13. Vice-president Santander and general Padilla conspire against him. His aids-de-camp killed, Santander taken prisoner.—Peace between Naples and Tripoli.—Executions and imprisonments in Portugal. Expedition against Madeira and Terceira, which declared for the emperor Pedro. The former is taken, August 23. The queen of Portugal, donna Maria da Gloria, arrives in London, October 6; the king receives her as a queen.—In Mexico, general St. Anna, governor of Vera Cruz, declares against Gomer Pedraza, the newly elected president, and in favor of Guerrero, the rival candidate.—Disturbances in Ireland, and the Catholic association resumes its sittings, the act against it having expired (O'Connel, Shiels).—London university opened.—Caillé returns from Timbuctoo.—Dumont d'Urville makes a voyage of discovery in the years 1826 to 1829.—Dismission of Villèle.

1829. Pope Leo XII died (Feb. 18), and is succeeded by Pius VIII.—General Diebitsch is put at the head of the Russian army in February. A protocol of Great Britain, France and Russia, arranging the government, boundaries, &c., of Greece. Diebitsch gains an important victory near Shumla over the Turks; in the middle of July, he passes the Balkan; in August, he takes Adrianople, and a treaty of peace is signed at this place between Russia and Turkey in September.—In France, the Martignac ministry is dismissed, and, August 8, the ultra ministry of prince Polignac formed.—Catholics emancipated by the British parliament in April.—In December, the suttees (burning of widows) abolished in the East Indies by the English government.—The Greeks gain some victories over the Turks, but the internal state of Greece is afflicting. Missolonghi and Anatolico surrender to the Greeks in May, Lepanto in April. The president, Capo d'Istria, opens the Panhellenicon in July. Troubles in Portugal under the usurper, don Miguel, who establishes courts against the

A. D. constitutionalists, the judges of which are to be remunerated by the confiscated property of the latter. An attack upon Terceira fails.—Spain acknowledges don Miguel; deplorable state of Spain.—Confusion in South America. Vincente Guerrero chosen president of Mexico. Insurrection in the south of Colombia. In Buenos Ayres, Lavalle's government attacked, and Meza, the chief opponent, executed. At Tarqui, a battle between the Colombians and the Peruvians in February; the latter are defeated. The parties conclude peace in October. The city of Guatimala capitulates, after a long siege, to the army of San Salvador, under general Morazan. In Lima, a revolution favorable to Bolivar in June. A battle between the Colombian troops under Paez, and those under generals Quiroga and Gustos, in June; the latter are defeated. Peace concluded between Lavalle and Rosas, in the Argentine republic, in June. Spain sends general Barradas to re-conquer Mexico; he fails entirely, and is compelled to surrender, September 12, to general Santa Anna. Slavery abolished in Mexico by a proclamation of the president Guerrero, in virtue of the extraordinary power conferred upon him on account of the disturbed state of Mexico. In September, a new and successful revolution breaks out in Buenos Ayres, against Lavalle; and in the same month Venezuela, under Paez, declares herself independent of Colombia; in November, Yucatan separates from the Mexican union, and the province of Conception declares itself independent of Chile. In December, Bustamente, vice-president of Mexico, heads a revolution against the president, and is successful. In Chile, a civil war begins, and a battle takes place between the generals Luctra and Prieto. Bolivar convokes a constituent congress, to form a new constitution.—In Manilla, a conspiracy is discovered to declare the island independent.—Andrew Jackson, president of the U. States. Treaty between the U. States and Brazil.—Captain Ross sails from Woolwich, England, in a steamboat, for the discovery of the north-west passage.

XVI. *From the French Revolution of* 1830.

1830. The ultra party in Europe seem, at the beginning of this year, to be fast increasing in power over the liberals.—George IV, king of Great Britain, dies; William IV succeeds.—In March, the address of the 221 deputies to Charles X.—In France, priests and ultras firmly united. French expedition against Algiers; the city taken, July 5. July 25, the three fatal ordinances are issued, to overthrow the charter. A *coup d'état* violently demanded by the ultras. Glorious resistance of the Parisians. Charter amended, and Louis Philip, duke of Orleans, declared king; August 9, he takes the oath. National guards reëstablished.—The Belgians rise against the Dutch in August, and after bloody contests declare Belgium independent, October 4.—Insurrection at Brunswick against the brutal duke, in September; after the diet had called upon him in vain to rule according to law, and Saxon troops had marched to enforce the order of the diet. He is driven away, and his brother takes the government. In September, the Saxons force the bigoted king Anthony to declare prince Frederic, son of his brother Maximilian (who renounces his right of succession), co-regent, and to make salutary reforms. (Prince Frederic is a Protestant.)—In November, Wellington's administration overthrown, and earl Grey's formed; Brougham, lord chancellor. England and Ireland in a state of great disturbance.—In November, revolution in Warsaw; Constantine flies.—In October, disturbances in Switzerland, against the aristocratic governments; in November, the Jesuits are expelled from Friburg, and in many cantons the people rise, and demand a more democratic government.--The Spanish constitutionalists, in September, attempt to enter Spain, under Mina, but are defeated; severe laws against the liberty of the press. In April, the Salic law was abolished; and in the autumn, an Infanta was born to the king.—December 15, the trial of the four ministers of Charles X (Polignac, Peyronnet, Chantelauze and Guernon de Ranville) began. The ministers condemned to perpetual imprisonment, and Polignac to civil death.—In February, prince Leopold of Saxe-Coburg is elected sovereign prince of Greece; he accepts, but afterwards refuses.—In

A. D. 1830. January, Virginia adopts a new constitution. In January, Bolivar lays down his authority as supreme chief.—Violent earthquakes in Central America. A revolution, headed by general Urdaneta, at Bogota. Guatimala almost destroyed by an earthquake. Mosquera chosen president of Colombia. A treaty signed between the U. States and Turkey, for the navigation of the Black sea. General Flores declares the south part of Colombia independent in May. General Sucre assassinated. Civil war at Monte Video ends. A revolution against the government at Bogota; a battle in which the insurgents are victorious. Pope Pius VIII dies, December 7th. Bolivar dies, December 17th.—Persia convulsed by civil war between the sons of the shah.

Histriones. During a dreadful pestilence in Rome, B. C. 353, after various means had been ineffectually used for appeasing the gods, it was proposed to exhibit stage-plays, which, in all antiquity, had a religious and solemn signification. In Rome, they had not, at that time, become usual; the only amusements of the warlike Romans having been the games of the circus, races, and other contests. They therefore obtained from the Etruscans (from whom they borrowed many religious rites) dancers, who performed their mimic dances to the sound of the tibia, on stages erected for the purpose. The Roman youth, delighted with this new spectacle, imitated them, and recited, at the same time, ludicrous verses. This new kind of exhibition was cultivated by native Romans, to whom the name *histriones* was given (from an Etruscan word which signifies a *dancer* or *stage-player*). They now recited comic poems (*saturæ*, satires), accompanied with action and music. But the declamation was afterwards separated from the action. Livius Andronicus, who composed the first regular comedies from these satires (in the ancient sense of that word), about 240 B. C., and, as was then usual, acted them himself, first introduced the custom of having the recitation performed by another person, while the *histrio* endeavored to represent the action. In the dialogue, however, the *histrio* was obliged to speak also. From this time, *histrio* became synonymous with *pantomime*, that is, an artist who merely acts in dumb show; but the *mime* was often a mere interlude mixed with dancing. This is Livy's account (vii, 2). The actors, properly speaking, that is, those who recited the words, were distinguished from the *histriones*. Their art became so popular, that the greatest men, particularly the orators, took lessons from them. But in later times, licentiousness increased so much in Rome, in consequence of their immoral representations, and so many disturbances and dangerous parties were caused by their public reception, that they were not only, several times under the emperors, forbidden to appear publicly upon the stage, and limited to private representations, but they were even repeatedly expelled (for instance, under Nero) from the city, and were restrained by various laws.

Hita, Gines Perez de, was born in Murcia. He wrote a work with the following title—*Historia de los Vandos de los Zegris y Abencerrages, Caballeros Moros de Grenada; de las civiles Guerras que hubo en ella, y Batallas particulares que hubo en la Vega entre Moros y Christianos, hasta que el Rey D. Fernando V la ganó. Sacada de un Libro Arabigo, cuyo Autor de Vista fué un Moro, llamado Haben Hamin, Natural de Grenada; y traducida en Castellano por Gines Perez de Hita.* It is now generally conceded, that this work is not a translation. It has been attacked on account of the romantic stories it contains; but it remains popular, and furnished Florian most of the materials for his *Gonsalve de Cordoue.*

Hive. (See *Bee.*)

Ho (*river, canal*); a Chinese word; as, *Hoang-Ho* (yellow river); *Yu-Ho* (royal canal).

Hobart Town; the capital of Van Diemen's Land; on the south side of the island, in Buckingham county; lat. 42° 54′ S.; lon. 147° 22′ E.; on the right bank of the Derwent, 12 miles above its entrance into Sullivan's cove. It has a picturesque situation at the foot of Table or Wellington mountain, which is upwards of 4000 feet high. The town is extensive, regularly laid out, and has 11 streets, a church, a government-house, a jail, barracks, and several handsome brick houses, though most of the houses are of wood. The climate is healthy and temperate. It is the chief town of an English settlement on the Derwent, which contained, in 1818, 2804 inhabitants, of whom 1348 were con-

victs; in 1829, 5700. There were, in 1829, four newspapers published in this place, and a quarterly pamphlet called Austral-Asiatic Review. (See *Diemen's Land, Van.*)—See the *Hobart Town Almanack.*

Hobbes, Thomas; a celebrated moral and political writer and philosopher of the 17th century. He was born April 5, 1588, within the borough of Malmesbury in Wiltshire. In 1603, he became a student of Magdalen hall, Oxford. In 1610, he set out on a tour with the son of lord Hardwicke (afterwards earl of Devonshire), through France and Italy; and, after his return to England, he resided several years in the Devonshire family, as secretary to lord Hardwicke. During this period, Hobbes became acquainted with lord Bacon (some of whose works he translated into Latin), lord Herbert of Cherbury, and Ben Jonson. The first performance which he published was a translation of the history of Thucydides. On a subsequent visit to the continent, he became acquainted with Gassendi, at Paris, and Galileo, at Pisa. In 1637, he returned to England, and resided much at Chatsworth till 1641, when, alarmed at the probability of political commotions, he went to Paris. He staid abroad some years, and, during that time, published most of his works. In 1642 first appeared his treatise *De Cive*, afterwards published in England, with the title of Philosophical Rudiments concerning Government and Society, or a Dissertation concerning Man in his several Habitudes and Respects as a Member of Society, first Secular, and then Sacred. His writings on the mathematics are not important. Yet he was employed to teach prince Charles (afterwards Charles II) the elements of mathematical philosophy. In 1650 was published, in London, a small treatise by Hobbes, entitled Human Nature; and another, *De Corpore Politico*, or Elements of the Law. But the most remarkable of his works is his Leviathan, or the Matter, Form and Power of a Commonwealth, ecclesiastical and civil (printed in London, 1651, folio). This greatly alarmed the ecclesiastics of those days, and drew on the author much literary hostility. Returning to England, he was well received by the Devonshire family, in which he passed the remainder of his life. He continued to employ his pen on philosophical topics; and, in 1654, he published a Letter upon Liberty and Necessity. In 1658 appeared his Dissertation on Man, which completed his philosophical system, a work containing some singular notions relative to the moral and intellectual faculties of the human species. After the restoration, Hobbes was favorably received by the king, who promised him his protection, and settled on him a pension of £100 a year out of his privy purse. He was visited by Cosmo de' Medici, then prince, and afterwards duke of Tuscany, and by other foreigners of distinction. In 1666, his Leviathan was censured in parliament, and a bill was introduced into the house of commons, to provide for the punishment of atheism and profaneness, which gave him great uneasiness. On this occasion he composed a learned and ingenious work, entitled a Historical Narration concerning Heresy and the Punishment thereof, to show that he was not legally chargeable with heresy in writing and publishing his Leviathan. Among the principal literary labors of his later years, were translations of Homer's Iliad and Odyssey, in verse, which passed through three editions within ten years, though utterly destitute of poetical merit. His *Decameron Physiologicum*, or Ten Dialogues of Natural Philosophy, was published in 1678; as was also a Dialogue between a Philosopher and a Student of the Common Law of England; and, in 1679, he consigned to the care of a bookseller, his Behemoth, or a History of the Civil Wars from 1640 to 1660, which did not appear till after his death. That event took place Dec. 4, 1679, at Hardwicke, a seat of the earl of Devonshire, in Derbyshire. Few authors have encountered more opposition than the philosopher of Malmesbury. The imputation of irreligion was brought against him by his literary antagonists, and the charge has been renewed even in our own times. He has been unjustly charged with atheism; but it cannot be denied that there are few persons whose works, owing to the extraordinary abilities of the writer, and the singularity of his notions, the dogmatical manner in which they are delivered, and the agreeableness of the style, have had more influence in spreading infidelity and irreligion, though none of them are directly levelled against revealed religion. The merit of Hobbes consists in having successfully applied the inductive method of reasoning, recommended by Bacon, to the investigation of mental philosophy. In his search after truth, he is startled by no consequences to which the inquiry may lead, his object being to ascertain the boundaries of knowledge, and to show where the imperfection of human intellect renders our creed a matter of conventional

authority. He admits the being of a God, but asserts that incorporeal substances are nonentities. Religion, he says, originated from the fear of power invisible, imagined by the mind of man. He also asserts the materiality and mortality of the human soul, or rather treats the distinction between soul and body as an error. He states the Pentateuch, and other sacred histories of the Jews, to be no older than the time of Ezra, and that the Christian Scriptures were not received by the church as of divine authority till the settlement of the canon by the council of Laodicea, A. D. 364. Both with respect to religion and government, he ascribes great weight to the will of the civil magistrate. And his sentiments on this point, together with his doctrine that a state of nature must be a state of perpetual hostility, in which brute force must supersede law and every other principle of action, have perhaps been most generally objected to. Yet his claim of obedience to existing authorities is qualified by the assertion, that it is no longer due than while they can afford protection to the subject. He says expressly, "*Obligatio civium erga eum qui summam habet potestatem, tandem nec diutius permanere intelligitur, quam manet potentia cives protegendi.*" The philosophy of Hobbes, so depreciated among his contemporaries, has been more or less adopted by Locke, Hartley, Hume and Priestley. His writings are distinguished for acuteness, but contain many paradoxes. Of his several opponents, we only mention, among the moderns, Feuerbach, who wrote, in opposition to his system, his *Anti-Hobbes* (Erlangen, 1793). Hobbes was honest, kind, moderate, communicative, and of unrelaxing application.

Hobhouse, John Cam, esquire, was educated at Trinity college, Cambridge. He soon after went on his travels, in part of which he was accompanied by lord Byron, with whom he visited Greece, and some other European provinces of the Turkish empire. In 1809, while of Trinity college, he published Imitations and Translations from the Ancient and Modern Classics, together with Original Poems (8vo.). This volume contains, also, some of lord Byron's early poems. On his return from his tour, he gave to the public Some Account of a Journey into Albania and other Provinces of the Turkish Empire (4to., 1812). When Napoleon returned from Elba, Mr. Hobhouse was in France, and published the Substance of some Letters written by an Englishman during the last Reign of Napoleon (2 vols., 8vo.). This work gives a good account of the transactions of the hundred days which passed between the landing of Napoleon and his last abdication. Mr. Hobhouse has also published a volume illustrative of lord Byron's Childe Harold. A pamphlet which he wrote in the latter end of 1819, contained a severe attack on the house of commons. This was construed into a breach of privilege, and the author was committed to Newgate, where he remained till the prorogation of the parliament. The people warmly espoused his cause, and so popular did he become, that he was elected one of the representatives of Westminster, in spite of the combined influence of the whig party and of the administration. He has proved himself to be an able speaker.

Hobson's Choice; a vulgar, proverbial expression, denoting *without an alternative*. It is said to have had its origin in the name of a person who let horses at Cambridge in England, and obliged every customer to take, in his turn, the horse which stood next the door.

Hoche, Lazarus, general in the French revolutionary war, was born 1764, at Montreuil, near Versailles, where his father was the keeper of the king's hounds; became, when 14 years old, a groom in the king's stables. He took service in the regiment of French guards when 16 years old. In the day time, he mounted guard for others, or did their work, in order to gain something to buy books, which he read during the night. At the beginning of the revolution, he immediately joined the party of the people; became a member of the municipal guard of Paris; distinguished himself by zeal and intelligence; became, in 1792, lieutenant; and studied military science with great diligence. During the siege of Thionville, he gave proofs of intrepidity and great military acquirements, and became aid-de-camp of general Leveneur, with whom, after the battle of Neerwinden and the defection of Dumouriez, he returned to Paris. His plan of operations met the approbation of the committee of public safety, and he was sent, as adjutant-general, to defend Dunkirk. Hoche inspired all by his addresses and his example, repulsed every attack of the English, and soon obtained the rank of general of brigade and division. He was not yet 24 years old, when he received the command of the army of the Moselle. The army was raw and inexperienced, but his military spirit immediately gave animation to the whole. His plan was to drive the enemy from Alsace; but he had

the most experienced troops of all Europe, under the duke of Brunswick, opposed to him. In vain did he assault, for three days, the lines of Kaiserslautern; he was obliged to make a retrograde movement. He then directed his efforts against the Austrians on the Lower Rhine; crossed the Vosges, in spite of the bad weather and roads; defeated general Wurmser at Weissemburg, December 26; delivered Landau; took Germersheim, Spire, Worms, &c.; and drove the Austrians out of Alsace. His frankness displeased the deputy St. Just, by whose means he was deprived of his command, and sent as a prisoner to Paris. The revolution of the 9th Thermidor saved him from the guillotine. In 1795, he was employed against the royalists in the west, in which capacity he displayed great ability, both as a general and as a statesman, exerting himself to pacify and not to destroy; and his efforts were crowned with unexpected success. The new committee of public safety intrusted him with the command of the armies which occupied all the country from the Somme to the Loire, and he now expected, by vigorous measures, to secure the public tranquillity; but the partial treaties concluded by the commissioners of the convention with the insurgents frustrated his plans. When hostilities were renewed, and the emigrants landed at Quiberon (June, 1795), he collected his scattered troops, and marched against them with great promptness and decision. He determined upon the assault of fort Penthièvre against the views of the council of war. The fort was taken; the royalists were driven into the sea and forced to surrender. He then wrote to the committee of public safety, to request that all the prisoners except the leaders might be spared; but the committee ordered them all to be executed. Hoche, indignant at this, put the command of Morbihan into the hands of general Lemoine, and marched, with his remaining troops, against St. Malo. When the directory took the reins of government, Hoche received the command of the armies of the west, with plenary powers, for the subjection of Vendée. He labored principally to crush Charette, the ablest and most zealous of the Vendean chiefs. Hoche took possession of all the military points of the Vendée; inspired the people of the country with confidence by the severe discipline which he kept in his army; flattered the priests; weakened and divided the royalists, and defeated them every where. Charette and Stofflet fell into his hands; quiet was restored in the Vendée; and Hoche marched towards Anjou and Brittany. Here he was equally skilful and fortunate, and succeeded in establishing tranquillity. July 16, 1796, the directory declared that Hoche and his army had deserved well of their country. Hoche now conceived the plan of exciting civil war in England, as England had so long maintained the civil war in France, and separating Ireland from Great Britain. After having overcome all the obstacles which were in the way of such an expedition, he set sail, December 15, from Brest; but a storm dispersed the fleet; he found himself alone on the coast of the enemy; and the plan failed. After his return, he received the command of the army of the Sambre and Meuse. He opened the campaign of 1797, by a bold passage over the Rhine, in the face of the enemy. In four days, he had marched with his army 35 leagues, had been victorious in three battles and five skirmishes, and taken Wetzlar; there the news of the armistice, concluded in Italy, stopped him in the path of victory. After having declared himself ready to lend his support to the directory, in the internal struggle in France, he suddenly died, Sept. 15, 1797, in Wetzlar, it was supposed at the time, of poison, but this has never been proved. Hoche was born for a soldier, proud and ambitious like Cæsar, but often, also, great and magnanimous like him.

Hochheim; a considerable village and bailiwic of Nassau, 16 miles from Frankfort on the Maine. The famous Hochheimer or Hock wine, which surpasses the other Rhenish wines in spirit and softness, is made here. The English name *Hock* is a corruption of *Hochheimer*, and is often applied to all Rhenish wines.

Hochkirch, or Hohkirch; a village in Upper Lusatia, not far from Bautzen (q. v.), rendered remarkable by the battle of Oct. 14, 1758, in the seven years' war, in which Frederic the Great was surprised by marshal Daun and defeated.

Hochstadt. (See *Blenheim.*)

Hock. (See *Hochheim.*)

Hockhocking; a river of Ohio, which rises in Fairfield county, and runs into the Ohio at Troy, 25 miles below Marietta. Near its source, seven miles N. E. of Lancaster, there is a romantic cascade; the water falls over a stratum of rock upwards of 40 feet in perpendicular height. 25 miles below, there is another perpendicular fall of seven feet. Except the interruption at the lower falls and other places

by mill dams, this river is navigable for large boats 70 miles.

Hocus Pocus; a cant term, of uncertain etymology, applied to a juggle or cheat. Doctor Tillotson derives it from the form of consecrating the sacramental bread in the Roman Catholic church—*hoc est corpus*. Junius derives it from the Welsh *hocced* (a cheat) and *poke* or *pocus* (a bag), the jugglers using a bag for conveyance.

Hoditz, Albert Joseph, count of; known for his rare talent of changing every thing around him into instruments of pleasure. He was born 1706, and married the widow of George William, margrave of Bayreuth. He resided on his estate in Moravia, and converted his peasants into dancers, singers, actors, musicians, &c. There were 4000 fountains in his garden. Every thing about it was converted into an ornament. The village of Roswald was often celebrated in song, particularly in an epistle of Frederic II (7th vol. *Œuvres Posthumes*). Hoditz died 1778.

Hoest, Jens Kragh. (See *Höst.*)

Hof (*court*, and *farm*); a German word, which appears in very many geographical names, as *Frauenhof*, *Hofheim*.

Hofer, Andrew, commander of the Tyrolese in the insurrection of 1809, during the war between Austria and France, was born, in 1767, in the inn of St. Leonard in Passeyr, called the *inn on the Sand*, and carried on a trade to Italy in wine and horses. In 1796, when the war approached Tyrol, he led a rifle company from his own country against the French on lake Guarda. After the peace of Lunéville, the militia of Tyrol was organized, on which occasion Hofer displayed great zeal. In 1808, a rupture between the cabinets of St. Cloud and Vienna appearing unavoidable, in consequence of events in Spain, much agitation took place in Tyrol; private messengers went to Vienna, among whom was Andrew Hofer, and laid before the arch-duke John, commander of the army of Austria Proper, the wishes of the mountaineers. By his command, the baron of Hormayr (q. v.) formed the plan for an insurrection, and for the occupation of those mountains, the keys of Italy and Germany. Every thing prospered. Between the 11th and 13th of April, 1809, almost the whole country was conquered, and 8000 of the best troops of Bavaria were made prisoners by the peasants. April 12, Hofer forced a battalion of Bavarians in the plain of Stertzing to surrender. His people advanced on the Bavarian artillery with hay carts, and attacked the cavalry with pitchforks, flails and clubs. They rolled trunks of trees and rocks down upon their enemies, and made cannon of wood with iron hoops. Women and children were seen fighting, or loading the rifles of the men. Northern and Middle Tyrol having been freed from the Bavarians, Hofer advanced with Hormayr into the Southern, from which Baraguay d'Hilliers was driven out with great loss. Meanwhile the French, after the victory of Eckmühl and Ratisbon, had advanced towards Vienna. The Bavarians now invaded Tyrol with great devastation. On the day of the surrender of Vienna, general Chasteler (q. v.) suffered a defeat near Mörgel. He retreated to the central position of the Brenner, and fought his way through the enemy, leaving general Buol with a small corps for the defence of Tyrol. Hofer now appeared upon the Brenner, and became the idol of the Tyrolese. Two battles, fought on the 25th and 29th of May, 1809, near the Isel mountain, in sight of the city of Innspruck, forced the Bavarians again to leave Tyrol. At the beginning of June, Hofer and his band took part in the relief of count Leiningen, who was besieged in Trent. He was upon the point of joining the regular troops, who were to take possession of Klagenfurt, and to restore to the closely-blockaded and suffering Tyrol a communication with the interior of the imperial states, when the battle of Wagram was succeeded by the armistice of Znaim (July 12), the terms of which required that the Austrians should abandon Tyrol and the Vorarlberg to the vengeance of the enemy. In consequence of this, the wildest commotions arose among the forsaken people. Some of the most furious wished to retain by force general Buol and Hormayr; to seize the cannon and ammunition; to disarm those who would not join them; and to murder the prisoners. But the greatest part of the mischief was prevented. The troops withdrew, according to the conditions of the truce. Hofer concealed himself in a cave, in the valley of the Passeyr. But the enemy, who had already penetrated the Tyrol, suffered, from the 3d to the 9th of August, 1809, repeated attacks from the armed populace. Then Hofer issued from his retreat, and appeared as the chief leader of the Tyrolese. The second battle of mount Isel (August 13) compelled the marshal duke of Dantzic to evacuate Tyrol. Hofer now carried on the military and civil administration, under the

most singular circumstances, till the peace of Vienna was proclaimed (October 14). Among other things, he coined money with his image. The people, continually deceived by the most contradictory rumors, gave, for a long time, but little credit to the report of the peace. Several corps of the enemy had already entered the Tyrolese mountains. The people were prepared for desperate resistance, when Hofer (1st, 5th and 8th of November) declared his submission to the viceroy Eugene, and to the commander-in-chief of the Bavarians. In the middle of November, misled by the false reports of some of the insurgents, he commenced hostilities anew, and thus forfeited the protection of the amnesty. He then remained concealed in an Alpine hut, in Passeyr, amidst snow and ice. For a long time, neither the golden promises nor the threats of the French general could induce any one in these mountains to betray his place of concealment. At last a priest, named Donay, formerly a confidant of Hofer, and who had been despatched by him with his submission to the viceroy at Villach, but had afterwards been offended by him, communicated to general Baraguay d'Hilliers the name of the man who carried food to Hofer and his family. This man was prevailed on, partly by promises, partly by menaces of death, to serve as a guide to the troops. They discovered Hofer Jan. 20, 1810, and carried him to Mantua, where a court-martial was held. Hofer was shot, February 20, at Mantua. He met his death with firmness. The family of Hofer was indemnified for the loss of their property by the emperor of Austria, in 1819, and his son ennobled.—See the *History of Andreas Hofer* (Leipsic, 1817). A life of Hofer, which was published at Innspruck, was prohibited by Austria in 1814. His body, however, is now buried at Innspruck, in the splendid cathedral of the place, in consequence of the general wish of the people.

Hoffmann, Christopher Lewis, a German physician and medical writer of the last century, was born at Rheda, in Westphalia, in 1721; and after having been physician to the bishop of Munster, and the elector of Cologne, he, in 1787, accepted the same situation with the elector of Mayence. That prince gave him the direction of the college of medicine in that city. On the suppression of the electorate, he removed to the small town of Eltviel, on the Rhine, where he died in 1807. He distinguished himself as a professional writer, by forming a new system of medicine, combining the nervous and humoral pathology. He admitted the sensibility and irritability of the solids as the basis of his system, and the corruption of the humors as a principle of irritation. His ideas are developed in the following works: On the Sensibility and Irritability of Diseased Parts; On the Scurvy and Syphilis; On the medicinal Virtues of Mercury; a Treatise on the Small-Pox (2 vols., 8vo.); the Magnetist (Frankfort, 1787, 4to.). He also published a number of Latin dissertations, in the Memoirs of the College of Medicine at Munster.

Hoffmann, Frederic, the most celebrated individual of a name and family distinguished in the annals of medicine, was born 1660, at Halle, in Saxony, where his father was an eminent physician. He studied medicine at Jena, under professor Wedelius. In 1680, he attended the chemical lectures of Caspar Cramer, at Erfurt, and, returning to Jena, took the degreeof M. D. in 1681. He then gave lectures at Jena, and afterwards practised as physician at Minden. He removed to Halberstadt in 1688, to settle there as public physician; at which period he published a treatise *De Insufficientia Acidi et Viscidi*. On the establishment of the university of Halle, Hoffmann, in 1693, was appointed primary professor of medicine and natural philosophy. He improved the spirit of medical education, promoting among the students of the university a disposition for inquiry highly favorable to the progress of knowledge. In 1718, he commenced the publication of a work entitled *Systema Medicinæ rationalis*, which was received with great approbation by the faculty in different parts of Europe. In this system of medicine, he exhibits his peculiar theoretical opinions, the chief feature of which is the doctrine of atony and spasm, afterwards made the foundation of a medical hypothesis by doctor John Brown. Much of the humoral pathology was retained by Hoffmann, whose speculations are chiefly important as having given an impulse to future inquiries. He made a useful collection of the most important cases which occurred to him in his practice as a physician, and published them under the title of *Medicina Consultatoria*. After a long life devoted to the cultivation of medicine, he died at Halle, in 1743. His works were collected after his death, at Geneva, 1748—1754, in nine volumes, folio.

Hoffmann, Ernest Theodore Amadeus, or, properly, Ernest Theodore William, an original novelist, was born at Königsberg, in East Prussia, Jan. 24, 1776,

where he studied law. He afterwards held a judicial appointment in Berlin. He was appointed, in 1800, assessor in the government of Posen; in 1802, counsellor in the government of Plozk; and, in 1803, proceeded in the same official character to Warsaw. The invasion of the French, in 1806, finished his career in that city. Without prospects in his native country, and without property, he employed his musical knowledge as a means of support for several years. In 1816, he was reinstated as counsellor in the court of judicature of Berlin, where he died July 24, 1822. From his youth, he devoted all his leisure hours to the study of music. Among his works are the *Phantasiestücken in Callot's Manier* (Bamberg, 1814, 4 vols.; 3d edition, Leipsic, 1825, in 2 vols.); *Die Elixire des Teufels* (Berlin, 1816); the *Nachtstücke* (2 vols., 1817); the *Serapionsbrüder* (23 tales, in 4 vols., Berlin, 1819, et seq.); and many others. Hoffmann was an irregular and unhappy man. He possessed much imagination and talent, but little soundness of mind; and his habits were intemperate. His judicial duties, however, were faithfully performed. The whole world appeared to him in the aspect of a caricature. He was able to unite the most opposite ideas. Notwithstanding his epicurism, there was something stoical in his character. Not long before his death, he asked his friend Hitzig, "Don't you still perceive the smell of roast meat?" (referring to his back having been burned by a red-hot iron in order to excite the vital powers, his disease being in the spinal marrow). His life, by Hitzig, is very interesting. Hoffman's works have lately been translated into French.

Hoffmannsegg, John Centurius, count of; a distinguished entomologist and botanist; born at Dresden, in 1766. In his 14th year, he lost his parents, after which he studied in Leipsic, and subsequently in Göttingen. His fondness for entomology received a scientific direction from Hellwig and Illiger of Brunswick, and was further exercised by a journey to Hungary and Italy. The Brunswick or the Hellwig-Hoffmannsegg cabinet was formed of his and Hellwig's collections, by the scientific arrangement of which Hellwig and Illiger have laid the foundation of modern entomology. A journey to Portugal, in company with doctor Tilesius, turned his attention to botany. To make himself acquainted with the *flora* of his country, he travelled, in 1797, with professor Link, through France and Spain to Portugal, where they spent a year and a half in the study of subjects of natural history, principally in the department of botany, and discovered several hundred new species of plants. After Link's departure, in 1799, the count remained till 1801 in Portugal, and discovered many unknown plants and rare insects. He likewise procured for his assistant (F. W. Sieber) permission to make a voyage to Brazil, for the purpose of making collections. After his return, he labored in Brunswick till 1804, to promote the objects of the collection there. He afterwards undertook, in Berlin, his *Flore Portugaise*, for which he himself prepared and superintended every thing—paper, printing, drawing, engraving, coloring, &c. The work has been supported by the Prussian government. At the same time, the count founded the zoological museum of Berlin, which was placed under Illiger's inspection. He next made a journey to Copenhagen, to convey to Berlin the stores of natural history collected by Sieber in Brazil. In 1816, the count went to reside at Dresden. There he has formed, of his gardens and farm, a botanic institute, distinguished for richness and scientific plan. The printed systematic catalogue of the plants gives an opportunity to the friends of botany to procure the best and most valuable specimens and seeds.

Hofwyl. (See *Fellenberg*.)

Hog (*sus*). In grossness of manners, the hog tribe stand unrivalled among quadrupeds; and their general appearance corresponds, in a great measure, with their habits. The generic characters are, four or six incisors in the upper jaw, converging; six in the lower jaw, projecting; two canines in the upper and two in the lower jaw, very long; fourteen molars in each jaw; the snout prominent, truncate, and containing a peculiar bone; feet, cloven. There is, however, said to be a remarkable variety about Upsal, which has entire hoofs. It also exists in Illyria and Sardinia; and Mascall says it formerly was to be seen in Berkshire, England. The wild boar and the common hog are identical, the differences between them arising from the long domestication of the latter; though it is probable (as is observed by Desmarest) that some of the varieties may be derived from races unknown to us; among these are the Chinese, Guinea and Turkish. The common hog (*S. scrofa*), in a tame state, is almost universal, except in very high latitudes. In the forests of South America, it is found in vast droves, derived from the European varieties again relapsed into a state of nature. The com-

mon hog appears to enjoy none of the senses in perfection except that of smell; this, however, is acute, and the hog is used, in some parts of Italy, in hunting for truffles, which grow some distance under the surface; and it is stated that a game-keeper in England actually broke in a sow to find game, and to back and stand like a pointer. When she came on the cold scent of game, she slackened her trot, gradually dropped her ears and tail till she was near, and then fell on her knees. So stanch was she, that she frequently remained upwards of five minutes on her point. As soon as the game rose, she always returned to the keeper, grunting for a reward, which consisted of a sort of pudding made of barley meal. It can hear distant sounds; but its sense of hearing is by no means acute. In their taste, hogs discover a strange degree of caprice; for whilst they are singularly delicate in their choice of herbs, they will devour with voracity the most nauseous and putrid carrion. At times they even satisfy their insatiable appetite with their own young; and they have been known to attack and mangle children. The eyes of the hog are remarkably small and sunken. His form is inelegant, and his motions uncouth and unwieldy. His appearance is always slothful and stupid, and, if undisturbed, he would sleep most of the time that was not devoted to the satisfying the calls of appetite. Thus his whole life is a succession of torpor and gluttony; and, if supplied with sufficient food, he often becomes so fat as to be incapable of motion. The hog seems to be affected by the approach of stormy weather in a very extraordinary manner. On such occasions, he runs about in a restless and perturbed state, uttering loud cries. The sow brings forth in the beginning of the fifth month after conception, and has usually two litters in a year. Her offspring are very numerous, a litter consisting of from 10 to even 20; but she can bring up no more than she has teats, which are 12 in number. The natural term of the life of these animals is from 15 to 30 years, and they continue to increase in size and strength until they are from four to five years of age. As might be supposed from their habits, they are much infested by vermin of different kinds, and are also liable to many disorders, particularly those arising from gluttony. Notwithstanding all these repugnant qualities of the hog, he is of incalculable benefit to mankind. His flesh is pleasant, substantial and nutritious, particularly to persons employed in hard labor. Pork takes salt better than almost any other meat, and hence forms an important article in military and naval stores. The lard of the hog is used in a variety of preparations, and the bristles are used, in large quantities, in the manufacture of brushes, whilst the skin is in equal demand among the saddlers. In Minorca, it is said that the hog is used as a beast of draught. The wild boar, from which most of our domesticated varieties are derived, is found in most parts of Europe and Asia, and is by no means so stupid or filthy an animal as the tame hog. His snout is longer, his ears shorter; he roots up the ground in a different manner, ploughing it up in furrows; his tusks are larger, some of them being ten inches in length, bent circularly, and exceedingly sharp at the points. The wild boar, for the first three years of his life, follows the sow, the whole litter living in a herd together. This appears to be for the purpose of mutual protection against their enemies; for, when attacked, they give each other assistance, the strongest facing the danger. When the boar, however, has attained his full size and strength, he ranges the forest alone and unsupported, dreading no single creature, not even man himself. Hunting this animal has always been a favorite amusement. The dogs used in this sport are of the slow, heavy kind, usually a kind of small mastiff. When the boar is roused, he goes slowly and uniformly forward, frequently stopping and facing his pursuers, often inflicting severe and even mortal wounds. He is at last despatched by the hunters, either with fire-arms or strong pikes, termed *boar spears*. A chase seldom terminates without the maiming or destruction of some of the dogs. The domesticated varieties of the hog are exceedingly numerous. A mere enumeration of them would swell this article beyond its due limits. We shall therefore only notice the most remarkable, at the head of which stands the *Chinese* or *Siam*; this is distinguished by having the upper part of its body almost bare, its belly hanging nearly to the ground; its legs very short. Its general color is a dark gray. The flesh of this variety is peculiarly white and delicate. This animal and its sub-varieties occur in China, and are also diffused through almost all the islands of the South seas, where they form the principal animal food of the inhabitants. They are fed on the bread-fruit, either in its natural state or made into a sour paste, yams, &c. This nutriment renders the flesh juicy and delicious. These animals are also considered

as the most acceptable offering that can be presented to the gods.—*Guinea hog* (*sus porcus*, Gm.). In this variety the head is small; the ears long, thin and pointed; the tail long, naked, almost reaching the ground; the hair on the body is short, reddish, shining, and softer than in the other varieties; the back is nearly naked. This animal is common on the Gold coast, and it is also said to have been naturalized in Brazil.—Pork forms no inconsiderable article of food in the U. States, and hence much attention is paid to the breeding of hogs, particularly in the western part of the country, from whence the great supply is obtained. It is a strong food, and better calculated for such as use much bodily exertion, than for the sedentary. Hogs are apt to do much mischief when not kept in a pen, from their practice of rooting. The common mode of preventing this is by putting rings in their nose. This is painful to them, and they must be replaced as often as they give way, which happens so frequently that rings afford but little security. The best method of preventing them from doing injury is, to divide the two strong tendons of their snout with a sharp knife, about an inch and a half from the nose. This may be done with little pain, and no injury to the animal, when it is about two or three months old.—*Babyroussa* (*sus babyroussa*). This is a gregarious animal, and is found in large herds in Java, Amboyna, &c., but not on the continent of Asia. The babyroussa is about the size of a large hog, but has much longer legs. What chiefly distinguishes it are the size and shape of its tusks; those in the lower jaw are similar to the tusks of the rest of the genus, but those in the upper are placed on the external surface of the jaw, perforating the skin of the snout, and turning upwards towards the forehead, being 12 inches in length, of a fine, hard grain, like ivory. As the animal advances in age, they become so long and curved as to nearly touch the forehead. The ears are small, erect and pointed. A few weak bristles cover the back; the rest of the body is covered with a short, fine and somewhat woolly hair, of a deep brown or blackish color. The voice of the babyroussa is very similar to that of the common hog, but it is a much more silent animal. Their usual food is the leaves of the banana and other vegetables, but they do not dig for roots as the other species do. They are readily tamed, and their flesh is well tasted. Like the rest of the genus, they swim with great facility; in fact, when closely pursued, it is said they will plunge into the sea and swim to a considerable distance, often diving. Travellers relate (though we are sceptical as to the fact) that the babyroussa is often seen to rest its head, when sleeping, by hooking its curved tusks over the bough of a bush.

Hogarth, William, an eminent and original painter, was born in London, in 1697 or 1698, and was apprenticed to an engraving silversmith. This occupation gave him some skill in drawing; and, before his apprenticeship expired, he had exhibited several specimens of ludicrous caricature. Yielding to the impulse of genius, as soon as he became his own master, he entered at the academy for design, in St. Martin's lane, and studied drawing from the life. He was at first obliged to support himself by engraving arms and shop-bills, from which he ascended to designs for books, an edition of Hudibras affording him the first subject particularly suited to his genius. In the mean time, having practised painting with much industry, and being very successful in catching likenesses, he acquired considerable celebrity as a portrait painter. In 1730, he contracted a clandestine marriage with the only daughter of sir James Thornhill, the painter; and soon after commenced his first great series of moral paintings, the Harlot's Progress. Nothing could exceed the popularity of this series, for the plates of which the names of 1200 subscribers were entered. In 1745, he acquired additional reputation by his much-admired series of the Rake's Progress, and Marriage a-la-Mode. His other works, in series, are, Industry and Idleness, the Stages of Cruelty, and Election Prints. The single comic pieces from his pencil are very numerous: among the most distinguished of these are, the March to Finchley, Modern Midnight Conversation, Sleeping Congregation, Parts of the Day, Gates of Calais, Gin Lane and Beer Street, Strollers in a Barn, &c. Hogarth also wished to shine in the higher branch of historical painting, and attempted a Sigismunda in the Italian style, which lord Orford calls a complete failure. Although he affected to disregard literature, he sought to appear in the character of an author, and by the aid chiefly of doctor B. Hoadley, produced, in 1753, his Analysis of Beauty, the leading principle of which is, that beauty fundamentally consists in that union of uniformity and variety which is found in the curve or waving line. By the resignation of his brother-in-law Thornhill, in 1757, he became ser-

geant-painter to the king—an appointment which perhaps induced him to depart from the party neutrality he had previously maintained, by attacking Mr. Wilkes and his friends, in a print published in September, 1762, entitled the Times. It was answered by Wilkes, in a severe North Briton, which in its turn, produced a caricature of Wilkes. An angry epistle to the painter followed from the pen of Churchill, which was retaliated by a caricature of the divine; and "never," says lord Orford, "did two men of abilities throw mud with less dexterity." The powers of Hogarth were not, however, impaired, as he had shortly before published one of his capital works, a satirical print against the Methodists. From this, a decline in his health took place, which terminated in death, in 1764. Hogarth was a man of rough and vulgar manners, who affected a contempt for all knowledge which he did not himself possess; but he was, at the same time, generous and hospitable. He was often absent in company, and seemed to be entertaining himself with his own ideas, or searching after some new objects of ridicule, which he attentively caught up when they occurred. Many of his delineations are individual portraits. A catalogue of all his prints will be found in the fourth volume of Walpole's Anecdotes. A multiplicity of local and temporary circumstances introduced into his pictures, has rendered notes necessary to a due comprehension of them—a task which has been well performed in the Hogarth Illustrated of Ireland. In the French translation of the Analysis of Beauty, by Jansen (Paris, 1825, 2 vols.), is a useful *Notice chronologique, historique et critique de tous les Ouvrages de Peinture et de Gravure de Mr. Hogarth.* A distinguished German writer (Lichtenberg) has published Illustrations of Hogarth, in six volumes, with engravings (Göttingen, 1796), which are full of wit and fine observations.

Hogendorp, Gysbert Charles, count of, was born at Rotterdam, in 1762; and, having lost his father by shipwreck, in 1773, he went to Berlin with his elder brother, Dyrk, who afterwards distinguished himself in the service of Napoleon, and entered the cadet school. He then became a page of prince Henry, and followed him, as ensign, in the war of the Bavarian succession. After the peace, he returned to his country, and the stadtholder, William V, gave him a place among his guards, in 1782. In the following year, he went to America, where he was received with kindness by Franklin. After passing seven months in Philadelphia, he returned, in 1784, to his own country, and attended the lectures at Leyden, where he received the degree of doctor. Through attachment to the house of Orange, he left the military service when the patriots obtained the superiority. After the restoration of the stadtholder, he was named grand-pensioner of Rotterdam, but gave up his place when (1795) the French conquered Holland, and the stadtholder fled to England. His unsuccessful project (1802) of forming a colony of the friends of the house of Orange at the Cape, cost him the greater part of his fortune; but he continued to labor in the cause of his prince, and formed an association, the object of which was the restoration of the house of Orange. When the arms of the allies were victorious, in 1813, he united the friends of the prince at the Hague, advanced 50,000 florins of his own property to raise a naval force to command the Maese, and contributed all in his power to the restoration. The prince appointed him a member of the committee to draw up the plan of the new constitution, which was accepted and sworn to in March, 1814. Hogendorp afterwards received the department of foreign affairs, and was made vice-president of the council of state. In 1815, the king created him count, and conferred on him the grand cross of the order of the lion. In 1816, feeble health induced him to give up his offices. Since 1815, count Hogendorp has been a member of the lower house of the states general, and, as a defender of the rights of the people, has belonged to the opposition. He renounced his place in the upper house, because its sessions were secret. Among his works are a Treatise on the Trade to India (1801, 2 vols.); Memorial on the Trade to Java (1804), and Remarks on the Political Economy of the Kingdom of the Netherlands (Hague, 1818—24, 9 vols., in Dutch). This work contains the best of his speeches in the assembly of the states general.

Hogg, James, is the son of a respectable farmer and sheep-dealer, of Ettrick, in Scotland, who, by a combination of unfortunate circumstances, was ruined when the subject of this article was a child. Young Hogg consequently received but a scanty portion of education. At seven years of age, he became a cowherd, and was afterwards a shepherd. During the period that he followed these occupations, he suffered many hardships. "Time after time," says he, "I had but two shirts, which grew often so bad, that I was oblig-

ed to quit wearing them altogether; for, when I put them on, they hung in long tatters as far as my heels. At these times, I certainly made a very grotesque figure, for, on quitting the shirt, I could never induce my breeches to keep up to their proper sphere." His pittance of wages he carried to his parents, but, when he was 14, he saved five shillings, with which he purchased an old violin; and, after the labors of the day were over, he amused himself by playing his favorite Scottish tunes. "My bed," says Mr. Hogg, "being always in stables and cow-houses, I disturbed nobody but myself." He thus describes his beginning to read poetry:— "It was while serving here (with Mr. Laidlaw), in the 18th year of my age, that I first got a perusal of the Life and Adventures of Sir William Wallace, and the Gentle Shepherd; and, though immoderately fond of them, yet (what you will think remarkable in one who has since dabbled so much in verses) I could not help regretting deeply that they were not in prose, that every body might have understood them; or, I thought, if they had been in the same kind of metre with the Psalms, I could have borne with them. The truth is, I made exceedingly slow progress in reading them. The little reading that I had learned I had nearly lost, and the Scottish dialect quite confounded me, so that, before I got to the end of a line, I had commonly lost the rhyme of the preceding one; and, if I came to a triplet, a thing of which I had no conception, I commonly read to the foot of the page without perceiving that I had lost the rhyme altogether. Thus, after I had got through them both, I found myself much in the same predicament with the man of Eskdale muir, who borrowed Bailey's Dictionary from his neighbor. On returning it, the lender asked him what he thought of it. 'I don't know,' replied he; 'I have read it all through, but cannot say that I understand it; it is the most confused book that I ever saw in my life.'" One anecdote more will complete the picture of his mental attainments at that period. "To give you some farther idea of the progress I had made in literature, I was, about this time, obliged to write a letter to my elder brother, and, having never drawn a pen for such a number of years, I had actually forgot how to make sundry of the letters of the alphabet, which I had either to print, or patch up the words in the best way that I could without them." But this state of things was not long to continue. Hogg had a desire to learn, and an intellect of no common order; nor did he let slip any opportunity of improving himself. Mrs. Laidlaw lent him some books, chiefly theological, to read while he was tending the ewes; and she likewise sometimes gave him the newspapers, which "he pored on with great earnestness, beginning at the date, and reading straight on, through advertisements of houses and lands, balm of Gilead, and every thing." In 1790, being then 19, he hired himself as shepherd to another gentleman, of the name of Laidlaw, with whom he lived nine years, and who treated him more like a father than a master. Mr. Laidlaw possessed many valuable books, all of which the young shepherd was allowed to read. Hogg perused them with considerable attention, and soon became master of all that he read. As soon as his powers of comprehension were unfolded, he began to aspire to be an author. His first attempts to write verse were made in the spring of 1793, and, as might be expected, were imperfect; but practice gradually gave him a command of metre and of language. The first thing which was "really his own," his initiatory trials being mere centos, was an Address to the Duke of Buccleugh, in Beha'f o' mysel' an' ither poor Fo'k. The ice being thus broken, he proceeded rapidly in his literary career. His first pieces were chiefly pastorals and ballads, founded on the local traditions of his country. In 1795, however, he ventured on the composition of a comedy, "in five long acts," to which he gave the title of the Scotch Gentleman. This he declares to be full of faults; "yet, on reading it to an Ettrick audience," which, he tells us, he has several times done, "it never fails to produce the most extraordinary convulsions of laughter, besides considerable anxiety." Mr. Hogg's account of his mode of composing, and fixing his ideas on paper, is as follows:—speaking of his comedy, he says, "Whether my manner of writing it out was new, I know not, but it was not without singularity. Having very little spare time from my flock, which was unruly enough, I folded and stitched a few sheets of paper, which I carried in my pocket. I had no inkhorn, but, in place of it, I borrowed a small vial, which I fixed in a hole in the breast of my waistcoat, and, having a cork affixed by a piece of twine, it answered the purpose full as well. Thus equipped, whenever a leisure moment or two offered, I had nothing to do but to sit down, and write my thoughts as I found them. This is still my invariable practice in writing

prose. I cannot make out one sentence by study, without the pen in my hand, to catch the ideas as they arise. I seldom or never write two copies of the same thing. My manner of composing poetry is very different, and, I believe, much more singular. Let the piece be of what length it will, I compose and correct it wholly in my mind, ere I put pen to paper, when I write it down as fast as the A B C. When once it is written, it remains in that state, it being, as you very well know, with the utmost difficulty that I can be brought to alter one line, which, I think, is partly owing to the above practice." Hogg continued to amuse himself with poetry for some years; but it was not till 1801 that he ventured to encounter the dangers of the press, and then he was prompted by the impulse of the moment. His work was entitled Pastorals, Poems, &c., and was imperfectly printed from imperfect copies. After having continued for a considerable time longer in his rustic occupation, he resolved to settle in Harries; but, by some unexplained misfortune, he lost, in one week, all the earnings of a life of industry, and was again compelled to become a shepherd in Nithsdale. It was while he was thus employed, that, encouraged by Mr. Scott, he published the Mountain Bard, by which, and by his work on Sheep, he was rendered master of nearly £300—a sum which, he says, made him "perfectly mad." A proof of his temporary insanity was his taking two extensive farms, which required ten times the capital that he possessed. He struggled on with them for three years, at the end of which time he was once more penniless. He then returned to Ettrick Forest, but could find no one who would engage him. In 1810, therefore, "in utter desperation, he took his plaid about his shoulders," and set off for Edinburgh, determined to force himself into notice as a literary character. A volume of songs, entitled the Forest Minstrel, produced him nothing; and he was still more unfortunate with the Spy, a periodical paper, which he continued during 12 months, and by which he was a loser. At the same time, he was one of the principal conductors of the Forum, a debating society. In 1813, he brought forth the work which established his poetical fame. This was the Queen's Wake, a poem, which has gone through several editions. Unfortunately, however, the roguery of his bookseller deprived him of all the profit arising from the early editions. The Pilgrims of the Sun (1815) and Mador of the Moor (1816) were his next efforts, but they did not acquire the popularity of the Queen's Wake, though Mr. Hogg evidently ranks them, in merit, above it. His next scheme was to publish a volume, containing a poem from every living poet in Great Britain; but his scheme was frustrated by the refusal of Mr. Scott to contribute—a refusal which Hogg long resented. As his original plan was destroyed, he resolved to put to press a volume of imitations; and the result was the Poetic Mirror, which was all written within the short space of three weeks. It was applauded, and it sold well. In the following year, he gave to the world two volumes of tragedies, under the title of Dramatic Tales, which excited little interest. At the time when he gave up the Spy, he planned a new magazine, and that magazine has since obtained celebrity, under the name of *Blackwood's*. Later works of Mr. Hogg are the Brownie of Bodsbeck, and other Tales (2 vols., 1818); Winter Evening Tales (2 vols., 1819); and Jacobite Relics of Scotland (1819 and 1821). He is now married, and comfortably settled on a considerable farm.

Hohenlinden; a village of Bavaria, six leagues from Munich, celebrated for the victory gained by the French, under Moreau, over the Austrians, December 3, 1800. The French took 80 pieces of cannon, 200 caissons, 10,000 prisoners, with three general officers. Preliminaries of peace were soon after signed at the same place.

Hohenlohe, Alexander Leopold, prince of; since 1825 canon at Grosswardein in Hungary; born August 17, 1793, 18th son of the crown-prince Charles Albert and a Hungarian lady. His father was disqualified for government by mental derangement, and died in 1795. His pious mother determined him to embrace the clerical profession. An ex-Jesuit was the first instructer of the prince. He studied at Vienna and Berne, and finished his studies at Ellwangen, under the care of his uncle, the suffragan bishop, and was chosen deacon by the chapter of Olmütz. He was, even at that time, fond of conversing with beggars and believers in wonders; but it was not without difficulty that he passed the examination for admission into holy orders, notwithstanding his high connexions. In 1815, the prince began to exhibit his talents for preaching. In 1816, he went to Rome, received permission to read mass in any church of the city, lived in a college of the Jesuits, and began the work of his own moral purification. After having received (1817) the papal per-

mission to consecrate as many as 3000 rosaries, crucifixes, &c., at once, he left Rome, and went to Germany, where he was considered by his colleagues as devoted to Jesuitism, and an enemy of knowledge. He wrote several spiritual works. In 1820, he wrote a pamphlet, dedicated to the emperors Francis and Alexander and the king of Prussia, in which he attempts to prove that only a genuine Christian can be a faithful subject; and by a genuine Christian he means a Roman Catholic. A friend of his made him acquainted with a peasant, named Martin Michel, in Baden, who, for several years, was said to have effected miraculous cures, by means of prayers, and who assured him that he, the prince, being a priest, could much more easily perform miracles. The experiment was made. A princess, Matilda of Schwartzenburg, who had been almost cured of distortion of the spine by the skilful surgical machinist, Heine of Würtzburg, tried to walk, by the invitation of the princely priest and the peasant, and she succeeded. The prince now began to try his powers without the aid of the peasant, and crowds flocked to the spiritual physician. Many were in fact benefited, and afforded instances of the power of a lively faith; many believed that they were; and many went away, in despair that they had not faith enough. His attempts in the Würtzburg and Bamberg hospitals failed, and the police was ordered not to allow him to try his experiments, except in their presence. A prince of Hildburghausen called in his aid; but his suffering eyes soon became worse, in consequence of his discontinuing all medical applications. In July, 1821, the prince Hohenlohe laid a statement of his miracles before the pope, attributing his success to his fervent prayers. The answer of the pope has never been known exactly, as it remained in the hands of the bishop of Würtzburg; but Pius VII is said, in a private conversation, to have expressed much doubt on the subject of these miracles. According to hints received from Rome, the process was not to be called any longer a *miracle*, but *priestly prayer for healing*. The prince Hohenlohe, after his return from the prince of Hildburghausen above-mentioned, declared himself exhausted, and unwilling to perform his miracles in presence of the health police. He afterwards went to Vienna and Hungary. Since then he has cured people at a distance, and cases have been published of cures performed, in one instance in Marseilles, another in Scotland, and in several others, by appointing an hour in which the individuals should unite their prayers with his. Some have objected against these simultaneous prayers, so considered, that a prayer at eight o'clock in Hungary has long been ended before that of eight o'clock at Marseilles begins; but they have forgotten that the whole process is a miracle. Germany is much indebted to Mr. Hornthal, an officer of Bamberg, for checking the progress of this delusion. The prince Hohenlohe is a man of fine exterior, gentle manners, a most insinuating voice, and of talents for the pulpit. That he is a prince and priest has, no doubt, contributed much to his *éclat* as a worker of miracles.

Hohenlohe; one of the mediatized principalities of Germany, containing 620 square miles, with 90,000 inhabitants, partly under the sovereignty of Wurtemberg, partly under that of Bavaria. Besides this, the princes of Hohenlohe have considerable possessions. The house of Hohenlohe is descended from Eberhard, duke of the Franks, brother to the German king Conrad I (died 918).

Hohenlohe-Ingelfingen, Frederic Louis, prince of; born in 1746; a general in the Prussian service, in the campaign of 1806. In the war against the French, in 1792, he commanded a division, and, in 1793, fought with distinction in the battles of Oppenheim, Pirmasens and Hornbach, and had a share in the forcing of the lines at Weissenburg. In 1794, he gained a victory at Kaiserslautern, and received the command of the line of neutrality on the Ems. In 1804, he was made governor of the principality of Franconia, and commandant of Breslau. When, in 1805, the Prussian army approached Franconia, the prince commanded a corps between the Saale and the Thuringian forest, and, in the war of 1806, led the army, whose advanced guard, under prince Louis Ferdinand, suffered a defeat at Saalfeld, October 10. After the battle of Jena, October 14, he directed the retreat, and led the remnants of the great Prussian army, which had collected under him at Magdeburg, to the Oder. But the distance of the camp of general Blücher prevented him from joining the prince. Destitute of cavalry, and unable with his infantry, exhausted by fatigue, to engage with a superior enemy, he thought himself authorized to surrender, with 17,000 men, at Prenzlau, October 28, 1806. He died February 15, 1818.

Hohenstaufen. In the battle of Merseburg (1030), between the emperor Henry IV and his competitor, Rodolph of Suabia, Frederic of Staufen, lord of Hohen-

staufen, in Suabia, not far from Göppingen, displayed so much courage, under the eyes of the emperor, that he was rewarded with the duchy of Suabia, and received Agnes, daughter of Henry, in marriage. Thus was laid the foundation of the future greatness of a house whose elevation and fall are among the most important epochs in the history of the German empire. Frederic (died 1105) left two sons, Frederic and Conrad; the elder succeeded him as duke of Suabia, and the younger was invested (1116) by his uncle, the emperor Henry V, with the new duchy of Franconia. After the death of the emperor Henry V (July 23, 1125), who was the last male of the Franconian line, his two nephews, Frederic II (the one-eyed), duke of Suabia, and Conrad, duke of Franconia, appear to have aspired to the German crown; but their connexion with the late emperor was made the ground of opposition by the directors of the election, the archbishop of Mentz and the legate of the pope; and the election of Lothaire of Saxony took place 1125. This circumstance, with the demand, made by the new emperor, of the restitution of all the possessions acquired by the lords of Hohenstaufen during the preceding reign, produced a fierce war between the emperor and the two brothers. Lothaire would have been overpowered in this contest, had he not preserved himself by a union with Henry the Proud, duke of Bavaria, to whom he gave his daughter and the duchy of Saxony. Frederic II was unable to withstand the overwhelming power of both, since his brother Conrad, after his return from the Holy Land, had undertaken a campaign to Italy, where he had caused himself (1123) to be proclaimed king. The peace of Mühlhausen (1135), between Lothaire and Conrad, put an end to this 10 years' war. Conrad renounced his title of king of Italy, but received the first rank among the dukes, and both he and his brother regained all their lands. After Lothaire's death (1137), Conrad, duke of Franconia, of the house of Hohenstaufen, was raised to the throne of Germany, being chosen February 22, 1138, and crowned March 6 of the same year. The archbishop Adelbert of Treves, and the legate of the pope, cardinal Theodoin, accomplished this work; for the politic and skilful Conrad had succeeded, during Lothaire's reign, in gaining the favor of the church, and he appeared to all less dangerous than his rival, Henry the Proud, duke of Saxony and Bavaria, whose power was formidable. The inextinguishable hatred of the Guelphs (q. v.) against the house of Hohenstaufen (Ghibelines), the first germ of which lay in the alliance between duke Henry and the emperor Lothaire, was still more inflamed by the emperor Conrad III placing Henry the Proud under the ban, depriving him of his feudal possessions, and otherwise injuring him, because he refused to obey his order to relinquish the duchy of Saxony and Tuscany, and some other Italian possessions, it being contrary to the German constitution for a prince to hold two duchies. The contest produced by this imperial sentence, which brought so many sufferings on Germany and Italy, lasted for more than 300 years. After the death of Conrad III (February 15, 1152), the confidence which was felt in the Hohenstaufen family caused the choice to fall on his nephew, Frederic III, of Suabia, son of Frederic II (the one-eyed), called, among the German kings, Frederic I (q. v.), (Barbarossa) the red-beard. Frederic I had excited the jealousy of the pope by his increasing power in Italy. This was the true cause of the failure of the exertions of his son and successor, Henry VI, to make the German crown hereditary in his family, so that he was scarcely able to have his son Frederic, two years of age, declared his successor (1169). After the death of Henry VI (1197), Philip, duke of Suabia, was named regent of the empire, during the minority of Frederic, his nephew, who was acknowledged king; and the pope was powerful enough to set up in opposition to him, first Berthold, duke of Zähringen, and then Otho, second son of duke Henry the Lion, who, by the gift of his uncle, king Richard of England, had become lord of the French county of Poitou. The murder of Philip, by Otho, count of Wittelsbach (June 21, 1208), secured to Otho IV, for some years, the entire government; but, when he wished to make good his imperial rights in Italy, he excited the anger of pope Innocent III to such a degree that he took under his protection Frederic, the young king of Sicily (against whom Otho was carrying on war), laid the emperor under an interdict, and raised up a powerful party in Germany against him. King Frederic now went to Germany, caused himself to be crowned at Aix-la-Chapelle, and, after the defeat of Otho IV at Bovines (1214), became sole ruler, under the title of emperor Frederic II. (Otho IV died May 19, 1218.) During his life-time, Frederic had his second son, Conrad, chosen king of the Romans (1237), after his eldest son, Henry (who died in prison, 1242), had rendered him-

self ineligible to this dignity, by rebelling against his father. Conrad IV, after the death of his father (1250), was acknowledged as king by most of the states of the empire; but Innocent IV laid him under an interdict, declared him stripped of all his lands, and persecuted him with relentless hatred; but Conrad, who had many personal friends in Germany, kept in check William of Holland, the opposite candidate, defeated the army of the pope, and was about to advance into Lombardy, when he died, in his camp, at Lavello (1254), as is thought, from poison, administered to him by his illegitimate brother, Manfred. After the death of Conrad IV, this Manfred possessed himself of the crown of Sicily; but he lost his life and his crown in a battle, and Charles of Anjou was crowned by the pope (1266) king of Naples and Sicily. The severe and cruel government of Charles raised up a powerful party against him; their love for the noble house of Hohenstaufen was awakened, and Conradin (q. v.), the only son of Conrad IV, was called from Bavaria, where he had hitherto lived, in order to ascend his rightful throne. In order to raise money to defray the expenses of a campaign in Italy, Conradin pledged several castles and other possessions for 2200 marks of silver; went to Italy at the head of his army, accompanied by his friend, the young prince Frederic of Baden; defeated the usurper Charles, August 23, 1268, but had the misfortune, while pursuing the enemy too warmly, to be taken prisoner, together with Frederic and several German princes. Charles had him, together with his attendants, publicly executed at Naples, October 29, 1268. Thus perished the last Hohenstaufen. The possessions of the family fell to Bavaria, Baden and Würtemberg; the ducal dignity in Suabia and Franconia ceased, and the title of duke of Franconia alone went to the bishop of Würtzburg. The fame of the family of Hohenstaufen is rendered imperishable by the political greatness to which the Frederics, in particular, attained, by means of their wisdom, virtue and power, by their struggles to free Germany from the dominion of the pope, by the order which they introduced into all the states of the empire, by the encouragement which they gave to commerce and trade, and likewise by their unwearied care to promote the sciences and arts. They particularly patronised history and poetry. How much they valued history is apparent from the letter of Frederic I, in which he invited his uncle Otho, bishop of Freysingen, to be his historiographer. Both Frederics merit lasting honor for their administration of justice, and the rectitude with which they allowed the rights of their subjects, even against the throne itself. Astronomy, astrology, physical science, philosophy, geography, and particularly poetry, were favorite pursuits of the Frederics, even in the midst of public business and the tumult of arms; and very favorable effects followed, from the close alliance between the German poets and the minstrels of Naples and Sicily, after those states had come into the possession of the family of Hohenstaufen. Frederic II, who first published the decrees of the diet in the German language, erected schools for the Minnesingers, and passed a law for the protection of the students in their journeys to the universities. (See Frederic von Raûmer's excellent *History of the Hohenstaufen and their Times* (6 vols., with 12 engravings and maps, Leipsic, 1823).

Hohenstaufen; a high mountain in the kingdom of Würtemberg, between Gmünd and Göppingen, the original residence of the famous German family which bears its name. It rises in the form of a pyramid, above the chain of hills which extends between the Fils and the Rems. On its southern declivity is a small market-town of the same name. The castle of Hohenstaufen was burnt by the insurgents, in the peasants' war (1525). Nothing of the ruins is now discernible, but a few feet of a low wall.

Hohenzollern-Hechingen, and Hohenzollern-Sigmaringen; two sovereign principalities of the Germanic confederation (q. v.; see also the table in the article *Europe*). The most remote known ancestor of this family was Thassilo, count of Zollern (died about 800). His descendant in the eighth generation was Robert II, count of Zollern, who lived in 1165, and had two sons, Frederic IV and Conrad. The latter became burgrave of Nuremberg, in 1200, and his grand-nephew, Frederic III, was made, in 1277, a prince, and received the burgraveship as a hereditary fief. From him the royal Prussian dynasty is descended. (See *Prussia*.)

Holbach, Paul Thyry, baron of, member of the academies of Petersburg, Manheim and Berlin, was born at Heidelsheim in the Palatinate, in 1723. He was educated in Paris, where he passed the greater part of his life, and died in 1789. He was distinguished for his love of the arts, and was eminent as a mineralogist; he

has been represented in general as benevolent, amiable and even-tempered, but the irritable Jean-Jacques complains of his rudeness. He was the centre of a circle of men of wit, but of the *nouvelle philosophie*, using his great fortune, says Rousseau, generously, and appearing to advantage in the learned society which he gathered round his table. His guests were in general *philosophes* of too free a turn of thinking to be admitted to the dinners of madame Geoffrin, and Marmontel declares that God, virtue and morality were never discussed there. He was the author of a great number of works, most of which were anonymous or pseudonymous. He contributed many papers on natural history, politics and philosophy to the *Encyclopédie;* he also translated a German work of Waller on Mineralogy, Akenside's Pleasures of Imagination, some essays of Tindal, Hume, &c. His principal work, which appeared under the name of M. Mirabaud, and which excited much attention in the learned world, is the *Système de la Nature*. Voltaire characterizes it as execrable in morality, and absurd in physics, and Frederic the Great undertook to refute it. According to Holbach, matter is the only form of existence, and every thing is the effect of a blind necessity; instead of God, whom he asserts to have been invented by theologians, he substitutes Nature, which he considers an assemblage of all beings and their motions. The *Eléments de la Morale universelle* (1790) contains the same principles.

Holbein, Hans; the son of a painter at Basle, in Switzerland, who, being instructed by his father in the rudiments of the art, soon rose to great eminence in his profession. The year of his birth has been variously fixed, by Patin in 1495, but by others in 1498, which latter is the æra more generally received. His talents procured him the acquaintance and even the friendship of Erasmus, in spite of his rough and dissolute habits, which that philosopher exerted himself much to correct. His advice, and the wish to escape from the consequences of an unfortunate marriage, induced the young artist to set out for England, whither he had been invited most pressingly by one of the nobility. His finances were so low at the time, that he found the greatest difficulty in reaching this country; where, when he arrived, he had forgotten the name of his promised patron. Fortunately, however, the features of the peer were yet fresh in his recollection, and a striking resemblance of him, which he produced, enabled him to discover his name. Letters from his friend Erasmus, whose Panegyric on Folly he had illustrated by a series of drawings, procured him subsequently the patronage of the chancellor sir Thomas More, who took him into his own house, employed him to delineate the portraits of most of his own personal friends about the court, and introduced him to the notice of Henry VIII, who, with all his faults, was a liberal encourager of the fine arts. At the command of this monarch, Holbein drew the portrait of the dowager duchess of Milan, whom Henry entertained thoughts of espousing; also that of Anne of Cleves, the original of which was afterwards considered, by his fastidious patron, so far inferior, in point of beauty, to her picture, that his disgust was expressed in terms less courtly than sincere. Holbein also painted most of the principal English nobility, who showed themselves eager to encourage an artist ranking so high in the favor of Henry. These portraits are still considered masterpieces of art. Some of his earlier productions, especially his Dance of Death, are also very celebrated, and have perhaps contributed as much to his reputation as his later productions. The capricious prince whom he served, however fickle towards others, was constant in the protection which he afforded to him, and was so sensible of his value, that a memorable saying of his is recorded, on the occasion of some complaint made against this artist by a court butterfly: "I can, if I please, make seven lords of seven ploughmen; but I cannot make one Holbein even of seven lords." Holbein died at Whitehall, of the plague, in 1554. He excelled in wood engraving, and, before his visit to England, had produced a large number of wood cuts. Several of his historical paintings were engraved in wood by him; among others, his Dance of Death. The best edition of his series of 90 small wood cuts, illustrative of the New Testament, is that of Lyons, 1539, very rare. (See Füssli's *History of the best Artists of Switzerland.*)

Holberg, Louis, baron of, the father of modern Danish literature, and a popular writer in the same sense as Cervantes in Spain, Molière in France, and Shakspeare in England, was born (1684) at Bergen, in Norway, and early lost his father, who had raised himself, by a bold achievement, from the rank of a common soldier to the office of colonel. Little care was taken in forming his mind and character. In 1702, he studied theology

and the foreign languages at Copenhagen, and afterwards became an instructer. The perusal of the accounts of travellers excited in him a great desire of visiting other countries. Notwithstanding his straitened circumstances, he went first to Amsterdam, then to England, Germany, France and Italy. He then resided at Copenhagen two years, as a teacher of languages. In 1718, he received the chair of metaphysics; 1720, he became assessor of the consistory and professor of eloquence. Holberg had hitherto devoted himself to the study of jurisprudence, history and the languages; and, until his 30th year, he had written no poetry. At that time, he attempted a satire, in which he took Juvenal as his model. This attempt was successful, and he now wrote his great comic-heroic poem, in iambics, the *Peder Paars*. Holberg laid the foundation of his fame by this national satire. It has been translated into several languages. An accident having induced him to write for the stage, he here found a proper field for his talents. He wrote with much ease, and in quick succession, 24 comedies, all of which were received with great favor, and which constitute him the founder of the comic theatre of Denmark. The strong, lively wit, the native humor, and the original characters in his comedies, secure to him an elevated place among the small number of genuine comic writers among the moderns. Their genuine comic character has induced Baggesen, one of the poets of Denmark, to undertake to adapt the language to the present state of the Danish tongue. His satirical and humorous romance, Nicholas Klimm's Subterraneous Travels, in the Latin language, translated into seven languages shortly after it appeared, and into Danish by Baggesen (1789), has also contributed to his fame. His Epistles, Fables and Epigrams are highly valued; not less so are his historical works, which he wrote under Christian VI, who was not very favorable to poetry. Still Holberg acquired fame and riches, and was elevated by the king to the rank of baron (1747). He died 1754, and left the greatest part of his property to the seminary of young noblemen at Soroe. Holberg was lively and refined in his wit. He was extremely temperate, and dressed with much care. He was fond of the society of women, but was never married; he considered their conversation more striking and natural than that of men. His comedies, translated into German by Œhlenschlager, appeared at Leipsic in 1822. Professor Rahbeck has edited an edition of Holberg's Miscellaneous Writings, in 21 vols., and also the latest edition of Holberg's Comedies, in 6 vols. (Copenhagen, 1826).

Holcroft, Thomas, a dramatist, novelist and miscellaneous writer, born in 1744. His father was a shoe-maker, and the son followed the same occupation, which he relinquished when young, to try his fortune on the stage. His scheme did not succeed, and he then turned his attention to dramatic composition, and produced several pieces, of which the most popular is the Road to Ruin (1792), still frequently performed. On the occurrence of the French revolution, Holcroft displayed much zeal in the cause of liberty; and his conduct, with that of other individuals, having excited the alarm of government, he was included in the famous prosecution for treason instituted against Hardy, Horne Tooke, Thelwall and others, in 1794. The persons just mentioned having been acquitted, Holcroft and the rest were discharged without being brought to trial. He continued to write for the stage with great assiduity, and published a multitude of works, original and translated, among the former of which were some clever novels. His last publication was a Tour in Germany and France (2 vols., 4to.). He died in 1809. Holcroft is stated to have been the first who introduced on the English stage those since popular entertainments termed *melo-dramas*. He possessed strong natural abilities, and, considering that he was self-taught, his attainments were very considerable. His translations are from the French and German languages.

Hold; the whole interior cavity or belly of a ship, or all that part of her inside which is comprehended between the floor and the lower deck, throughout her length. This capacious apartment usually contains the ballast, provisions and stores of a ship of war, and the principal part of the cargo in a merchantman; in the former, it is divided into several apartments (by bulk-heads), which are denominated according to the articles which they contain, as the *fish-room*, the *spirit-room*, the *magazine*, the *bread-room*, &c.—The *after hold* is that which lies abaft the main-mast, and is usually set apart for the stowage of the provisions in ships of war. —The *fore hold* denotes that part of the hold which is situated in the fore part of the ship, or about the fore hatchway. It is usually in continuation with the main hold, and serves the same purposes.—The *main hold;* that part which is just before

the main-mast, and which generally contains the fresh water and beer, for the use of the ship's company.

Hole, Black, at Calcutta, denotes a place of confinement, 18 feet by 18 feet, containing 324 square feet, in which 146 persons were shut up, when fort William was taken, in 1756, by Surajah Dowla, nabob of Bengal. The room afforded for each person a space of 26½ inches by 12 inches, which was just enough to hold them, without pressing violently upon each other. To this dungeon there was only one small grated window, and, the weather being very sultry, the air within could neither circulate nor be changed. In less than an hour, many of the unhappy people were seized with extreme difficulty of breathing, several were delirious, and the place was filled with incoherent ravings and exclamations of distress, in which the cry for water was predominant. This was handed to them by the sentinels, but had no effect to allay their thirst. In less than four hours, many were suffocated, or died in violent deliriums. In an hour more, the survivors, except those at the grate, were, in the highest degree, frantic and outrageous. At length, those at the grate became insensible, so that we have no account of what happened till they were released at six o'clock in the morning, having been confined from seven at night. Such were the effects of animal effluvia, in a close and unventilated place, in the space of 11 hours, that out of 146 persons, not more than 23 came out alive, and those in a high putrid fever, from which, however, by fresh air and proper attention, they gradually recovered. Mr. Holwell, who commanded in fort William at the time when it was taken, and was one of the sufferers in the black hole, published an interesting Narrative of the sufferings endured in the Black Hole of Calcutta.

Holibut (*pleuronectes hippoglossus*). This large and excellent fish is sometimes upwards of 300 pounds in weight. The color above is of an obscure green, bordering upon black; that of the belly a pure white. The scales are small, and the body free from spines: even the edges of the fins have no asperity from the projection of the rays. The eyes are on the right side of the animal. It is brought to our markets very plentifully in the spring. From its large size, it is usually cut up and sold piece-meal. The head, fins and flap are considered as the most savory parts. It usually makes its appearance with the shad and herring, or about the end of March and beginning of April. It is taken on the Nantucket shoals, and sometimes as far south as Sandy Hook, before the water loses its wintry coldness. As the temperature increases, these fish change their ground, and migrate to the banks of Newfoundland. The bait used in taking them is small herring.

Holinshed, or Holingshed, Raphael; an English chronicler, of the age of queen Elizabeth. He has been represented as a clergyman, and bishop Tanner farther states that he was educated at Cambridge, and took the degree of M. A. there in 1544. But doctor Farmer, in his Essay on the Learning of Shakspeare, has corrected this mistake, having ascertained that the graduate was one Ottewall Holingshed, who was subsequently nominated by the founder one of the first fellows of Trinity college. From the will of the historian, preserved by Hearne, it appears that at the close of his life he was a steward or servant to Thomas Burdet, esquire, of Bromcote, in Warwickshire. His death took place about 1582. The Chronicles of Holinshed were first published in two vols., fol. (1577); and a second edition, in three vols., in 1587. Several individuals were concerned in the compilation of this work. In 1807, a new edition of it appeared, in six vols., 4to, in which the omissions, chiefly from the preceding impression of the third volume, were restored. They principally relate to the history of lord Cobham and the earl of Leicester, during the reign of Elizabeth, to whom the passages in question appeared offensive. Prefixed to the Chronicles is one of the most curious and interesting memorials existing of the manners and domestic history of the English in the 16th century.

Holkar; a Mahratta chief, distinguished in the wars of the British in India. (See *Mahrattas.*)

Holland; a maritime province of the Netherlands, remarkable above all others, even in that populous country, for the density of its towns and villages, and for the triumph of persevering industry over the difficulties of nature. In the present article will be described the province, properly so called, and consisting of two parts, North and South Holland. They form a narrow tract, extending from lat. 51° 40′ to 53° 10′ N.; in length about 90 miles, in breadth varying from 25 to 40. The greatest breadth is in the south. This province is bounded west by the German ocean, south by Zealand, east by the Zuyder Zee and the province of Utrecht. The superficial extent of the whole prov-

ince of Holland is about 2200 square miles. The whole province contains 37 cities and towns, 38 smaller towns with markets, and 418 villages. The division into the two governments of South and North Holland, is recognised by the constitution of 1814; population, 820,449. The following are the chief towns: Amsterdam, Rotterdam, Hague, Leyden, Haarlem, Dort, Delft, Gouda, Alkmaar, Hoorn. The national religion is Calvinism; but there is a Lutheran congregation in every town of consequence; and among the lower classes the Catholics are numerous. The whole province of Holland is a continued flat, and lies so low as to be under the level of the sea at high water: the tide is prevented from flowing in by means of dikes and natural sand-banks. The numerous canals and ditches which traverse the province in all directions, are likewise provided with dikes, and serve not only to promote internal communication, but to drain the country of superfluous water. In addition to the two great rivers which water this province in common with the rest of the Netherlands, viz., the Rhine and the Maese, Holland has several smaller rivers, the Amstel, the Schie, the Rotte; but they have so little current as to be more properly canals, or water-courses. The principal lake is that of Haarlem. The soil is in general rich, consisting of a deep, fat loam. From the humidity of both soil and climate, there is little of the province under tillage, and that little is in South Holland. The crops principally cultivated, are wheat, madder, tobacco, hemp and flax. The agricultural wealth of the province at large, consists in its pastures, which are almost unrivalled in the abundance and luxuriance of the grass which they produce. The manufactures of Holland, though no longer extensive, embrace a variety of articles, viz., linen, woollen, and leather; also paper, wax, refined sugar, starch, and, in certain districts, pottery and tiles. Large quantities of gin are likewise made, particularly at Schiedam, near the Maese. (For the history and statistics, see *Netherlands.*)

Holland, New; an island in the south Pacific ocean, the largest in the world, and long supposed to form a part of a great southern continent. It stretches from east to west above 2600 miles, between Sandy cape and the entrance of Sharks' bay; and it is above 2000 miles in length from cape York on the north, 10° 45′, to Wilson's promontory, in 39° 10′ S. latitude. The superficial area is estimated at three and a half millions of square miles. The country was first discovered by the Dutch, in 1605, and was visited, in 1616, by Dirk Hartag, who commemorated his visit in a plate of tin left by him, which was found by some English navigators, in 1801. It was occasionally visited by the Dutch navigators till the end of the century. It was visited by captain Cook, in 1770, and was determined by him to be an island. It was afterwards visited by captain Furneaux, in 1773; by Vancouver, in 1791; by the French navigator, Bruny d'Entrecasteaux; and, in 1795—1799, by Bass and Flinders. In 1801, captain Flinders surveyed its coasts; and, in 1818 and 1824, captain King completed what had been left undone by his predecessors. Very little is known of the interior of this vast country. The principal animal and vegetable productions have been described under the head of *Australia.* On the north coast lies the gulf of Carpentaria, 400 miles deep and 300 broad. From cape Wessel, the north-west head of the gulf, to cape Van Diemen, the country is called *Arnheim's Land.* The coast here is low, containing many fine ports and harbors. Liverpool river empties into the sea on this coast. What on the old maps is called *Van Diemen's bay*, was found by captain King to be a strait 70 miles long and 40 broad, separating two large islands from the main land, called *Melville* and *Bathurst islands;* the former is 200 miles, the latter 120 miles, in circumference. The northern coast, with these islands, is now included in the British territory (formal possession of the country between 129 and 136° E. longitude having been taken in 1824). A colony was founded at Port Cockburn, on Melville island, at the mouth of Apsley strait, which separates the two islands. To the west of this point, the coast trends to the south, and is low and sterile as far as Cambridge gulf, in 128° E. longitude; westward from the gulf, the coast is intersected by numerous bays, ports, and some rivers, one of which, Prince Regent's river, is of considerable size. The remainder of the north-west coast, as far as North-west cape, an extent of 1000 miles, called in the maps, *De Witt's Land*, is low, sandy, and dangerous of approach. Endracht's, Edel's and Leeuwin's Land, are the names of successive portions of the coast from North-west cape to cape Leeuwin, a distance of 800 miles. The only openings of any importance here, are Sharks' bay and Swan river (q. v.); the latter has been selected by the British government, as the site of a

western Australian colony; and an expedition to form the settlement was sent in 1829. The south coast, extending above 1200 miles, between cape Leeuwin and cape Howe, trends to the northward from both extremities, so as to form a wide gulf. The western portion of it is called *Nuyt's Land;* of the other portion, nothing was known till the voyages of Flinders and Baudin, who met in the middle of the gulf. Spencer's and St. Vincent's gulf are on this coast. The coast near Bass's straits is of the most sterile description; it has, however, two fine harbors, Port Western and Port Philip, in the neighborhood of which the country is rich; the former will probably be soon made the seat of a settlement. Cape Howe forms the south-east point of New Holland. The eastern coast is called *New South Wales*, and under that head we shall give an account of the British colonies there, and of the nature of the country, so far as it is known. The inhabitants of New Holland are of the middle stature. They have a large, misshapen head, slender extremities and projecting bellies. Their noses are flat, nostrils wide, eyes much sunk in the head, and covered with thick eye-brows. Their lips are thick, their mouths very wide, their teeth white, sound and even. Many have very prominent jaws. The skin is at first red, and afterwards becomes almost of an African blackness. Both sexes rub fish oil into their skins to protect them from the air and the musquitoes. Their habitations are extremely rude, and their habits barbarous.

Holland; a fine and close kind of linen, so called from its being first manufactured in Holland.

Holland (Henry Richard Fox), lord, son of Stephen, second lord Holland, and nephew of the celebrated Charles James Fox (q. v.), one of the distinguished whig leaders in the English house of lords, was born in 1773, and educated at Eton and Oxford, and, on coming of age, took his seat in the upper house (1794), having lost his father at a very early age. Attached to the policy of his uncle, he felt a strong desire to visit the continent during the progress of the French revolution; but, the state of France at that time rendering a long residence there impossible, he went to Italy, where he became acquainted with the beautiful wife of sir Godfrey Webster. He eloped with her to England, and, on her husband obtaining a divorce, married her. After his return to England, he took an active part in the opposition, and, on the peace of Amiens, he went to Spain, partly for his health, and partly for the purpose of becoming more intimately acquainted with Spanish literature. This visit produced his Account of the Life and Writings of Lope de Vega (1806), and some translations from the Spanish. In 1806, he became a member of the short-lived whig administration formed at that time. In 1808, he edited the History of the Reign of James II, by his uncle. He has supported the claims of the dissenters, opposed the restrictions on the regency, advocated the cause of the queen, and, during the confinement of Napoleon in St. Helena, exerted himself in favor of the illustrious captive, who acknowledged his efforts by the bequest of an antique cameo to lady Holland.

Holles, Denzil, lord, an eminent political character of the seventeenth century, the second son of Holles the first earl of Clare, was born in 1597. He was liberally educated, and, when his father had a place at court, was playfellow and companion to prince Charles. The earl of Clare's subsequent discontent was communicated to his sons, and, in the last parliament of James I, Denzil sided with the opposition. In the parliament of 1627, he took a leading part in favor of liberty, with his characteristic ardor and courage. When the three resolutions of the commons, against popery, Arminianism, and tonnage and poundage by the king's prerogative, were drawn up, he was one of the two members who forcibly held the speaker in the chair until they were passed. For this conduct, refusing to give bail or sureties for his good behavior, he was condemned to fine and imprisonment, the latter of which he endured in the Tower for upwards of twelve months. In 1640, he entered the long parliament, a determined foe to the court, and was placed at the head of the Presbyterian party. The earl of Strafford having married his sister, he was prevented from taking part in the prosecution of that minister; but he carried up the impeachment against archbishop Laud. He was also one of the members, the imprudent attempt to seize whom, in the parliament house, formed the immediate cause of taking up arms. In the ensuing war, the parliament conferred on him the command of a regiment, and appointed him lieutenant of Bristol; but becoming aware of the designs of the leaders of the Independents, he endeavored to frustrate them by promoting a treaty with the king. In 1644, he was one of the

commissioners appointed to carry propositions of peace to Charles at Oxford; and, in 1647, he made a motion for disbanding the army, but that party was now too strong, and the attack was returned upon himself by an impeachment for high treason. He consulted his safety by retiring to France, whence he was allowed to return in 1648, when he resumed his seat in parliament, and was one of the commissioners appointed to treat with the king in the Isle of Wight. He was soon after again obliged, by the violence of the times, to retreat to France, where he remained until the restoration, which he zealously promoted. He was one of the members of the house of commons who waited upon the king at the Hague; and Charles II, before his coronation, advanced him to the peerage, by the title of lord Holles of Isfield in Sussex. In 1663, he was sent ambassador to France; and in 1667 was one of the English plenipotentiaries at Breda. Notwithstanding these employments, he remained a zealous friend to liberty; and when the politics of the reign tended to make the king absolute, lord Holles was a conspicuous leader of opposition. He is mentioned by Barillon, the French ambassador, as one of the noblemen who entered into negotiations with France to thwart the suspected measures of Charles against liberty at home; but it is at the same time intimated, that he and lord William Russell alone refused the money offered by Louis XIV. He died with a high character for honor, integrity and patriotism, in 1680, in the eighty-second year of his age. In 1699 were published Memoirs of Denzil Lord Holles, from 1641 to 1648, (4to); some of his letters and speeches have been published separately.

Holley, Horace, reverend, LL.D., was born in Salisbury, Conn., Feb. 13, 1781, and in his early childhood gave indications of high and generous qualities. While a boy of twelve or thirteen years of age, he was employed in his father's shop or on the farm; but, showing a decided taste for study, he was, at the age of sixteen, sent to school, and entered Yale college in 1799. Having finished his collegiate course with credit, he began the study of the law, which he soon after abandoned for that of divinity. In 1805, he was ordained to the pastoral charge of Greenfield Hill, Fairfield, Conn., where he continued three years, when this connexion was amicably dissolved. He was now at maturity; his mind was active, vigorous and glowing; his person manly, graceful and imposing, and his eloquence warm and impressive. In 1809, he was installed over the society in Hollis street, Boston, where he continued ten years, the pride of his people, from whom he received every demonstration of affection and esteem. Mr. Holley had been educated at Yale college, under doctor Dwight, and, of course, in the Calvinistic faith. Further study and reflection had led to a change in his religious views, and he became Unitarian in his sentiments. His sermons were generally extemporaneous, or, if written, were seldom finished; they were practical, addressed equally to the heart and understanding, and distinguished for eloquence and power. It was his custom to remain in his study late Saturday evening, arranging the plan of his discourse, and making notes. After a few hours' sleep, he returned to his study, without allowing himself to be interrupted by a breakfast; and often passed the day without dining; so that he kept his mind full of his subject, and constantly on the watch. In 1818, he accepted an invitation to become president of Transylvania university in Kentucky. Here he remained until 1827, when he was induced to resign the presidency of the institution, of which he had elevated the character, and increased the number of the students. A plan was then formed of erecting a seminary in Louisiana, to be placed under his direction; but he was taken sick while at New Orleans, in the summer of 1827, and, having embarked for New York, died on the passage, July 31.

Hollis, Thomas, an English gentleman, memorable for his attachment to civil and religious liberty, and his services to literature and the arts, was born in London in 1720. He was descended from a Yorkshire family of dissenters, and was sent, after a common school education, to Amsterdam, in his thirteenth or fourteenth year, to learn the Dutch language and merchant's accounts. Not long after his return, in 1735, his father died; and, being now the heir of a handsome fortune, it was resolved to complete his education upon a liberal plan. In 1740, he took chambers in Lincoln's inn, but never engaged in the law as a profession. His attention seems to have been chiefly occupied with the study of the English constitution, and the cultivation of a zealous attachment for civil and religious liberty, and of the friendship of its most eminent supporters, especially among the dissenters. In 1748, he travelled over a part of the continent, and in 1750 engaged in another tour through the remainder. Find-

ing, on his return, that he could not enter parliament without compliances which he did not approve, he made collections of books and medals, especially such as preserved the memory of eminent asserters of liberty, among whom he highly regarded Milton and Algernon Sidney. He was a fellow of the royal, antiquarian, and other learned societies, and made many valuable presents to the British museum. He presented a handsome collection of English books to the library at Berne, and also to Harvard college, in New England, to which, in imitation of some deceased members of his family, he was a most liberal benefactor. In his own country, also, it was one of his leading objects to disseminate books favorable to popular principles of government, editions of many of which he caused to be re-printed. He died in 1774. He was very gentle and polite in his manners, and seems to have united much of the ancient stoic to the modern partisan of freedom and general philanthropist. (See *Memoirs of Thomas Hollis, by Thomas Brand Hollis*, London, 1780.)

Hollow Square, in the military art; a body of foot soldiers drawn up with an empty space in the middle.

Holly. The American holly (*ilex opaca*) is widely diffused throughout the U. States, extending from about lat. 42° to the gulf of Mexico, and beyond the Mississippi to the border of the desert plains which skirt the base of the Rocky mountains. In many parts of this district, it is not uncommon, and adds to the beauty of the forest by its red berries and brilliant evergreen foliage. It sometimes attains the height of forty feet, with a trunk a foot in diameter. The leaves are undulated, coriaceous, dentate, and spiny on the margin; the flowers, as in the rest of the genus, inconspicuous, consisting of a four-toothed calyx, four petals, and as many stamens; and they are succeeded by rounded berries containing four osseous seeds. The wood is very hard, susceptible of a fine polish, and more capable of receiving a black color than any other: it is used principally for veneering; the black lines with which cabinet work is frequently ornamented, in this country, are formed of this wood, dyed in the coppers of the hatter. It is a good wood for turning, for the cogs of wheels, and for the pulleys of vessels; but for this latter purpose lignum vitæ is preferable. The European holly is very similar to the American in size, appearance, and the qualities of the wood. The *I. vomitoria* is a shrub, inhabiting the Southern States from lat. 37° to the gulf of Mexico, bearing smooth, elliptical and serrated leaves, an infusion of which is taken like tea by the aborigines, who ascribe to it extraordinary virtues, and are accustomed to assemble every spring, with much ceremony, for the purpose of drinking it. It is tonic and diuretic, and, in large doses, purgative and emetic. Three other species of ilex inhabit the southern parts of the U. States. From its retaining its foliage during the winter, the holly is a very desirable tree for shrubberies and ornamental planting. As a fence, it is very serviceable; and when formed into hedges, it admits of being cropped, and retains its verdure even through the severest winters. Its growth is slow, but its duration is longer than that of most other trees. In winter, it affords shelter to birds, and its berries supply them with food; and in Corsica they are used to make a liquor somewhat similar to coffee. The bark is smooth, and replete with a strong mucilaginous substance, from which birdlime is made. Birdlime, it is well known, is used for snaring small birds. Among the Romans, it was customary to send boughs of holly to friends, with new year's gifts, as emblematical of good wishes; and in England it is used, as other evergreens are here, to decorate houses at Christmas.

Hollyhock (*althæa rosea*); a malvaceous plant, a native of the East, and very frequently cultivated in gardens for the sake of its ornamental spikes of large and beautiful flowers. The root is biennial, and shoots up one or several very upright, hairy stems, which attain the height of from five to eight feet. The leaves are cordate at base, and divided into from five to seven lobes. The flowers are subsessile, rose-colored, and situated in the axils of the superior leaves, thus forming a long terminal spike. From cultivation, many varieties have arisen, bearing flowers, single or double, white, yellow, red, or even almost black. It is a hardy plant, and easily re-produced from seed.

Holmes' Hole; a safe and commodious harbor on N. side of Martha's Vineyard, in the township of Tisbury, Mass. It is formed by West and East Chops; the former of which is 2½, and the latter 2 miles, from the head of the harbor. The points are 2½ miles apart. The depth of water is from 3½ to 8 fathoms. Numerous vessels, bound to Boston or the eastward, are frequently seen here waiting for a fair wind. From about 1000 to 1200 sail anchor here in the course of a year. Here is

a village which contains a meeting-house, a post-office, and 80 or 90 houses. It is 83 miles S. S. E. of Boston. The whole town of Tisbury contains a population of 1318, and furnishes good pilots for vessels bound to Boston over the Nantucket shoals, and to New Bedford.

Holstein; a German duchy, bounded on the north by Sleswick, on the east by the Baltic and the duchy of Lauenburg, on the south and west separated from the kingdom of Hanover by the river Elbe, and washed by the North sea. It contains 3285 square miles, with 362,300 inhabitants, mostly Lutherans. A ridge of hills divides the country from north to south, into two large inclined planes, running down on one side to the Elbe and the North sea, on the other to the Baltic. The descent towards the Elbe is comparatively gradual, and on this side several streams run from the highlands, most of which empty into the Elbe; as the Alster, the Pinnau, the Krükau and the Stör. The part towards the Baltic is more hilly, and there are only two rivers worth mentioning, viz. the Schwentine and the Trave. But the lakes are numerous, the principal of which are the lakes Plön and Selent. On the eastern declivity, there are some charming spots; e. g., the environs of Plön, Eutin and Kiel. Nearly all the country is fruitful, particularly the lowlands on the Elbe and North sea, which begin about 20 miles below Hamburg, and are 10 miles broad. But a great part of the land in the eastern descent may now be compared to the above-mentioned lowlands, principally in consequence of the use of marl. As for minerals, the country about Oldeslohe contains salt and lime, but no metals. The animal and vegetable productions are more important. Grain is almost always abundant. Manufactures are not produced in sufficient quantities to meet the demand. Manufactures, therefore, together with colonial products and wines, are among the articles of importation. Grain, horses, black cattle, butter and peat are exported. The import and export of products are very much facilitated by the situation of the country on two seas, and would be rendered even more easy by the increase of canals in the country. Hamburg, lying on the borders of Holstein, together with Altona and Lübeck, are important markets for the consumption of domestic products. The Greenland seal and whale fisheries furnish many inhabitants of Holstein with profitable employment. Holstein may be called a fortunate country, for the necessaries of life cannot easily fail, and are generally abundant. There are good schools in the principal cities, and a university was founded in Kiel, 1665. The seminary for instructers, established in Kiel, 1780, has been of great service in promoting general education. December 19, 1804, bondage was abolished. The most important cities in Holstein are, Altona (q. v.); Glückstadt, a fortified city, the seat of government, at the junction of the Elbe and Stör, (the latter of which here forms a pretty good harbor), containing 900 houses and 5200 inhabitants, engaged in the Greenland seal and whale fisheries; Rendsburg on the Eyder, at the termination of the canal which connects the harbor of Kiel with the Eyder, is an important fortress, containing 7500 inhabitants; Kiel. (q. v.) Of less note are Segeberg, where is a quarry of limestone, Oldeslohe, where are salt springs, Plön, Itzehoe, Wilster, &c. The sovereign is the king of Denmark: for the administration of justice, the whole country, except the cities and the estates of noblemen, is divided into districts, under the jurisdiction of particular courts, from which an appeal may be made to the college of justice, or supreme court at Glückstadt, and from the seigneurial courts to the district court, which is partly filled by nobles; an appeal to the king is still allowed in certain cases. The established religion is the evangelical Lutheran, but other religious sects are tolerated; and, for the purposes of ecclesiastical government, the country is divided into eight provostships. Each provostship has a consistory, or spiritual court, composed of several clergymen of the district, under the supervision of the provost, which decides the causes that come within its jurisdiction. From this court, an appeal may be made to the superior consistory at Glückstadt, or supreme court, composed of the clergymen of Glückstadt and the general superintendent. The provost superintends the churches and schools of his district, and visits them twice a year; the superintendent does the same for the whole country. The earliest history of Holstein is obscure. Charlemagne conquered the Saxons who inhabited this country, and transported more than 10,000 families across the Rhine into Flanders, Brabant and Holland. The emperor Lothaire erected Holstein and Stormar into a county. The contest between Denmark and the ducal house of Gottorp was ended, 1773, by the grand prince, afterwards emperor Paul I of Russia, ceding his claims on Holstein to the king of Denmark, in exchange for the

counties of Oldenburg and Delmenhorst, which, in 1777, were erected into the duchy of Holstein-Oldenburg, and conferred by Paul I on the younger line of Gottorp. When the constitution of the German empire was abolished by the confederation of the Rhine, the king of Denmark united (9th Sept., 1806) the whole duchy of Holstein with the kingdom of Denmark, and took away its existing constitution. In the great European crisis of 1813, the war was carried into Holstein. The country was occupied by the combined Swedish and Russian armies, and, after a short armistice, a peace was concluded at Kiel (q. v.), Jan. 14, 1814. In 1815, the king of Denmark, as sovereign of Holstein, was admitted into the Germanic confederation. Holstein was, therefore, once more connected with Germany, and it became necessary to establish a constitution in which the estates should be represented, according to the decree of the confederation. The prelates and nobility of the duchy of Holstein have made application, in consequence, to the diet.

Holt, sir John; an English judge, celebrated for firmness, integrity and knowledge of constitutional law, was born in 1642, and was entered as gentleman commoner at Oriel college, Oxford. Being designed for the profession of the law, he became a member of the society of Gray's Inn in 1658, was called to the bar in due course, and soon distinguished himself as a sound lawyer and an able advocate. His professional eminence having procured him the post of recorder to the city of London, he filled that responsible office with much ability for about a year and a half, when, the court determining on the abolition of the test act, his uncompromising opposition to that unpopular measure lost him his situation. He continued in disgrace with James till 1686, when he was made serjeant-at-law; and, becoming a member of the lower house, on the arrival of the prince of Orange, he distinguished himself so much by his talents and exertions in what is called the *convention parliament*, that William, soon after his own establishment on the throne, elevated him to the dignity of lord-chief-justice of the king's bench, with a seat at the council board. In this situation he continued during the remainder of his life, declining the chancellorship, which was offered him on the removal of lord Somers in 1700, and discharging the duties of his high office with a degree of resolute uprightness, which, however distasteful, on more occasions than one, to both the houses of lords and commons, gained him popularity with his contemporaries, and has secured him the veneration of posterity. The only professional remains of this able magistrate are his edition of sir John Kelyng's Reports of Cases in Pleas of the Crown, in the Reign of Charles II, with Notes, printed in 1708, folio. Sir John Holt died in the spring of 1709.

Hölty, Lewis Henry Christopher. This lyric poet, who excelled particularly in the elegy and idyl, was born at Mariensee, in Hanover (1748). He was the son of a clergyman, was, when a boy, lively and desirous of knowledge, affectionate and pleasing; but the loss of his mother, and his sufferings from the small-pox, which attacked him in his 9th year, deprived him of his gaiety. His severe studies, which he often pursued until late at night, also contributed to this effect. His inclination for strong emotion, and his poetical talent, were early developed. In 1765, his father sent him to a school at Celle, and, 1769, to Göttingen. He studied theology faithfully, but without neglecting the ancient and modern poets, and without ceasing to exercise his own poetical talents. As early as 1769, he had gained the reputation of a young man of genius, and Kästner admitted him into his German society. He subsequently became acquainted with Bürger and Miller, and afterwards with Voss, Boje, count Stolberg, and the other members of the society of poets at Göttingen at that period, where the young members met once a week, to assist each other in their labors. The best of Hölty's poems, even in the department peculiar to him, were written at this period, when he was much excited by the influence of this association. To enable himself to remain at Göttingen, he applied for a place in the philological seminary, and endeavored to earn something by translations and by giving instruction. Love also contributed to bind him to this city. Like Petrarch, he became acquainted with a Laura, but never made known to her his affection. His health was undermined by severe study, and his father's death (1775), which affected him deeply, increased his debility. Conscious of the near approach of death, he wrote many touching elegies, and was occupied with a collection of his poems, when he breathed his last, Sept. 1, 1776. In tender elegiac or idylic poetry, he is peculiarly successful. An edition of his poems was edited by Voss and Stolberg (1783), finally corrected and increased by Voss (1804).

Holy Alliance. Suffering turns the

eyes of nations, as well as of individuals, to Him who consoles when all other hope is gone. This was the case with the Germans in the time of Napoleon, when, for a long series of years, they endured all the horrors of invasion and war. They took refuge in religion, more particularly as their sufferings were considered the direct consequences of the French revolution, which they looked upon as a work of impiety. The emperor Alexander, as is well known, had also, at least as early as the war with Napoleon, acquired a religious turn of mind, which seemed to increase during the campaign in Germany and France. All the allies, in short, as well as their people, participated more or less in this deep religious feeling, whilst Napoleon was held up as the representative or incarnation of evil. After the fall of Napoleon, this religious feeling still remained strong in the minds of the people of Europe, and blended with their notions of politics and government, which, in the case of the great mass, were, of course, crude and superficial. They were induced to believe, that religion might be made the basis of international politics. Availing themselves of this feeling, the sovereigns were enabled to form the league denominated the *Holy Alliance*, which was proposed by the emperor Alexander of Russia. Participating in the spirit abovementioned, and desirous to become the pacificator of Europe (an idea which appears to have flattered Napoleon's ambition in the first years of his government), and perhaps instigated by madame Krüdener (q. v.), he proposed this union, Sept. 26, 1815, after the defeat of Napoleon at Waterloo had cleared the way for the execution of his desire of establishing a settled peace in Europe. Alexander, Francis of Austria, and Frederic William of Prussia, signed with their own hands, and without the countersign of a minister, the act establishing this alliance, which is said to have been sent to the two latter in the hand-writing of the first. Alexander published the act in 1816, and at a later period the two other monarchs followed this example. It consisted of a declaration, that, in accordance with the precepts of the gospel of Jesus Christ, the principles of justice, charity and peace should be the basis of their internal administration, and of their international relations, and that the happiness and religious welfare of their subjects should be their great object. It was also stipulated, that the three sovereigns should invite others to become members of the Holy Alliance. We do not believe that Alexander foresaw to what violations of justice this alliance would lead; but he is, nevertheless, reprehensible for the consequences of a union founded on principles so indefinite. The sovereigns were soon obliged, by the course of events, to become more precise; and what was at first merely an act of weakness, soon became a conspiracy of the governments against the nations. It was distinctly understood, that the sovereigns became members of the league personally, and, therefore, no counter-signature of ministers was necessary; no guarantees were stipulated. This personal union of princes is either a contradiction in terms (for what is the monarch personally, as distinguished from a chief magistrate, and considered with reference to his own private disposition, but a simple individual?) or it implies that the sovereign is a ruler in his individual capacity, constituted by divine right, so that he never can be separated from the idea of a state or government; but behind this notion lurk all evil and tyranny, an entire contempt of the principles of justice and sound sense. What, then, did these monarchs personally pledge themselves to do? To rule according to the principles of justice and charity. How charity can be made a principle of political relations, it is difficult to say; and, as for justice, a compact to be governed by it in future would seem to imply that it had not been their rule in times past. It had been generally conceded, even by the supporters of despotic governments, that rulers were established for the good of the people; only the people were to be regarded in the light of school-boys, who should submit implicitly to their teachers. The members of the holy alliance, however, thought it necessary to make a formal compact, to act justly towards their subjects. As regarded the subject of international relations, the sovereigns showed very little political wisdom when they supposed that a personal pledge could withstand the strong current of events. The name of this league, too, was ill chosen, besides being arrogant; since an institution with a similar name—the *holy office* (and not entirely different, in respect to religion, from what the holy alliance turned out to be in respect to politics)—had drawn upon itself the abhorrence of mankind. As the founders of the holy alliance were a Russian and two German princes, the nations directly interested in it said little against it. In Russia, of course, nothing was permitted to be said; and the Germans are

so little versed in politics and public right, that, far from seeing through the league, they were misled by their natural *bonhommie*, to consider it as indicating the approach of a new era of Christian government, or were led to praise it from habits of obsequiousness. Some writers, whom we can hardly suppose to have been actuated by servile motives, and among them even professors in the universities, suffered themselves to fall into a strain of extravagant panegyric, in speaking of the holy alliance, which is quite unaccountable; while others immediately denounced it. One writer* says, that only since the establishment of the holy alliance, can we speak of Christian politics, whilst history would designate all former politics as heathenish, because derived from the Greeks, Romans and barbarians. Another writer† says, "Jealousy, ambition, passion, intrigue, will be banished from the circle of the sovereigns and their cabinets, and Christian charity will take their place. The rulers have united to rule according to the principles of love, of justice and peace, and to act towards each other accordingly. A union of crowned friends, united by the ties of a noble confidence, will watch for the happiness of nations, and, by united efforts, remove every thing hostile to their repose, particularly the fanatical spirit of revolution, which has for years disturbed the peace of nations, and arrayed them against each other on the field of battle," &c. These sentiments were adopted and echoed by a large party. Let us see, then, how these crowned friends watched over the happiness of nations. As early as in 1818, a congress was held at Aix-la-Chapelle, in which the holy alliance came out more distinctly with its intentions. A *Déclaration des Monarques* (Nov. 15, 1818), signed by eight ministers, was issued by five powers (the kings of England and France having acceded to this alliance as individuals, though not in their official capacity, not being able to blend the two characters with the same ease as the three other monarchs). The declaration stated that peace was the object of the alliance, and the system of *legitimate stability* was announced. The *Conservateur Impérial*, at Petersburg (March 14, 1817), had already given the views of the monarchs in regard to what they thought to be *justice* and *charity*. From this congress dates the beginning of those congressional politics, of which we have spoken in the article *Congress*, and the great conspiracy of kings to subdue the liberal spirit then breaking out all over the continent of Europe. All the European sovereigns finally became members of the holy alliance, except the pope, who, of course, could not be a member of a religious league, without being at its head. The German princes, soon after the congress of Aix-la-Chapelle (q. v.), began their persecutions of the liberals, and, in November, 1819, a German congress was held at Vienna, at which Metternich presided, and which lasted until May, 1820. In the autumn of the same year, the holy alliance, at least several of the powers as members thereof, held a congress at Troppau (q. v.) on account of the disturbances in Spain, and when the revolution in Naples broke out, the congress was transferred to Laybach, in Carniola, where the right of armed intervention (i. e., a forcible interference in the internal affairs of any nation, whose condition is not agreeable to the views and Christian intentions of the crowned friends), already agreed upon at Troppau, was diplomatically admitted into the international law of the powers of the European continent. After the Austrians had, as the phrase was, restored quiet in Italy, Austria, Russia and Prussia issued a proclamation, that the justice and disinterestedness which had hitherto guided the councils of the sovereigns, would always be the rule of their politics. In 1822, the chief powers and their adherents held a new congress at Verona (see *Congress*), on account of the insurrections in Spain and Portugal, and the political state of Italy and Greece. The war of France, or rather of the Bourbons, against Spain, in 1823, was a consequence of this congress. We all know the deplorable consequences of this invasion. Spain was thrown back into barbarism. For the Christian views of the holy alliance respecting Greece, see *Greece*, page 26; and as to Italy, no unprejudiced visitor of that country will assert that it is happy under the watchful care of the holy alliance. As the views of the holy alliance became more decidedly manifested, England drew off from it, and, after Canning's appointment as secretary of foreign affairs, she refused to interfere with the internal affairs of Spain, through the duke of Wellington, the English minister at Verona. The manner in which the principles of the alliance were viewed by the U. States, appears from the message of president Monroe (1825),

* The article *Holy Alliance*, in the *Conversations-Lexicon*.

† The article *Holy Alliance*, in the *Rhenish Conversat. Lexicon*.

in which he declared, that any attempt, on the part of the European powers, to extend the system of national interference to any portion of this hemisphere, would be considered as dangerous to the peace and safety of the U. States; and that any interposition, by any European power, for the purpose of controlling, in any manner, the governments of America which had established their independence, would be considered as the manifestation of an unfriendly disposition towards the U. States. (See *Congress of Panama*, vol. iii, p. 435.) The constant violation of the promises to provide for civil liberty in Germany and Italy; the suspension of the constitution of Poland; the benumbing oppression extended all over the European continent; the arrogant proscription of all forms of government not agreeing with its views; the assertion of divine right and legitimacy, in direct opposition to the spirit of the age; many persecutions and sufferings to which virtuous citizens have been subjected,—is the sum of what has been done by this league. It is highly probable too, that the late French government had received promises of support from the allies before issuing its fatal ordinances. In future, the allies will, of course, have not a friend, but an opponent, in the French government. The readiness of the members to acknowledge the independence of Belgium, is a proof that the holy alliance has been compelled to abandon its principles of "legitimate stability;" and, in fact, the people at this moment oblige each monarch to direct his attention so much to his own affairs, that it can hardly be considered as still existing. But certainly, should the people be overcome, it would show itself in all the fierceness of tyranny. Sir James Mackintosh says of the doctrine of legitimacy, in the sense in which it is used by the holy alliance, "sophistry lent her colors to the most extravagant pretensions of tyranny," and, in case of the success of these pretensions (which may God avert), tyranny would lend the most formidable weapons in its arsenal to sophistry. We may observe, in conclusion, that, in proportion as the monarchs have united to keep down the people, liberty has become the common cause of all nations.

Holy Ghost. (See *Ghost, Holy.*)

Holy Ghost, Order of the. (See *Ghost, Order of the Holy.*)

Holy Office. (See *Inquisition.*)

Holyhead; a seaport town of Wales, situated near the point of the peninsula or island, which projects from the western coast of the isle of Anglesey, and now a place of considerable importance, since it has become the great port of communication to the Irish capital, and the rendezvous of the mail packets. A pier has been constructed, to allow vessels to land or sail at all times of the tide. A lighthouse is erected on the island of South Stack. The town of Holyhead consists principally of a long street, with detached buildings. Population, 2195; 278 miles north-west of London.

Holyoke, Edward Augustus, M. D., the son of the reverend Edward Holyoke, a president of Harvard college, was born August 1, 1728, old style, in the county of Essex, Massachusetts. He was graduated at Harvard, in 1746, and commenced the study of medicine the following year. In 1749, he began to practise his profession in Salem. He never was as far as fifty miles from the spot on which he was born. He was twice married, and had a numerous offspring. He died March 31, 1829, being then over one hundred years of age. Doctor Holyoke was always deemed an acute and learned physician, and a good anatomist and surgeon. He was one of the founders, and the first president, of the medical society of Massachusetts. He published various scientific disquisitions. He was versed in natural philosophy and astronomy. He seldom passed a day, for the first sixty years of his practice, without noting down some fact or observation, forming an increase of his professional knowledge. His meteorological observations were recorded daily for 80 years. When he was 92 years old, he performed the operation of paracentesis. Several of the most distinguished physicians of New England were educated under his tuition. He corresponded with eminent philosophers abroad. In a letter written by him, so late as October, in the year 1828, he mentions, that he was blessed with an excellent constitution; that he maintained his health by constant exercise, having, between the ages of 30 and 80, always walked in the practice of his profession; that he was not particular in his diet, but temperate as to quantity, and that he had a good set of teeth, but lost them all, through their gradual decay, by his 80th year. His temper was cheerful; he kept his passions under due restraint. He ascribed his longevity, in part, to "his always having taken care to have a full proportion of sleep." He ate very freely of all kinds of fruit. His hearing and memory were impaired for the last 30 years of his life,

but even after he had attained his 100th year, he took interest in the investigation of medical subjects, and wrote letters which show that he still possessed clearness and strength of understanding. When he was 45 years old, he required for his sight the aid of convex glasses. These he employed for 40 years, when his eyes gradually improved, and, at the time of his death, he was able to read the finest print without the help of spectacles. His medical brethren of Salem and Boston united in giving him a public dinner on his one hundredth birth day. An interesting memoir of his life and character has been published at the request of the Essex medical society.

Holyrood, Palace and Abbey of, in Edinburgh, at the eastern extremity of the Old Town. The abbey was founded in 1128, by David I, and was used as the royal cemetery. It is now entirely in ruins. The palace is a large quadrangular building of hewn stone, with a court within, surrounded by a piazza. It contains a gallery 150 feet long, in which are portraits of all the Scottish kings. It is now used at the election of the sixteen peers of Scotland, to represent their order in parliament. In the north-west tower, the bed-chamber of the unfortunate Mary, with the remains of her crimson damask bed, is still to be seen, and an adjoining cabinet, from which Rizzio was dragged, and murdered in her presence. A large portion of it was repaired for the Bourbon princes, who resided here after the revolution. It has since been occupied by the duke of Hamilton, hereditary keeper of the palace, and other noblemen and persons with interest enough to procure admission, and again became the residence of the Bourbons, after they were compelled to leave France by the revolution of 1830.

Holy Water, in the Greek and Roman Catholic church; water which has been consecrated by prayers, exorcism, and other ceremonies, to sprinkle the faithful and things used for the church. "By this benediction," says the *Dictionnaire de Théologie* (Toulouse, 1817—a Catholic work), "the church implores God to purify those who use it, from sin, to avert the temptations of the enemy of salvation and the snares of this world. In the apostolic constitutions, the holy water is called a means of expiating sins, and putting the evil spirit to flight." It is contained in a particular kind of vases, probably in imitation of the brazen sea of the Jews, at the doors of churches, and also within them at certain places, from which the Catholics sprinkle themselves before prayer. Holy water is also often found in the chambers of the Catholics, and is used before prayer, particularly before going to bed. The Roman Catholic church seems to consider holy water not only symbolical of the purity of the soul, but, in certain cases, as effectual in exorcism. In Rome, animals are also sprinkled with holy water, on a certain feast, to keep them healthy and thriving. The Protestants renounced the use of holy water, probably from a fear that it would be considered, like amulets or relics, as something efficacious in itself, without the repentance commanded by the church. Ablutions have always been used by pagans and Jews, and the sprinkling with water is typical of washing or ablution. Protestant writers assert that vessels were not placed at the doors of churches, for washing the hands, before the 4th century, and that the water was not blessed for this purpose until the 6th century; but Catholic writers consider it to be proved, that this custom is handed down from the time of the apostles. (See father Le Brun, *Explic. des Cérémonies*, vol. i, p. 76.)

Holywell; a town and parish of North Wales, in Flintshire, formerly an inconsiderable village, but now become, from its mineral riches, and the vast manufactures carried on in the neighborhood, a rapidly improving and flourishing town. In this district the great lead mines of Flintshire are situated. The principal manufactures round Holywell are immense copper and brass works, besides cotton mills and silk works. The situation is recommended by the easy access to the sea, and the vicinity of the Flintshire coal pits. The machinery at these works is set in motion by a stream, occasionally aided by steam, which issues from the remarkable holy well of St. Winifred, boiling up with violence as from a caldron. Population, 8309.

Homburg. (See *Hesse-Homburg*.)

Home is etymologically the same with the German *heim*, not any longer employed as a substantive, and formerly signifying an enclosure as well as an enclosed field,—also a tent. The German *Heimath* is an expressive word for one's country, but no European language has a word expressive of the same ideas of independence and comfort as the English *home*. With the southern nations, this may be owing to the circumstance that their happiness is not so closely connected with a particular residence, whilst an Eng-

lishman, obliged by his climate to seek for true comfort within doors, accumulates there his means of happiness. The word retains the same expressiveness among all people of English descent. When used in reference to one's country, it has the sense of the German *Heimath*. The word was commonly used in the American colonies, before the revolution, in reference to England. At the present day, advertisements continually appear in the Calcutta papers of vessels "bound home," meaning to England.

Home, Henry (lord Kaimes), a Scotch judge, eminent for his writings on various subjects, was descended from a noble family. He was born at Berwick in 1696, and received his education from a private tutor at home. In 1712, he was bound to a writer of the signet, but, ambitious of becoming an advocate, he zealously supplied the defects of his education, and fitted himself for the bar, to which he was called in 1724. He soon acquired reputation by a number of publications on the civil and Scottish law, the first of which, consisting of Remarkable Decisions in the Court of Session, appeared in 1728. This was followed, in 1732, by Essays on several Subjects in Law. During the troubles in 1745 and 1746, he sought shelter in retirement, the fruits of which appeared in 1747, in his Essays upon several Subjects concerning British Antiquities. In 1757 appeared his work, the Statute Law of Scotland abridged, with Historical Notes; in 1766 and 1780, additional Decisions of the Court of Session; and, in 1777, his Elucidations respecting the Common and Statute Law in Scotland. In 1752, he became a judge of session, and assumed, according to the custom of Scotland, the title of lord Kaimes. From his youth he had a great turn for metaphysical disquisitions, and maintained a correspondence with bishops Berkeley and Butler, doctor Clarke, and other eminent reasoners. In 1752, he published Essays on the Principles of Morality and Natural Religion, in which he advocates the doctrine of philosophical necessity. His Introduction to the Art of Thinking (12mo., 1761) is useful to young persons. In 1762, he published his Elements of Criticism (3 vols., 8vo.), in which, discarding all arbitrary rules of literary composition, he endeavors to establish a new theory on the principles of human nature. Its chief defect is an unnecessary multiplication of original tastes or principles. He followed this elaborate work, in 1773, with two quarto vols., entitled Sketches of the History of Man, which is ingenious and entertaining, but not always founded on the best information. In 1776, at the age of 80, he published the Gentleman Farmer; being an Attempt to improve Agriculture, by subjecting it to the Test of Rational Principles, (8vo.). He died in 1782, at the age of 86.

Home, John, a dramatic writer, was born near Ancrum, in Roxburghshire, in 1724. He was educated at Edinburgh, for the church. In 1745, he took up arms on the royal side, and was made prisoner at the battle of Falkirk, but contrived to escape, and was licensed to preach in 1747. After visiting London, he was settled as minister at Athelstaneford, in East Lothian, where he composed his tragedy of Agis, which was refused by the London managers. His Douglas being also refused by Garrick, the author had it performed at Edinburgh, in 1756, himself and several of his clerical brethren being present. For this departure from the usages of the church of Scotland, the author was threatened with ecclesiastical censures, and in consequence resigned his living, and ever after acted and appeared as a layman. As a persecuted man, he was complimented on this occasion by David Hume, who, in a strain of high panegyric, addressed to him his Four Dissertations. His Douglas became a stock piece. Several other dramatic attempts by him completely failed. The Siege of Aquilea, the Fatal Discovery, Alonzo, and Alfred, had not even temporary success. His History of the Rebellion of 1745—6 (4to.), also disappointed public expectation. He died in 1808, at the advanced age of 85.

Homer and the Homerides. The little which we know of the life of one of the most distinguished poets, is very uncertain. According to common tradition, his father was Mæon, his mother Critheïs, and he was a child of love, born on the river Meles, not far from Smyrna. Hence he was called, from his father, *Mæonides*, and from the place of his birth, *Melesigenes* (born on the Meles). Other genealogies are also given. It is well known that seven cities disputed for the honor of being his birthplace: Smyrna, Colophon, Chios, Argos, Athens, Rhodes and Salamis: instead of the two latter, however, some mention Cumæ and Pylos. If we search his poems for indications of his birthplace, we shall find several passages from which it may be inferred that he lived in Asia Minor, probably in Ionia, or in a neighboring island. (See Wood's essay On the Original Genius of Homer.)

According to the hymn to Apollo, quoted by Thucydides, he lived in Chios. Smyrna and Chios seem to have the strongest arguments in their favor. If we inquire farther, When did Homer live? the same uncertainty meets us. It is doubtful whether he should be referred to the 10th, 9th or 8th century before Christ. The second date is the most probable. Phemios and Pronapides are mentioned as his teachers, according to a late biography, which is destitute of authority. The many journeys which he is said to have made, not only through Greece, but also through Phœnicia and Egypt, seem to have been attributed to him merely on account of the knowledge of the geography and navigation of his time, displayed in the poem. If Homer was really blind, as Pausanias declares, he certainly cannot have been so from his birth, for it would be impossible for a man born blind to give such descriptions of visible things as he does. Some have represented him as a blind schoolmaster, and others as a blind beggar, who was obliged to sing his songs before the doors of the rich for bread. This assertion is inconsistent with all we know of the ancient Greek bards and their manner of life. If not rich and powerful, they were at least respected and esteemed, and equally welcome in the assemblies of citizens, in the palaces of princes, and at public sacrifices. If, therefore, Homer was, as indeed is probable, a wandering singer, he certainly was no beggar. Of the circumstances of his death, we know as little which can be relied upon. Yet his grave has been shown on the island Ios (now Nio). So little do we know of Homer! But what if there never was such a person as Homer? According to an old tradition, he is descended, in the fourteenth degree, from a Thracian bard; the names of his mother, father and grandfather have reference to poetry. What, then, if this genealogy (as is the case with many of the mythological representations of other subjects) is merely an allegorical history of poetry, which was brought from Thrace through Thessaly to Greece, and thence passed to Asia Minor? Homer, in such a case, would be a collective name, and signify an Ionian school of poets, in which poetry was learned and handed down from generation to generation. (See the celebrated Frederic Schlegel's *History of the Poetry of the Greeks.*) On this supposition, the contradictory accounts of Homer might be explained. More distinct information on these points is perhaps contained in the poems which we possess under the name of Homer. Twenty-four poems are ascribed to him, which are lost. Those which are extant are the Iliad, Odyssey, Batrachomyomachia, Hymns and Epigrams. Criticism decides that all four of these cannot be ascribed to Homer. The Batrachomyomachia (i. e., the Battle of the Frogs and Mice), a mock-heroic poem, is evidently merely an attempt, and a successful one) to travesty the Iliad and Odyssey, and its contents, language, and the customs to which it refers, betray a much later age than the other Homeric poems. The Hymns are chiefly of an epic character, and essentially different from those of Orpheus, and are only fragments of ancient Cyclic poems, or preludes of rhapsodies; they are also considered by the more acute critics to be of a much later age than the two great epics, and not to be by the Ionic bard. There remains, then (as the Epigrams are out of the question), only the two larger poems, the Iliad and Odyssey, from which we can form any judgment of Homer. The whole mass of stories in these poems revolves round two great centres; the one, a renowned national enterprise, redolent of youthful vigor and the glory of courage (as conceived of by nations in their infancy, very different from moral firmness, or even from the military valor of our times); the other, a full picture of domestic life, united with the charming, the wonderful of distant countries, and exhibiting a model of sagacity, victorious, at last, over a thousand obstacles. We do not mean that the works exhibit a settled plan, based upon these leading ideas, and to which all the parts are subservient, but that such is the result to which we are brought by putting together all the parts of the two poems. Even the ancients felt, that the Odyssey was composed in a very different spirit from the Iliad, which has much more fire and elevation. The style of the two poems is different. In the Iliad, one book often contains forty similes, whilst the whole Odyssey contains but twenty. Longinus (ch. 33) speaks at length of the difference between the Iliad and the Odyssey; according to him, the author of the Iliad resembles the rising, and the author of the Odyssey the setting sun. The tone of complaint which prevails in the Odyssey is cited as a confirmation of the supposed old age of the writer. Some Alexandrine scholars received the name of *chorizontes* (i. e. the separating), because they believed the poems to be by different authors. In the Odyssey, the language,

ideas and mythology are different from those of the Iliad. What is done in the Iliad by Iris, is performed in the Odyssey by Mercury. No god or goddess is precisely the same in both poems; the figures have changed. The Olympus, the notions of the kingdom of the shades, the costume of the gods in their intercourse with mortals, are different; customs, manners, moral notions, the arts and sciences, are advanced. The supposition, therefore, that the two poems belong neither to the same poet, nor to the same age, is obvious, and cannot be entirely rejected. Wolf, the famous German philologist, went still farther in his *Prolegomena* to Homer, and maintained new views respecting the ancient epic poems of the Greeks in general, and the Homeric in particular. Neither the whole Iliad, nor the whole Odyssey, is, according to him, the work of one author, but each was originally a series of songs of different poets. The proofs of this assertion are the following: In the time of Homer, the art of writing, if invented, was at least not in common use among the Greeks, and not carried so far as the writing of books. But if Homer did not know how to write, he could never have conceived the idea of composing works of such extent. The Greeks, in the time of Homer, were not so far advanced in civilization as was necessary for the composition of such a whole; because, though there is by no means an entire unity of plan in these poems, particularly in the Iliad (as has often been asserted; in fact, all perfections have been attributed to these poems), yet it is an artificial composition, and the Odyssey is still more so; this circumstance does not agree with the state of civilization in which the Greeks must have been at that early period, according to all appearances. In addition to this, there is in the poem itself a great inequality, particularly between the first and last books. From the 19th to the 22d book of the Iliad are traces of a tone of thinking and expression foreign to the preceding part of the work. From the 8th book we perceive marks of the process employed to connect the rhapsodies. Finally, in the time of Homer, the language was not carried to such a grammatical perfection as it appears in both poems, and according to Hermann (edit. *Orph.* p. 687), the metre is not the same: thus, for instance, a very great difference in this respect is observable between the 13th and 23d book. The result of all these investigations is, that neither of these epics is from one author, nor of the same age. Several parts may be discovered, which form wholes by themselves; for instance, the 7th, 8th and 9th books form one rhapsody—the victories of Hector. Other parts also form wholes of themselves; some of them were evidently inserted at a later period, as was acknowledged by the ancients; among them are the catalogue of ships, the games, the episode of Dolon, and others. The question then is, How were these separate parts combined into two wholes? For centuries, these parts were detached songs, preserved by the rhapsodists, the favorites of the Ionian Greeks. Lycurgus, about a generation after Homer, first brought the Homeric poems into the mother country, on his return from Crete and Asia. Three centuries later, Pisistratus and the Pisistratidæ began to collect the works of Homer, and ordered that they should be annually sung at the feast of the Panathenæa, by the rhapsodists. After they had been reduced to writing, and put in order, they underwent repeated revisions, their deficiencies were supplied, they were continued, and at last received their present form from the labors of the Alexandrine scholars. These epics also owe their division into 24 books to these learned men, according to the number of the letters of the alphabet. (For the periods which are to be distinguished, see Wolf and Schlegel, in the work already quoted.) The scholars engaged in this labor were called *diaskeuastes* (i. e. editors). Before these *diaskeuastes*, therefore, we cannot speak of an Iliad or an Odyssey. They have not, then, in all probability, their original form, because, even on the supposition of the most faithful tradition, deviations from the original would be unavoidable in so long a course of time. These changes became still more considerable by the boldness of the grammarians in correcting the various readings, and the rejection of passages became so frequent, as to give rise to a proverb—to cast Homer out of Homer. Not only single passages, but whole rhapsodies were rejected. From these circumstances we can judge how much we have or know of the original Homer. The (so called) *Homeric works* are, then, chiefly fragments of different authors, and the one Homer becomes several Homerides, i. e. bards of the same Ionian school (see *Greek Literature*) from which Homer himself proceeded, and over which he may have presided. The poets, however, are properly called *Homerides*, or descendants of Homer, because they all bear the stamp of the beautiful Ionian epic school.

If we, nevertheless, continue to speak of *Homer's poems*, it is partly in conformity to custom, partly because the real Homer, whose existence cannot be positively denied, may have furnished the ground of these poems, and perhaps composed a considerable part of them. However this may be, this critical view (which has found adversaries in Harles, Voss, St. Croix, Mannert, Hug, Bouterwek, &c.) only denies the character of a regular epic to the Homeric songs,—an epic in which an original, artificial unity embraces the whole, and strictly subjects all the single parts to a plan, which binds together the whole poem; and on the whole nothing is lost but the rules which certain critics, blindly following Aristotle, derived from that pretended whole. A mechanical and dramatical unity, foreign to the epic, has been attributed to those poems, which may be denied the Homeric songs, without injury to their poetical value. Though there is no single, uninterrupted action in these poems, yet action is in general the life of the Homeric poetry. Nowhere do we find a pause in the action, or, as it is called, a *poetical picture* or description; every thing is in a constant progress; it grows before our eyes. But every mode of expressing action is not compatible with the epic; a passionate description would pass over into lyric or dramatic poetry. Homer's heroes may be moved by the strongest passions; the representation of them is always calm. What the poet relates finds its way to every feeling heart, but he himself never shows his feelings, neither inclination nor dislike. Totally lost in his subject, you never perceive his individuality. That the poems are not necessarily, on this account, the work of one man, appears from the fact that this was more or less the characteristic of classic art. Though the poet is himself a Greek, he speaks impartially of the Trojans. There is nothing in the poems which makes us impatient for the *dénouement*. A uniform developement, in constant progress, is the character of the Homeric epic. Herder therefore says of him: "The truth and wisdom with which he unites all the subjects of his world in a living picture, the firmness of every stroke in all the personages of this immortal picture, the divine freedom with which he contemplates the characters, and paints their virtues and vices, their successes and disasters—this is what renders Homer unique, and worthy of immortality." We cannot entirely agree with this view of Homer, because in Shakspeare this impartiality and absence of individuality is at least equally great, and much more admirable, as he is a dramatic poet, and the display of character is therefore his paramount object. In what we have already said, we have indicated what we consider the chief beauty of Homer. Few of his characters are of an elevated stamp. What, for instance, is the greatness of his chief hero, Achilles? The excellence of Homer consists in the simple, true and diversified representation of one powerful action, which was national, and therefore all-engrossing; a representation which, though always calm, is always true. It is, in one word, the poetical faithfulness, the calmness and devotion of the poet, together with the beauty of his language, which render Homer great. If it were only for the chaste and yet powerful use of the noblest idiom ever spoken, so harmonious, finely organized and expressive, the pages of the Ionian epic would amply repay perusal. If the Homeric poems had always been considered in a simple and unprejudiced manner, free from the influence of a thousand pedantic theories and exaggerations, they would have had fewer pretended admirers, but more who truly relished them. (For some excellent remarks on this point, see A. W. Schlegel's criticism of Göthe's *Hermann und Dorothea*. For some further observations, see the article *Nibelungenlied*.) Germany possesses the best translation of Homer, by the great scholar J. H. Voss; there are also many other translations in the same language. Wolf's translation of 100 verses of the Odyssey (in his *Analecta*) exhibits the highest excellence of which a translator is capable; but the rules which he prescribed to himself of a close adherence to the original cannot be expected to be carried through. The English version of Pope is rather a paraphrase than a translation, but the beauty of its diction has made it a standard English classic. Cowper's version is much more faithful, but inferior in beauty of language. Sotheby, the translator of Oberon and of the Georgics, is now engaged in translating the Iliad. Among the editions of Homer are those of Clarke (London, 1729—40, 4 vols., 4to., often reprinted); Ernesti (Leipsic, 1759—64, 5 vols., and 1824 et seq.); Wolf (latest edition, Leipsic, 1817, 4 vols.); Heyne (Iliad only, Leipsic, 1802 et seq., 8 vols.) So much has been written for the explanation of Homer, that a mere enumeration of the titles of the works would fill a volume. We may mention Wolf's and Knight's Prolegomena, Feith's Homeric Antiquities,

De Marée's Essay on the Civilization of the Greeks in the Time of Homer, Halbkart's Homeric Psychology, several works on the Morality and Theology of Homer, by Heyne, Harles, Delbrück, Hermann, Voss, Wagner; on the Geography of the Homeric Poems, by Schönemann, Schlichthorst, A. W. Schlegel, Voss and Völcker. Even on the medicine, mineralogy, and the general stock of knowledge contained in Homer, works are not wanting. We may mention also, for the general reader, Flaxman's Illustrations of Homer (designs from Homer's descriptions), and Tischbein's Homer, after Antiques, with Explanations by Heyne.

Homeromastix (from Ὅμηρος and μαστιζειν, to flagellate), the Scourge of Homer; a surname of Zoilus.

Home-Sickness, in medicine *Nostalgia*. The natural feeling of grief at a separation from the paternal home and native soil, becomes, in men of great sensibility, who go to a different climate (especially from a mountainous to a champaign country), and are surrounded by different scenery, without active occupation, a real disease. It shows itself by a deep melancholy, under which the whole nervous system in a short time suffers. The mind of the patient is filled with thoughts of his country, and with associations which serve to recall it. The desire of seeing it, and despair of gratifying the desire, engross him. As the disease of the nerves increases, spasms come on. The respiration of the individual becomes difficult, interrupted, and consists almost wholly of sighs. His appetite is lost. A deadly paleness extends over all his countenance, and his sight grows dim and weak. His heart beats immoderately, and throbs with the slightest motion. His secretions become irregular; congestions afterwards originate in the noblest organs; sleep flies from him, or consists principally of dreams, which are filled with the scenes he has left. Sudden death sometimes puts an end to this situation; but more commonly a slow, nervous and hectic fever ensues, which carries off the individual, if it is impossible to overcome the disease. A return to his home is the most effectual remedy. The confidence that this will happen has cured many. But when this is impossible, agreeable occupation is a better remedy than medicine.

Homicide is either justifiable, excusable or felonious. Of the first sort is the killing of public enemies in battle, in the prosecution of a declared war, in pursuance of the orders given by commanders duly commissioned. So where a crime is punishable capitally according to the laws, the judge is bound to condemn the criminal to death, and the sheriff or other executive officer to carry the sentence into effect, in the manner prescribed by the sentence of condemnation. But the judge must have jurisdiction of the offence, and be duly commissioned, and the executive officer must be empowered to carry the sentence into effect, and must perform the execution in the manner prescribed by law, otherwise the execution of the criminal will make the judge or the officer, as the case may be, guilty of criminal homicide. Sir Matthew Hale, being doubtful of the validity of his commission under Cromwell, declined sitting as judge in a capital case. So, too, where an officer of justice is resisted in the execution of his office, in his attempt to arrest a person in a criminal, or, as is maintained, even in a civil case, he is not obliged to give back, but may repel force with force, and if the person resisting is unavoidably killed, the homicide is justifiable, for few men would quietly submit to arrest, if, in case of resistance, the officer was obliged to give back. But if the party, instead of resisting, attempts to avoid an arrest by flight, the officer is not, in ordinary cases, justified in killing him to prevent his escape. It is, however, laid down as law, that if a felony be committed, and the felon attempts to fly from justice, it is the duty of every man to use his best endeavors to prevent an escape; and if, in the fresh pursuit, the party be killed, where he cannot be taken alive, it will be deemed a justifiable homicide. And this justification is not limited to those who may witness the act of felony, but extends to all who join in the fresh pursuit. The same rule applies to cases of an attempt, on the part of a felon, to break away and escape, after he has been arrested, and is on the way to gaol. So if a party has been indicted for felony, and will not permit himself to be arrested, the officer, having a warrant for his arrest, may lawfully kill him, if he cannot be taken alive. But this is to be understood only of officers, and not of private persons. Magistrates and officers authorized to suppress and disperse mobs, are justified, by the common law, in taking the requisite measures and using the requisite force for this purpose, though it extend to the killing of some of the rioters. An English statute of 21 Edward I provides for a case of forcible resistance of trespassers, which is not applicable in the U. States, where there is no

similar law. It relates to trespasses in parks, and provides that if a parker, forester or warrener finds a trespasser in his grounds, intending to do damage therein, who will not yield after hue and cry made to stand, but flees or defends himself, if he is killed in the attempt to take him, the homicide shall be no crime. And a striking application of this law is mentioned in Hale's Pleas of the Crown, in the case of sir William Hawkesworth, who, being weary of life, after blaming his parker for his negligence, and ordering him to execute the law rigorously against any one who should enter the park for the purpose of stealing deer, went himself into the park, by night, when he could not be distinguished by the keeper, and, on being questioned and refusing to stand, was shot, and the homicide was considered justifiable. The law arms every member of the community with the power of life and death for the prevention of atrocious felonies accompanied with violence and personal danger to others; as, in case of an attempt to murder or rob, or commit burglary or arson, the person making the attempt may, by the common law, if he cannot be otherwise prevented, be killed on the spot, and the law will not recognise the act as a crime. In cases of this sort, in order to justify the homicide, it must appear that there were good grounds for a suspicion that the person killed had a felonious intent. Thus in Levet's case, reported by Croke, Levet being awaked by one of his servants, and told that there were thieves in the house, got up, and with a drawn sword in his hand searched the different rooms to find the thieves. A servant had concealed Frances Freeman, a visitor of hers, in the buttery, not wishing her to be seen, and Levet's wife discovering Frances, it being too dark, however, to distinguish her clearly, called out to her husband that she had found the thieves, and he thereupon went into the buttery, and, thrusting with his sword in the dark, killed Frances. The homicide was held to be justifiable, though sir Michael Foster expresses a doubt whether sufficient caution had been used. But lord Hale considers it to be one of the cases in which the ignorance of the fact, and the strong grounds of the suspicion, afford a sufficient excuse. The cases already mentioned of justifiable homicide, are those in which the public authority and laws are directly concerned. The laws of society, however, leave every individual a portion of that right of personal defence with which he is invested by those of nature. If one may interpose to prevent an atrocious crime against society, where he is not himself in any personal danger, the laws will, *a fortiori*, permit him to defend himself against attacks upon his own person. This right may be more clearly explained in connexion with the subject of felonious homicide, usually classed under the titles of *murder* and *manslaughter*; for this latter term, though etymologically coinciding with the term *homicide*, is usually applied to cases of blamable homicide. Murder is the killing of a person who is under the protection of the laws, with malice prepense, either express or implied. Malice is the distinguishing characteristic of murder. It is not necessary, in order to constitute the crime of murder, that the slayer should have the direct intention of killing. If the act be done with a wicked, depraved, malignant spirit, a heart regardless of social duty and deliberately bent upon mischief, it is characterized by what the law denominates malice, though it may not result from any enmity or grudge against the particular victim. Thus, for instance, if a man resolves to kill the first person he may meet, a homicide committed in pursuance of such a resolution, is accompanied by the malice contemplated by the law as the characteristic of murder, although the parties may never have known each other. So if a man wantonly discharges a gun among a multitude of people, whereby any one is killed, the act will be done with that depravity of disposition which the law considers malice. Another instance of this intention of murder is, the purposely or wantonly letting fall a heavy body from the top of a house, or other height, into the street, where people are known to be frequently passing, and whereby any one is killed. The very definition of this crime imports that, like all other crimes, indeed, it can be committed only by a free agent. The crime presupposes a will, motive or disposition, on the part of the perpetrator. Nor will any mere threat so far take away his freedom of action as to excuse him for killing a third party, though the coercion used for this purpose might exonerate him from a contract made under its influence. An idiot or insane person cannot commit this crime. But drunkenness is, in general, no excuse for homicide, though the act be done under its immediate influence. But in the case of the U. States against Drew, reported in the sixth volume of Mason's Reports, Mr. Justice Story held that where a person had been so long in the habits of

intemperance, as to cause the kind of insanity known under the name of *mania a potu*, and was accordingly subject to an established derangement of mind, an act of homicide by such a person was not murder, but that he was to be considered as insane, and not responsible for crimes any more than if his mental disorder had been caused by any other vice, or without any fault on his part. The manner of killing is not material. Whether it be by sword, poison, beating, imprisonment, starvation, or exposure to the inclemency of the atmosphere, it will be equally murder. A son, who cruelly and unnaturally exposed his sick father to the open air during inclement weather, whereby his death was occasioned, was held to be guilty of mu·der; and so was a woman, who caused the death of her child by leaving it in an orchard scantily covered by leaves, whereby it perished; and so, also, persons having the care of a child, who caused its death by removing it from parish to parish without supplying it sufficient sustenance. A master who compelled his apprentice to sleep on boards, exposed to the atmosphere, and thereby occasioned his death, was held to be guilty of murder. This crime may be committed by mere advice and encouragement. In the case of the Commonwealth against Bowen, reported in the Massachusetts Reports, vol. 13, p. 356, a prisoner being condemned to death, and the day of his execution appointed, was advised by another to commit suicide, and disappoint the sheriff of the execution and the multitude of the spectacle. He did commit suicide, and the court instructed the jury that if the act was done in pursuance and in consequence of such instigation, it was an act of murder by the instigator. As to the person on whom a murder may be committed, the English books say it must be one "in the peace of the king," that is, a person entitled to the protection of the laws, as is one of the public enemy, if he is in the country and not participating in the war. An infant unborn is within the protection of the law, and it is laid down that if, in consequence of poison given or wounds inflicted before the birth of a child, which is afterwards born alive, it dies soon after its birth, the act is murder. The act of suicide is considered by the law to be murder, and the person making away with himself, is accordingly styled a *self-murderer*; and the laws of Great Britain, as well as those of the U. States, have heretofore attempted to punish this crime by directing that the body of a suicide should be ignominiously buried. But this was only punishing the surviving relatives and friends of the deceased for his offence; and though it should be admitted to be a discouragement of suicide, it would be a very questionable justification of the law, which will appear from applying the same rule to any other offence; as, for instance, we may suppose that if a man knew that all his relatives, friends and neighbors would be whipped for any theft he might commit, he might thereby possibly be induced, from motives of humanity, to refrain from thieving; but the chance of this salutary influence upon a vicious mind, would hardly be a sufficient justification of the law. These laws, inflicting punishment upon the living by the ignominious sepulture of suicides, have accordingly been very rarely put into execution, and the laws themselves begin to disappear from the statute book. The lines of distinction between felonious and excusable or justifiable homicide, and between manslaughter and murder, are, in many cases, nice and difficult to define with precision. But, in general, the accused has the advantage of any uncertainty or obscurity that may hang over his case, since the presumptions of law are usually in his favor. The characteristic distinction laid down in the books between murder and manslaughter is the absence of malice in the latter. Most of the instances of homicide which come under the term *manslaughter*, are those which the law considers excusable. Sudden provocation may be an excuse for striking another with the hand, or with a stick held in the hand, without the intention to give a deadly blow, and though death ensue, the party may not be guilty of murder. It is made a question whether mere words, unaccompanied by acts, such as menacing gestures, are a sufficient provocation to justify a blow or violence which results in homicide. Where a person, whose pocket was picked in a crowd, to avenge himself, threw the pickpocket into a neighboring pond, intending only to duck him, and the man was drowned, it was held to be only manslaughter. For though a bodily harm was intended, yet the injury which appeared likely to result from the act, was not greater than the provocation seemed to excuse, or at least palliate. One circumstance, showing the degree of malice, or, rather, showing its presence or absence, is the kind of weapon used in giving a wound on a sudden provocation; and another circumstance of importance is the fact of the weapon's being already in the hand or not, for going to seek a

weapon gives time for deliberation. The ground of excuse of homicide, in case of provocation merely, is the supposed sudden passion, some influence of which the law concedes to the frailty of human nature. But the excuse of self-defence goes still further; and where a man is attacked, so that his own life is endangered, or in such way that he may reasonably suppose it to be so, he may repel the attack with mortal weapons. One of the most frequent cases of manslaughter is that occasioned by single combat; and on account of the firm hold which the point of honor has taken of the civilized nations of the west, this has long been among the most difficult subjects of legislation. (See *Duel.*) The crime of murder, in its most aggravated degree, is punished with death throughout the civilized world; and, in England and a greater part of the U.States, this crime is so punished without exception. But in Pennsylvania and some other of the states, only murder in the first degree, that is, with deliberate intent, or committed with circumstances of great atrocity, is a subject of capital punishment; murder in the second degree, or of a less aggravated character, being punished by imprisonment in the public penitentiary for a longer or shorter period. Manslaughter is punished by imprisonment only, or by imprisonment and fine.

Homilius, Godfrey Augustus, music-director in the three principal churches at Dresden, one of the greatest organists and composers of church music of his time, born February 2, 1714, at Rosenthal, on the Bohemian frontiers, was made, in 1742, organist at a church in Dresden. He died June 1, 1785. Few of his compositions have been printed.

Hommel; the name of several great jurists in Saxony.—1. *Ferdinand Augustus Hommel* was born at Leipsic, in 1697, was professor of law and a member of the supreme court in the same place. He died, after a life devoted industriously to the science of law and the administration of justice, in 1766. His works show his philosophical mind and great legal erudition.—2. *Charles Ferdinand Hommel*, son of the preceding, was born in 1722; in 1750, taught law at Leipsic, and, in 1756, was made professor of the decretals. After having received many honors and titles, he died in 1781. He was one of the greatest jurists of his age. Besides his labors in the science of law, he contributed to introduce a better and purer language in the German courts. Besides the law, he was well versed in many other branches of science, as his *Bibliotheca Juris Rabbinica et Saracenorum Arabica*, his *Jurisprudentia Numismatibus illustrata*, and his many academical writings prove. Among his works are his German Flavius, that is, directions for drawing up sentences, both in civil and criminal cases (4th edit., augmented and corrected by doctor Klein, Bayreuth, 1800, 2 vols.); *Rhapsodia Quæstionum in Foro quotidie obvenientium* (7 vols., 4th edit., Leipsic, 1783—87, 4to.), of which the seventh volume, edited by Rössig, contains Hommel's Life; his *Oblectamenta Juris Feudalis* (Leipsic, 1755, 4to.); his work on Rewards and Punishments, according to the Turkish Laws (2d edit., 1772), &c.

Homo Novus (*Latin*, a new man); in ancient Rome, a person of plebeian birth, and the first of his family that held a curule office, with the right of putting a wax image of himself in the *atrium* of his house (*jus imaginum*), which placed him in the class of *nobiles*. The dignity thus acquired descended to his children.

Homœopathy; the name of a system of medicine, introduced by Samuel Hahnemann (q. v.), and which, for about 20 years, has attracted much attention in Germany, and, of late, in other countries also. The name expresses the essential character of the new system, which consists in this—that such remedies should be employed against any disease as, in a healthy person, would produce a similar, but not precisely the same disease (from ὅμοιον πάθος). The fundamental principle of this system is, therefore, *similia similibus curantur*. To find such medicines against any given disease, experiments are made on healthy persons, in order to determine the effect on them. In the conviction that every disease carries with it a great susceptibility for the proper medicine, and that the power of medicine increases by minute division, the homœopathist gives but one drug at a time, and does not administer another dose, or a new medicine, until the former has taken effect. At the same time, a strict diet is prescribed, that the operation of the medicine may not be disturbed. Homœopathy directs the attention chiefly to the symptoms of the disease, which are followed up and observed with much greater accuracy than formerly. Disease is considered by it as only an aggregate of symptoms; and therefore the business of the physician is to extinguish the symptoms. The disciples of this system care little about the customary names and divisions of diseases; they only regard the particular pains and debilities of which the varieties of sickness are com-

posed. The proximate causes of diseases, therefore, are little regarded, though the more remote causes are studied, at least in relation to diet. Every disease is considered as requiring a specific remedy. Homœopathy is thus in opposition to the Hippocratic system, which has existed, under various forms, for 22 centuries; and it has been exposed to numerous attacks on this account. We will mention some of the points in dispute. Homœopathy objects to the Hippocratic system, that it acts on the maxim *contraria contrariis curantur*, and therefore effects merely a palliative cure. This reproach is unjust, because the judicious physician endeavors to restore the diseased organs by the influence of the healthy organs, and the merest empiric alone attempts to cure by absolute *contraries*. The Hippocratic medicine does not even reject the homœopathic principle, as the treatment of nervous diseases proves. Secondly, the homœopathists accuse their opponents of directing their efforts against what cannot be known, the proximate cause of the disease; while, in turn, the homœopathist may be reproached with attaching himself merely to the superficial, external appearance of the disease, and with a pedantic minuteness in regard to those symptoms which disease assumes in a given case. Thirdly, the homœopathist accuses the others of administering remedies of which they do not know the effects; to which it may be replied, that the effect of a medicine becomes perfectly known only through a patient, never by a healthy person. Fourthly, the minuteness of the dose prescribed by the homœopathists is objected to by other physicians, who, however, should not forget that they constantly order a solution of one grain of tartar-emetic in eight ounces of water. The unnecessary or injudicious mixture of medicines has become much less common than formerly among the Hippocratic physicians. The Hippocratic school cannot reconcile itself to the idea that all classification of diseases under generic names is, in itself, without meaning, and that the course of acute diseases, the doctrine of the crisis, &c. (the basis of the Hippocratic medicine), is imaginary, since it rests on a faithful observation of nature. The old system, therefore, reproaches homœopathy not only with not knowing, but with disdaining to know, the nature of diseases. Since the knowledge of the nature and the course of diseases is the indisputable basis of the Hippocratic medicine, a great revolution in medicine is not to be expected from homœopathy. If its principles should prove true, it will result in a knowledge of specific means of cure, and thus make a valuable addition to medicine, as other systems have done. The works on homœopathy are already numerous. Hahnemann's *Organon der rationellen Heilkunst* appeared first at Dresden (1810), and has reached a fourth edition (1829); a French translation in Dresden by Brunow (1824), an English by Ahner, an Italian by professor Bernardo Quaranta, and Russian in Casan by Petersen. The *Reine Arzneimittellehre von Hahnemann* appeared, in six volumes, Dresden, 1811 to 1821. The Archives of Homœopathic Medicine, under the direction of Stapf, has been published at Leipsic, since 1821. Other works on homœopathy, some of which are against it, have been written by A. J. Hecker, Bischoff, Puchelt, Rau, Heinroth, &c.

Hompesch, Ferdinand, baron of, last grand-master of the order of the knights of St. John, was born, 1744, at Düsseldorf. In the 12th year of his age, he went to Malta, where he rose, successively, from a page of the grand-master to the rank of grand-cross, for 25 years was minister of the court of Vienna to his order, and, in 1797, was chosen grand-master. He was the first German invested with this dignity. When Bonaparte landed at Malta, on his passage to Egypt, in June, 1798, the works were surrendered by the commander, Bosreddon, without the knowledge of Hompesch. The grand-master, on the third day after the surrender, embarked for Trieste. He received 100,000 crowns for his plate, and was promised an annual pension, of the same amount, which, however, he did not receive; for, after his arrival in Trieste, he solemnly protested against the capitulation, as never consented to by him, and, some months afterwards, abdicated his dignity in favor of the emperor Paul I. He afterwards lived in obscurity and great distress. Necessity at length compelled him to go to Montpellier, to demand the arrears of the pension which had been promised him. He obtained, with much difficulty, 15,000 francs of this sum, and died in 1803. (See *Egypt, Landing of the French in.*)

Hondekoeter, or Hondekotter. There were three Flemish artists of this name.—*Giles*, born in 1583, at Utrecht, excelled in landscape painting.—His son, *Gysbrecht*, born in 1613, was celebrated for his delineation of ducks and other fowls, as well as of birds in general.—*Melchior*, the grandson, by far the most celebrated of the three, was born

in Utrecht, in 1636, and died there, in 1695.

Honduras, one of the states of Central America, is bounded north by the bay of Honduras, east by the Caribbean sea, south by Nicaragua, and west by Guatimala and Vera Paz; 890 miles from east to west, and 150 from north to south. The country consists of mountains, valleys and plains, watered by a great number of rivers. It was formerly one of the most populous countries of America; at present, though exceedingly fertile, it is almost a desert. The climate is hot and moist, and in many parts unhealthy. The soil is of great fertility, producing in abundance the various kinds of tropical fruits and vegetables. It yields three crops of maize and two of grapes in a year; other productions are wheat, peas, cotton, wool, with excellent pastures, honey, wax, provisions of all kinds; but mahogany and logwood form the principal exports. Chief towns, Valladolid, the capital, Truxillo, Gracias a Dios, St. Jago and Omoa. The part lying on the northern and eastern coast is known by the name of the *Mosquito Shore*, and is situated between 16° 10′ and 10° 25′ N. lat., and between 83° 55′ and 87° 50′ W. lon. It belongs to the Mosquito Indians. The British have settlements in the country.

Honduras; a large bay between cape Catoche and cape Honduras, having the coast of the province of Honduras south, that of Yucatan west, and the Caribbean sea east. Lat. 15° 30′ to 21° 30′ north. It is well known, from the British settlement of Balize, on the coast of Yucatan, formed for the purpose of cutting mahogany and dye woods. The town of Balize contains about 200 whites, upwards of 500 free people of color, and about 3000 slaves. Besides mahogany and logwood, the country produces various other kinds of valuable trees, and the soil is very fertile, adapted to sugar, coffee, indigo, cotton, and all the West India productions. The approach of the extensive coast which lies contiguous to the bay of Honduras is at all times dangerous, more especially so during the continuance of the north winds.

Honey; a vegetable product, very similar in its properties to sugar. It is found, in large quantities, in a number of vegetables, is collected by the bee, and is fed upon by many insects. It is always formed in the flower, chiefly at the base of the pistil, and it seems designed to receive and retain the fecundating pollen. Honey differs much in color and in consistence; it contains much saccharine matter, and, probably, some mucilage, from which it derives its softness and viscosity. Honey very readily enters into the vinous fermentation, and yields a strong liquor, called *mead*. There are two species of honey; the one is yellow, transparent, and of the consistence of turpentine; the other white, and capable of assuming a solid form, and of concreting into regular spheres. These two species are often united; they may be separated by means of alcohol, which dissolves the liquid honey much more readily than the solid. Honey has never been accurately analyzed, but some late experiments go to prove it to be composed of sugar, mucilage, and an acid. The honey made in mountainous countries is more highly flavored than that of low grounds. The honey made in the spring is more esteemed than that gathered in the summer; that of the summer more than that of the autumn. There is also a preference given to that of young swarms. Yellow honey is obtained, by pressure, from all sorts of honey-combs, old as well as new, and even from those whence the virgin honey has been extracted. The combs are broken, and heated, with a little water, in basins or pots, being kept constantly stirring; they are then put into bags of thin linen cloth, and these into a press, to squeeze out the honey. The wax stays behind in the bag, excepting some particles, which pass through with the honey. Honey is the production of most countries, yet more abundant in the island of Candia, and in the greater part of the islands of the Archipelago, than any where else. The Sicilian honey seems to be particularly high-flavored, and, in some parts of the island, even to surpass that of Minorca, which, no doubt, is owing to the quantity of aromatic plants with which that country is overspread. This honey is gathered three times in the year, in July, August and October. It is found, by the peasants, in the hollows of trees and rocks. The country of the lesser Hybla is still, as formerly, the part of the island that is most celebrated for this article. Considerable quantities of honey are produced by the wild bees, in the woods of North America. Honey is used in preserves and confectionary, and, in its pure state, to put upon bread; also as a demulcent medicine against hoarseness, catarrhs, &c., and externally, as a softening application, to promote suppuration. It is used, in its clarified state, to sweeten certain medicines. It is more aperient and detergent than sugar, and is particularly serviceable

in promoting expectoration in disorders of the breast, and as an ingredient in cooling and detergent gargarisms. For these, and other similar purposes, it is sometimes mixed with vinegar, in the proportion of two pounds of clarified honey to one pint of the acetic acid, boiled down to a proper consistence over a slow fire, and thus forms the oxymel simple of the shops. It is also impregnated with the virtues of different vegetables, by boiling it in the same manner, with their juice or infusions, till the watery parts have exhaled. It is the basis of several compositions in pharmacy, though in this way it is less used than formerly. It is also used in making mead. When collected from poisonous plants, as *rhododendron ponticum*, &c., it partakes of the qualities of the plants. The inferior qualities of honey, and what remains when it is purified, can be used in the preparation of brandy, vinegar, &c. Honey, as may be easily imagined, was one of the first articles of human nourishment. The gods of Greece were imagined to live on milk and honey (ambrosia). Aristotle, Celsus, Pliny, Ælian, and probably the ancients in general, did not know where honey originally came from; they thought it was a dew which fell from heaven. Pliny does not decide whether it issued from the heavens in general or from the stars, or was a juice produced by the purification of the air, and which afterwards was collected by the bees. The juice of the flowers, they believed, produced only the wax. Hence we find the honey flowing from the trees in great abundance, in the descriptions which the poets give of the golden age. In the Bible, we find mention made of bees'-honey, grape-honey (must, boiled to a sirup, and still used), and tree-honey, which is found upon the leaves of certain trees and shrubs, having been thrown out by certain insects (*aphis*, L.). In all the works on agriculture left by the ancients, we find much importance attached to honey and the care of bees. The ancients also ascribed medicinal powers to honey. In their domestic concerns, they used it as we do sugar, and made of it and good old wine a mixture very much liked. This was distributed among the soldiers when they returned in triumph.

Honey-comb; a waxen structure, full of cells, framed by the bees, to deposit their honey and eggs in. The construction of the honey-comb seems one of the most surprising parts of the works of insects; and the materials of which it is composed, which, though evidently collected from the flowers of plants, yet do not, that we know of, exist in them in that form, have given great cause of speculation. The wax is secreted, by the peculiar organization of the insect, in the form of small and thin oval scales, in the incisures or folds of the abdomen. The regular structure of the comb is also equally wonderful. The comb is composed of a number of cells, most of them exactly hexagonal, constructed with geometrical accuracy, and arranged in two layers, placed end to end, the openings of the different layers being in opposite directions. The comb is placed vertically; the cells, therefore, are horizontal. The distance of the different cakes of comb from each other is sufficient for two bees to pass readily between them, and they are here and there pierced with passages affording a communication between all parts of the hive. The construction of the cells is such as to afford the greatest possible number in a given space, with the least possible expenditure of material. The base of each cell is composed of three rhomboidal pieces, placed so as to form a pyramidal concavity. Thus the base of a cell on one side of the comb is composed of part of the bases of three on the other. The angles of the base are found, by the most accurate geometrical calculation, to be those by which the least possible expense was required to produce a given degree of strength. The sides of the cells are all much thinner than the finest paper; and yet they are so strengthened by their disposition, that they are able to resist all the motions of the bee within them. The effect of their thrusting their bodies into the cells would be the bursting of those cells at the top, were not these well guarded. But, to prevent this, the creatures extend a cord, or roll of wax, round the verge of every cell, in such a manner that it is scarce possible they should split in that particular part. This cord, or roll, is, at least, three times as thick as the sides of the cell, and is even much thicker and stronger at the angles of the cells than elsewhere, so that the aperture of each cell is not regularly hexagonal, though its inner cavity be perfectly so. The cells which have served or are to serve for the habitation of the worms of the common and of the male bees, are often made also, at other times, the receptacles of honey; but, though these are indifferently made to serve either use, there are others destined only to receive honey. The celerity with which a swarm of bees, received into a hive where they find themselves lodged to their minds,

bring their works of the comb to perfection, is amazing. There are vast numbers at work all at once; and, that they may not incommode one another, they do not work upon the first comb till it is finished, but, when the foundation of that is laid, they go to work upon another, so that there are often the beginnings of three or four stories made at once, and so many divisions allotted to the carrying on the work of each.

Honey Locust, Sweet Locust, or Black Locust (*gleditschia triacanthos*). This lofty and beautiful tree seems to belong, properly, to the region west of the Alleghany mountains, occurring, however, within the valleys of those mountains; but on approaching the Atlantic coast, it entirely disappears, except in the vicinity of habitations, where it is frequently planted for the sake of ornament. It belongs to the natural family *leguminosæ*. The leaves are pinnated, divided into numerous small leaflets, which give a light and very elegant appearance to the foliage; the flowers are greenish and inconspicuous, and are succeeded by long, flat, pendulous, and often twisted pods, containing the large brown seeds, enveloped in a pulp, which, when arrived at maturity, is extremely sweet. This tree is especially remarkable for its formidable branching thorns, frequently growing to the length of several inches, on which account it has been recommended for hedges. The wood resembles that of the locust, but is coarser grained, and, notwithstanding its excessive hardness when well seasoned, is but little esteemed. —The *G. monosperma*, a tree inferior in dimensions to the preceding, and distinguished by its pods, containing a single seed, inhabits also the Western States, but it is a more southern plant, and reaches the Atlantic in lower Carolina and Georgia. The wood is inferior in quality. A third species (*G. brachycarpa*) inhabits the same countries with the preceding.

Honeysuckle, or Woodbine. Several species of *lonicera* are cultivated for the beauty or delightful fragrance of their flowers. They are shrubby vines, with opposite simple leaves and long tubular flowers, disposed in terminal heads, or whirls. The *L. caprifolium*, a native of Europe, is a familiar and favorite plant, especially remarkable for the delicious perfume of its flowers, which are irregularly divided, as in most of the genus. The *coral honeysuckle*, a scarcely less familiar plant, inhabits the southern parts of the U. States and Mexico, and differs from the preceding in its red flowers being destitute of fragrance, and having the margin of the corolla regularly and not deeply divided. It was introduced into Europe in the year 1656, and is now frequent there in gardens. Both these species, as well as many others, are hardy plants and of easy cultivation. Five other species inhabit the U. States, principally in the northern or mountainous districts. The term *honeysuckle* is often improperly applied to a kind of clover, as also, in this country, to some species of *azalea*.

Honfleur; an irregularly built and ill fortified town of France, in the department of Calvados, on the Seine, opposite to Havre de Grace. It has a good harbor, and some maritime trade. It has manufactures of lace, hardware, vitriol, cordage, &c. Population, 9798; 30 miles N. E. Caen; lon. 0° 14′ 14″ E.; lat. 49° 25′ 13″ N.

Hong Merchants; a body of 8—12 Chinese merchants at Canton, who alone have the privilege of trading with Europeans, and are responsible for the conduct of the Europeans with whom they deal.

Honor, in law, is used especially for the more noble sort of seigniories, on which other inferior lordships or manors depend by performance of some customs or services to those who are lords of them. Before the statute 18 Edward I, the king's greater barons, who had a large extent of territory holden under the crown, frequently granted out smaller manors to inferior persons, to be holden of themselves, which therefore now continue to be held under a superior lord, who is called, in such cases, the *lord paramount* over all these manors; and his seigniory is frequently termed an *honor*, not a manor, especially if it has belonged to an ancient feudal baron, or been, at any time, in the hands of the crown. When the king grants an honor with appurtenances, it is superior to a manor with appurtenances; for to an honor, by common intendment, appertain franchises, and, by reason of those liberties and franchises, it is called an *honor*.

Honor, Courts of. There is a court of honor, over which the earl-marshal of England presides, which determines disputes concerning precedency and points of honor.

Honor, Maids of; ladies in the service of European queens, whose business it is to attend the queen when she appears in public. In England, they are six in number, with a salary of £300 each.

Honor, Legion of. (See *Legion of Honor*.)

Honor, Point of. (See *Duel.*)

Honors of War are stipulated terms which are granted to a vanquished enemy, and by which he is permitted to march out of a town, from a camp, or line of entrenchments, with all the insignia of military etiquette.—In another sense, they signify the compliments which are paid to great personages, military characters, when they appear before an armed body of men, or such as are given to the remains of a deceased officer. The particular circumstances attending the latter depend greatly upon the usages of different countries.

Honorarium; the pecuniary reward for actions, services or works whose value cannot, in fact, be estimated in money (*operæ liberales*).

Honorius; the first Roman emperor of the West, son of Theodosius the Great. He succeeded his father, with his brother Arcadius, A. D. 395. He was neither bold nor vicious, but he was of a modest and timid disposition, unfit for enterprise and fearful of danger. He conquered his enemies by means of his generals, and suffered himself and his people to be governed by ministers who took advantage of their imperial master's indolence and inactivity. He died of a dropsy, in the 39th year of his age, A. D. 423. He left no issue, though he had married two wives. Under him and his brother, the Roman power was divided into two different empires. The successors of Honorius, who fixed their residence at Rome, were called the emperors of the West, and the successors of Arcadius, who sat on the throne of Constantinople, were distinguished by the name of emperors of the Eastern Roman empire. This division of power proved fatal to both empires, and they soon looked upon one another with indifference, contempt and jealousy.

Honorius (popes of the name). Honorius I was elected pope in 626. He favored the heresy of the Monothelites, which was condemned by the sixth council of Constantinople. He died in 638.—Honorius II, elected pope in 1124, was, at the time of his election, bishop of Ostia. A part of the bishops and cardinals had previously invested cardinal Thibaut with that dignity; but, both candidates having resigned, Honorius was reëlected. He died 1130.—Honorius III was raised to the papal chair 1216, on the death of Innocent III. Immediately on his election, he wrote to the king of Jerusalem to assure him of his support; to the bishops of France, to encourage pilgrims; and to the emperor of Constantinople, to promise him assistance against the schismatics. John, king of England, had left to his successor, Henry III, the burthen of a war with the French prince Louis, who laid claim to the English throne, and had been encouraged in his pretensions by Innocent. Honorius reconciled the barons with Henry, and obliged Louis to renounce his pretensions. The pope then turned his attention to the crusades, and crowned Frederic II emperor of Germany, on condition that he would go to Palestine within two years. In France, he instigated Philip Augustus and Louis VIII to support the war against the Albigenses. He died in 1227, and was succeeded by Gregory IX.—Honorius IV was elected pope in 1285. He supported the French king, Philip the Bold, in the war against Peter of Arragon. He died in 1287.

Hontan, baron de la; a native of the province of Gascony, in France, who served as a common soldier in Canada, and afterwards as an officer. He was sent to Newfoundland as king's lieutenant; but, in consequence of disputes with the governor, he was disgraced, and retired first to Portugal, and then to Denmark. His travels in North America (Amsterdam, 1705, 2 vols., 12mo.) afford some curious details respecting the Indian tribes; but the work is written in a barbarous style, and its authenticity is very questionable.

Hontheim, Johann Nicolaus von, descended from an ancient and noble family in Treves, was born in 1701, and educated by the Jesuits. He studied law, became afterwards a clergyman, travelled to Rome, and made himself acquainted with the policy and abuses of the ecclesiastical government. On his return, he was appointed, by the elector of Treves, counsellor of the consistorium, and, soon afterwards, professor of the civil law. In 1748, he was made suffragan of the archbishopric. Between 1750 and 1760, he wrote a History of Treves in Latin; and, in 1763, under the assumed name of Justinus Febronius, a bold work, which procured him much reputation, On the Condition of the Church and the lawful Power of the Pope. This was likewise in Latin. Though he was an ardent Catholic, and dedicated the work to the pope, yet the usurpations of the Romish see are here attacked with so much boldness, that the author was persecuted, and the work prohibited by the court of Rome. He died in 1790, at Montquintin, much esteemed for his piety and benevolence.

Honthorst, Gerard, a celebrated artist, called also *Gerard delle Notti*, from his subjects, was born at Utrecht, in 1592, and was a disciple of Abraham Bloemart. He completed his studies at Rome, and imitated the style of Caravaggio. His subjects are generally night pieces, as large as life, and illuminated by torch or candle light. Among his numerous pictures, that of Jesus Christ before the Tribunal of Pilate, in the Giustiniani gallery, is the most celebrated. He visited London, and obtained the favor of Charles I by many able performances, and, on his return to Holland, was much employed by the prince of Orange. The pencil of Honthorst is free and firm, and his coloring has a great deal of force, although often unpleasing, from a predominancy of brown and yellow tints; with more grace and correctness in his figures, he would have been an excellent painter. He died in 1660, aged 68. —William Honthorst, brother to the above, painted portraits, which are highly esteemed.

Hood, Robin. The severity of the tyrannical forest laws, introduced into England by the Norman kings, and the great temptation to break them in the case of persons living near the royal forests, at a time when the yeomanry of the country were every where trained to the use of the long-bow, and excelled all other nations in the art of shooting, must constantly have occasioned great numbers of outlaws, especially among the best marksmen. These naturally fled to the woods for shelter, and, forming into troops, endeavored, by their numbers, to protect themselves from the dreadful penalties of their delinquency. The ancient punishment for killing the king's deer was, loss of eyes and castration—a punishment worse than death. This will account for the troops of banditti which lurked in the royal forests, and, from their superior skill in archery and knowledge of all the recesses of those unfrequented solitudes, found it no difficult matter to resist or elude the civil power. Among all those, none was more famous than Robin Hood, whose chief residence was in Sherwood forest, in Nottinghamshire, and the heads of whose story, as collected by Stow, are briefly these: "In this time (about the year 1190, in the reign of Richard I) were many robbers and outlawes, among which Robin Hood and Little John, renowned theeves, continued in the woods, despoyling and robbing the goodes of the rich. They killed none but such as would invade them, or by resistance for their own defence. The saide Robert entertained an hundred tall men and good archers, with suche spoiles and thefts as he got, upon whom four hundred (were they ever so strong) durst not give the onset. He suffered no woman to be oppressed, violated or otherwise molested; poore men's goods he spared, abundantlie reliveing them with that which by theft he got from abbeys and the houses of rich old carles, whom Maior (the historian) blamethe for his rapine and theft; but of all the theeves he affirmeth him to be the prince, and the most gentle theefe" (*Annals*, p. 159). The personal courage of this celebrated outlaw, his skill in archery, his humanity, and especially his levelling principle of taking from the rich and giving to the poor, have, in all ages, rendered him the favorite of the common people, who, not content to celebrate his memory by innumerable songs and stories, have bestowed on him the dignity of an earl. Indeed, it is not impossible that Robin himself, to gain more respect from his followers, or they, to derive the more credit to their profession, may have given rise to such a report; for we find it recorded in an epitaph which, if genuine, must have been inscribed on his tombstone, near the nunnery of Kirklees, in Yorkshire, where (as the story goes) he was bled to death by a treacherous nun, to whom he applied for phlebotomy. This epitaph gives the year 1247 as the time of his death. (See Percy's *Reliques of Ancient English Poetry*, and Sir John Hawkins's *History of Music*, 4to.' vol. 3.)

Hood, Samuel, lord viscount; an English admiral, son of an episcopal clergyman in Devonshire, where he was born in 1724. He entered as a midshipman in the navy, in 1740, and, six years after, was promoted to a lieutenancy. In 1754, he was made master and commander; and, in 1759, post-captain. He had the office of commissioner of Portsmouth dock-yard bestowed on him in 1778; but resigned it two years after, on being made a rear-admiral. He was then employed in the West Indies, where he preserved the isle of St. Christopher's from being taken by count de Grasse, and was present at the famous defeat of that officer by admiral Rodney, April 12, 1782. His services on this occasion were rewarded with an Irish peerage. In 1784, he was chosen member of parliament for Westminster; but vacated his seat in 1788, on obtaining the appointment of a lord of the admiralty. In 1793, he commanded against the French in the Mediterranean, when he signalized himself by the taking of Toulon,

and afterwards Corsica; in reward of which achievements he was made a viscount and governor of Greenwich hospital. He died at Bath in 1816.

Hooft, Peter Cornelius van; a Dutch historian and poet, born in 1581, at Amsterdam. He translated Tacitus into the Dutch language with great fidelity and perspicuity; published a life of Henry IV of France, in Latin; a History of the Low Countries, from the Abdication of the Emperor Charles V to the Year 1598 (2 vols., folio); besides a variety of miscellaneous works, consisting of epigrams, comedies, &c. Louis XIII made him a knight of the order of St. Michael. He was on his way to witness the obsequies of Frederic Henry, prince of Orange, when he was suddenly taken ill, and died on the road, in 1647.

Hooghly River, properly the Bhagirutty; a river of Bengal, formed by the junction of the two western branches of the Ganges, the Dunmooda and Roopnarain rivers. The entrance to this river is rendered extremely dangerous and difficult, by reason of numerous sand-banks, which are frequently shifting. The spring tides also run up with great violence, advancing at the rate of 15 miles an hour, and frequently overset boats, and drive ships from their anchorage. All the towns belonging to the European nations, and several others occupied by natives, stand on its banks; and few rivers can boast of a more extensive commerce.

Hookah. (See *Pipe*.)

Hooke, Nathaniel; celebrated for an elaborate Roman history. The time of his birth is unknown. The first fact known of him is given in a letter from himself to lord Oxford, in which he describes himself as ruined by the South sea infatuation. He was recommended to Sarah, duchess of Marlborough, to aid her in drawing up her Apology, for which service she presented him with £5000, although she afterwards quarrelled with him for endeavoring to make her a Catholic. His zeal for his religion was very great, if not orthodox, he being greatly attached to the mysticism and quietism of the school of Fenelon. It was Hooke who brought the priest to confess Pope on his death-bed. Hooke's great work, his Roman History from the earliest Period to the Accession of Octavius, is comprised in 4 vols., 4to., published in 1733, 1745, 1764, and 1771. It is a performance of great accuracy and critical acumen, the style of which is clear and perspicuous, without being eloquent or masterly. Another work of his upon Roman affairs was Observations on four Pieces upon the Roman Senate (1758, 4to.), in which he discusses the opinion of Vertot, Middleton and Chapman, with some severity in respect to the two latter. He also translated Ramsay's Travels of Cyrus. He died July 19, 1763.

Hooke, Robert, an English mathematician and natural philosopher, was born in the Isle of Wight in 1635. He was entered of Christ-church college, Oxford, in 1653. In 1658 or 1659, he invented the pendulum-watch; at least, the prior discovery of it is usually assigned to Hooke by the English, while foreigners ascribe it to Christian Huygens. In 1663, he was nominated one of the first fellows of the royal society, and was afterwards a member of the council. In 1664, he was made Cutlerian professor of mechanics to the royal society; and he afterwards became professor of geometry at Gresham college. The next year he published his Micrographia, or Philosophical Descriptions of Minute Bodies. In 1673, he proposed a Theory of the Variation of the Mariner's Compass. His death took place in March, 1703. He published a great number of papers in the Philosophical Transactions, besides which he was the author of Cutlerian Lectures, a volume of Posthumous Tracts (printed in 1705), and Philosophical Experiments and Observations (published by doctor Derham in 1726). Doctor Hooke was a man of undoubted talents, but of a very unamiable disposition. His quarrels with other men of science were generally managed in a way by no means creditable to his character.

Hooker, Richard, a celebrated divine and theological writer of the 16th century, was born about 1553, at the village of Heavitree, near Exeter. His avidity for learning procured him the patronage of bishop Jewel, who, in 1567, sent him to Oxford, where he obtained the place of one of the clerks of Corpus Christi college. He was elected a scholar of his college in 1573; and, in 1577, was chosen a fellow of Christ-church. In 1579, his skill in the Oriental languages procured him the appointment of deputy-professor of Hebrew; and, in 1581, he took holy orders, and was shortly after made preacher at St. Paul's cross, in London. In 1584, he was presented to the rectory of Drayton Beauchamp, in Buckinghamshire. The first four books of his celebrated treatise Of the Laws of Ecclesiastical Polity were printed in 1594. The ensuing year he was presented, by queen Elizabeth, to the liv-

ing of Bishop's Bourne, in Kent, where he passed the remainder of his life. The fifth book of his great work appeared in 1597; the last three were not published till after his death, in 1600. The Ecclesiastical Polity, written in defence of the church of England, against the attacks of the Puritans, is no less remarkable for learning and extent of research, than for the richness and purity of its style, which entitles its author to be regarded as one of the classics of the Elizabethan age. The most convenient edition is that of Oxford (3 vols., 8vo.). Hooker was also the author of some tracts and sermons.

Hooker, Thomas, an eminent divine, was born at Marfield, Leicestershire, in 1586. He became a fellow of Emanuel college, Cambridge, and a lecturer in Chelmsford, Essex, but was obliged to give up his ministry in consequence of his refusal to conform to all the rites of the established church. He then kept a school; but, being still persecuted by the spiritual court, he went over, in 1630, to Holland, and, in 1633, embarked for Boston, where he arrived September 4 of that year. The following October, he was ordained pastor of the church in Newtown; but, in June, 1636, he removed with his whole congregation to the banks of the Connecticut river, and may be termed the founder of the colony of that name, and especially of the town of Hartford. Whenever he visited Boston, which he did frequently, he attracted great crowds by the force of his preaching. He died July 7, 1647. He published many volumes of sermons, and various polemical works. His principal production is the Survey of Church Discipline—a work of great merit and research. Mr. Hooker was particularly noted for his power in argument.

Hoole, John, born in London, in 1727, was the son of a watch-maker. At the age of 17, he became a clerk of the East India house. In 1758, he began to translate the Jerusalem Delivered, and published the translation in 1763. In 1767, he published a translation of six dramas of Metastasio, in 2 vols.; and the next year brought out his own tragedy of Cyrus, which did not succeed. Timanthes, in 1770, and Cleone, in 1775, were equally unsuccessful, being the whole of his dramatic efforts. In 1773, he published the first volume of his Orlando Furioso, and concluded it in 1783, when it appeared complete in 5 vols., 8vo. He afterwards connected the narrative of the Orlando in 24 books, and disposed the stories in a regular series, which alteration by no means superseded his former edition. In 1792, he translated Tasso's Rinaldo, and ended his literary labors with a more complete collection of dramas from Metastasio. Mr. Hoole is smooth, but prosaic and monotonous in his versification, and his translations are now nearly superseded. He died in 1803.

Hoop Ash. (See *Hackberry*.)

Hooper, William, a signer of the declaration of independence, was born in Boston, June 17, 1742, and was the son of a clergyman who had emigrated to that city from Scotland. After graduating, in 1760, at Harvard college, he commenced the study of the law in the office of James Otis, and, on being admitted to the bar, removed to North Carolina, where he soon acquired an extensive practice. In 1773, he was chosen a representative in the provincial legislature, from the town of Wilmington, in which he had fixed his residence, and signalized himself by his opposition to an arbitrary measure of the government. He also wrote several essays, under the signature of *Hampden*, against the same measure. In 1774, he was named a delegate to the general congress about to meet at Philadelphia. In that body he fully maintained his previous reputation. He was the chairman of the committee appointed to report an address to the inhabitants of Jamaica, the draught of which was his work. Shortly after signing the declaration of independence, Mr. Hooper was obliged to resign his seat, in consequence of the embarrassed state into which his private affairs had fallen whilst he was occupied with his public duties. He died in October, 1790, at the age of 48 years.

Hooping-Cough; a disease known by a convulsive, strangulating cough, with hooping, returning by fits, that are usually terminated by a vomiting. It is contagious. Children are most commonly the subjects of this disease, and it seems to depend on a specific contagion, which affects them but once in their life. The disease being once produced, the fits of coughing are often repeated without any evident cause; but, in many cases, the contagion may be considered as only giving the predisposition, and the frequency of the fits may depend upon various exciting causes, such as violent exercise, a full meal, the having taken food of difficult digestion, and irritation of the lungs by dust, smoke, or disagreeable odors. Emotions of the mind may likewise prove an exciting cause. Its proximate or im-

mediate cause seems to be a viscid matter or phlegm lodged about the bronchia, trachea and fauces, which sticks so close as to be expectorated with the greatest difficulty. The hooping-cough usually comes on with a difficulty of breathing, some degree of thirst, a quick pulse, and other slight febrile symptoms, which are succeeded by a hoarseness, cough, and difficulty of expectoration. These symptoms continue, perhaps, for a fortnight or more, at the end of which time the disease puts on its peculiar and characteristic form, and is now evident, as the cough becomes convulsive, and is attended with a sound, which has been called a *hoop*. The coughing continues till either a quantity of mucus is thrown up from the lungs, or the contents of the stomach are evacuated by vomiting. On the first coming on of the disease, there is little or no expectoration; or if any, it consists only of thin mucus; and, as long as this is the case, the fits of coughing are frequent, and of considerable duration; but, on the expectoration becoming free and copious, the fits of coughing are less frequent, as well as of shorter duration. The disease, having arrived at its height, usually continues for some weeks longer, and at length goes off gradually. In some cases, it is, however, protracted for several months, or even a year. It is seldom fatal, except to very young children, who are always likely to suffer more from it than those of a more advanced age. The danger seems, indeed, always to be in proportion to the youth of the person, and the degree of fever and difficulty of breathing which accompanies the disease, as likewise the state of debility which prevails.

Hop (*humulus lupulus*). This well-known and useful plant is a native of Europe, Siberia, and, according to Mr. Nuttall, of North America also, being found on the upper parts of the Missouri. In many of the settled parts of the U. States, it occurs apparently wild, but may have escaped from a state of cultivation. It belongs to the same family with the hemp and nettle. The root is perennial, giving out several herbaceous, rough, twining stems, which bear opposite three to five-lobed leaves; the male flowers are green, consisting of a perianth, deeply divided into five parts, and five stamens; the fruit is a sort of cone, composed of membranous scales, each of which envelopes a single seed. These cones are the object for which it is so extensively cultivated, and their principal use is to communicate to beer its strength and their agreeably-aromatic bitter. The young shoots, however, are sometimes boiled and eaten like asparagus; the fibres of the old stems make good cords; and it is, besides, employed in medicine as a tonic, sudorific, and sedative. The cultivation of the hop is more carefully attended to in England than in any other country. A light and somewhat substantial soil should be selected. The time of planting is in the autumn, and that of harvesting about six weeks or two months after the flowers are expanded; if the fruit is suffered to get too ripe, it loses many of its good qualities. Other low plants may be cultivated in the intervals between the hop-poles. The hops, on being gathered, should be taken immediately to the kiln for drying, and afterwards packed in bags, the closer the better will they preserve their smell and flavor. The whole process, from the time of planting to the preparation for the purposes of commerce, requires much experience and many precautions. The crops even are excessively variable, often in a ten-fold proportion in different seasons and situations. The excellence of hops is tested by the clammy feeling of the powder contained in the cones.

Hope, Thomas, an English gentleman of large fortune, the nephew of a very opulent Amsterdam merchant, published, in 1805, Household Furniture and Internal Decorations (folio); subsequently, two superb works on costumes—The Costumes of the Ancients (2 vols., royal 8vo., 1809), and Designs of Modern Costume (folio, 1812). His Anastasius, or Memoirs of a Modern Greek (London, 1819), holds a distinguished rank among modern English works of fiction. It was, for some time, supposed to be from the pen of lord Byron. Mr. Hope is a distinguished patron of the fine arts, and lives with great splendor.

Hop-Hornbeam. (See *Iron-Wood*.)

Hopital, Michael de l', an eminent chancellor of France, was born in 1505, at Aigueperse, in Auvergne. His father, who was physician and chief manager of the affairs of the constable of Bourbon, sent him to study jurisprudence in the most celebrated universities of France and Italy, where he also distinguished himself by his acquirements in polite literature. He quickly rose in his profession, and, after obtaining the office of counsellor of parliament, was sent ambassador, by Henry II, to the council of Trent. In 1554, he was made superintendent of the royal finances, in which post, by his ability, economy and integrity, he restored the

exhausted treasury, and put an end to the dishonest practices and the unjust emoluments of a horde of rapacious court favorites, whose enmity he encountered with inflexible steadiness. On the death of Henry II, he was introduced, by the Guises, into the council of state, which post he gave up, to accompany Margaret of Valois, duchess of Savoy, as her chancellor. The confusion which followed in France soon made it necessary to recall a minister of so much talent, and he was advanced to the post of chancellor. Although patronised by the house of Guise, and obliged to acquiesce in many things which he disapproved, to prevent a great deal that he disapproved more, he never ceased to advocate toleration, and was the principal author of the edict of 1562, which allowed freedom of worship to Protestants. By this conduct he rendered himself exceedingly odious to the court of Rome, which sought in vain to remove him, until the court came to the sanguinary resolution of exterminating the reformed religion by violence. Finding himself regarded with suspicion and dislike, he anticipated his dismission by a voluntary retreat to his country-house, where, a few days after, the seals were demanded from him, which he resigned without regret, observing, that the affairs of the world were becoming too corrupt for him to take a part in them. In lettered ease, the conversation of a few friends, and in the composition of Latin poetry, in which he took much pleasure, he enjoyed himself with great satisfaction, until the atrocious day of St. Bartholomew, in 1572. Upon this event, his friends, fearing that he might be made one of its victims, urged him to take measures for his safety; but he not only disdained to seek concealment, but, when a party of horsemen, whose motive was unknown, advanced towards his house, he refused to close his gates. They were, in fact, despatched by the queen with express orders to save him. On this occasion, he was told that the persons who made the list of proscription pardoned him, when he coolly observed, "I did not know that I had done any thing to deserve either death or pardon." This excellent magistrate and truly great man survived that execrable event a few months only, dying March 13, 1573, at the age of 68. Distinguished by that firmness of mind, without which the greatest talents are often useless, no one was a more determined enemy to injustice; and the reform in legislation, produced by him, is regarded by the president Hénault and other enlightened writers, as at once highly honorable to his integrity and capacity, and of the greatest benefit to France. It was comprised in various ordinances, particularly that of Moulins, in 1566. His other works are, Latin Poems, of a grave and masculine character; easy, energetic, but diffuse; the best edition of which is that of Amsterdam (1732): Harangues before the Estates of Orleans, from which he appears to have excelled less as an orator than as a poet: Memoirs, containing treaties, state papers, &c.: a Discourse in Favor of Peace; and his Testament. The eulogy of L'Hopital was made a prize subject by the French academy in 1777, and a statue was erected to him by Louis XVI. An essay on his life and writings was published by M. Bernardi, in 1807. Charles Butler published an essay on his life, drawn from this and other French works (1814). It is not very valuable.

Hopital, William Francis Anthony de l', marquis de St. Mesme; a celebrated French mathematician of the 17th century. He was born in 1661, his father being a lieutenant-general in the army, and master of the horse to the duke of Orleans. After being educated at home, under a private tutor, he entered into the army; but was obliged to quit the service on account of the imperfection of his sight. He then devoted himself exclusively to the study of mathematics. At the age of 32, he distinguished himself by solving problems proposed to the lovers of mathematics by James Bernoulli; and, in 1693, he was admitted an honorary member of the academy of sciences at Paris. From that period he published, in the French and foreign journals, solutions of difficult questions, and other mathematical communications. Such was his reputation, that Huygens, profound as was his acquaintance with science, did not disdain to apply to him for information relative to the nature of the differential calculus. This led to the publication of his treatise, entitled *Analyse des infiniment Petits* (1696), the first French work on the subject, of which a new edition was published by Lefèvre (Paris, 1781, 4to.) The marquis de l'Hopital continued his researches with ardor till his death, which took place in 1704. Besides the works mentioned, he was the author of *Les Sections Coniques, les Lieux Géométriques, la Construction des Equations*; and *Une Théorie des Courbes Méchaniques* (4to.). He was, in private life, a man of integrity, of an open and candid disposition, and of agreeable and

polished manners, suited to his station in society.

Hopkins, Lemuel, a physician and author, was born at Waterbury, Connecticut, in 1750. He commenced the practice of medicine at Litchfield, but, after some years, removed to Hartford, where he enjoyed a high reputation. He died April 14, 1801, in the 51st year of his age. As a physician, he inspired the greatest confidence by his skill and unremitting attention. Whenever he became much interested in a case, his attentions were unceasing. Denying all other calls, he would devote his days and nights, often for a considerable time, to the case, and not unfrequently administer every dose of medicine with his own hand. The antiphlogistic regimen and practice in febrile diseases was introduced by doctor Hopkins, physicians having previously been accustomed to pursue, with regard to them, the alexipharmic practice. He was also distinguished as a literary character, and was a prominent member of that association of gentlemen called the *Hartford wits*. With Trumbull and Barlow, he wrote the Anarchiad, a satirical work, in 24 numbers, which contributed much to draw the attention of the public to the precarious state of the union under the old confederation. At a later period, he was joined with others in the publication of the Echo, Political Green-House, &c., which were intended to give a tone to the public feeling and sentiment in favor of the administration of Washington. Of his poetry, the pieces best known are the Hypocrite's Hope, and an Elegy on the Victim of a Cancer Quack.

Hopkins, Samuel, D. D., an eminent divine, and founder of the sect called *Hopkinsians*, was born September 17, 1721, in Waterbury, Connecticut, and was graduated at Yale college, in 1741. Soon afterwards, he engaged in theological studies at Northampton, Massachusetts, under the superintendence of Mr. Edwards, and, in 1743, was ordained at Housatonic, now Great Barrington, Massachusetts, where he continued until 1769, when he removed to Newport, Rhode Island, in consequence of the diminution of his congregation and the want of support. When he had resided for some time in this place, the people became dissatisfied with his sentiments, and resolved in a meeting to intimate to him their disinclination to his continuance amongst them. On the ensuing Sunday, he preached to them a farewell discourse, which was so interesting and impressive, that they besought him to remain. He did so until his death, December 20, 1803. Doctor Hopkins was a pious and zealous man, with considerable talents, and almost incredible powers of application. He is said to have been sometimes engaged during 18 hours of the day in his studies. He published numerous sermons, besides various other works, the principal of which are a Dialogue showing it to be the Duty and Interest of the American States to emancipate all their African Slaves (1776); a System of Doctrines contained in Divine Revelation, explained and defended, to which is added a Treatise on the Millennium (two volumes, 8vo., 1793), and a sketch of his own life. His theological opinions, which are in part those of the celebrated Jonathan Edwards, have given birth to the most earnest controversy. (For a full account, see the *Dictionary of all Religions*, by Hannah Adams, article *Hopkinsians*; the work of doctor Ezra Stiles Ely, entitled a *Contrast between Calvinism and Hopkinsianism*, and the third volume of the *General Repository* (Cambridge, 1813), where the whole subject is ably reviewed.)

Hopkins, Stephen, a signer of the declaration of independence, was born March 7, 1707, in that part of Providence which now forms the town of Scituate. After receiving a common education, he pursued his father's occupation of farming, until 1742, when he removed to Providence, which continued to be his home until his death. In 1732, he was elected a representative to the general assembly from Scituate, and was chosen speaker of that body in 1741. The following year, he removed, as we have said, to Providence, where he engaged in mercantile business. He had resided in this town but a few months, when he was chosen to represent it in the assembly, of which he was again made speaker. In 1751, he was appointed chief justice of the superior court of Rhode Island. In 1754, he was a commissioner from that colony to the convention which met at Albany for the purpose of securing the friendship of the Five Nations of Indians in the approaching French war, and establishing a union between the colonies. In 1756, he was elected governor of Rhode Island, and continued to hold that office, with the exception of three years, until 1767. In that year he retired from it voluntarily, in order to appease a party dispute by which the colony was distracted. He was at the head of one party, and governor Ward of the other, and, to

effect a union of opposing interests, he prevailed upon his friends and his opponents to join in choosing a third person. In 1774, he was chosen a delegate to the general congress which was to meet at Philadelphia, and the next year was a second time appointed chief justice of the superior court of the province. He was re-elected to congress in 1775 and in 1776. His signature to the declaration of independence is indicative of a tremulous hand, owing to a nervous affection, which compelled him, when he wrote, to guide his right hand with his left. In 1778, he was a fourth time chosen a member of congress, where he was of particular service to the committees appointed to fit out armed vessels, and to devise ways and means for furnishing the colonies with a naval armament, and in the deliberations on the rules and orders for the regulation of the navy, in consequence of his intimate acquaintance with the business of shipping. He died July 13, 1785, at the age of 78. Although Mr. Hopkins had received a very limited education, he had acquired, by his own exertions, extensive information. His pamphlet entitled, the Rights of the Colonies examined, contains an able exposition of the injustice of the stamp act, and various other measures of the British government, and was published by order of the general assembly, in 1765. As a mathematician, he particularly excelled, and he assisted in the observations on the transit of Venus over the sun's disk, in June, 1769. He was a member of the American philosophical society, and, for many years, he was also chancellor of the college of Rhode Island. To him Providence is mainly indebted for its library. As a speaker, he was clear, pertinent and powerful; sometimes energetic, but generally calm, rational and convincing.

Hopkinson, Francis, an eminent American author, and one of the signers of the declaration of independence, was born in Philadelphia, in 1738, to which city his parents had emigrated from England. His father was the intimate friend and scientific coadjutor of Franklin, to whom, it is said, he first exhibited the experiment of attracting the electric fluid by a pointed instead of a blunt instrument. Francis was educated at the college of Philadelphia. After graduating there, he studied law, and, in 1765, visited England, where he remained for two years. On his return, he fixed his residence at Bordentown, New Jersey, and entered congress as a delegate from New Jersey, in 1776. Doctor Rush asserts that his satires contributed greatly to the cause of his country's independence. He began this warfare in 1774, with his Pretty Story, in the strain of the Tale of the Tub, and prosecuted it, from year to year, with such productions as the Prophecy, the admirable Political Catechism, the various letters of tories and of British travellers, and answers to British proclamations and gazette accounts, &c. After the war, he employed his irony against domestic evils, particularly against the intemperance of parties, the ribaldry of the newspapers, and the exaggerations and prejudices with which the present federal constitution was at first assailed. After his retirement from congress, he received the post of judge of the admiralty for Pennsylvania, and, in the year 1790, passed to the bench of the district court. He died in 1791. The selection of his works, in three volumes, printed in 1792, and entitled, the Miscellaneous Essays and occasional Writings, &c., embraces serious compositions in prose, marked by deep sensibility, strong thought, and multifarious knowledge; papers on subjects of physical science; a number of acute and learned judicial decisions, &c. His songs possess much sweetness and delicacy, and the airs which he composed for them rendered them doubly popular. The Battle of the Kegs is a specimen of his facetiousness in verse, and his *L'Allegro* and *Il Penseroso* are graphic and agreeable imitations.

Horace. (See *Horatius Flaccus.*)

Horæ. (See *Hours.*)

Horapollo. We have a work in Greek, called *Hieroglyphica*, under the name of *Horapollo*, pretended to have been translated from the Egyptian by a certain Philip, of whom nothing is known. The work is of little value, noticing merely a few symbolical hieroglyphics, and these not always correctly. The best edition is De Pauw's (Gr. and Lat.), Utrecht, 1727.

Horary, or Hour Circle of a Globe, is a small brazen circle, fixed upon the brazen meridian, divided into 24 hours, having an index movable round the axis of the globe, which, upon turning the globe 15 degrees, will show what places have the sun an hour before or after us.

Horary Circles or Lines, in dialling, are the lines or circles which mark the hours on sun-dials. (See *Dial.*)

Horary Motion of the Earth; the arch it describes in the space of an hour, which is nearly 15 degrees, though not accurately so, as the earth moves with different ve-

locities, according to its greater or lesser distance from the sun.

Horatii. The Horatii were three Roman brothers, who, according to tradition, under the reign of Tullus, and at his suggestion, engaged the same number of Alban brothers (the Curiatii), in order to decide the contest between the two nations. Dionysius of Halicarnassus, to complete the wonder, relates that they were the sons of two sisters, and born at the same time. A sister of the Horatii was likewise betrothed to one of the Curiatii; but both sides forgot their private relations in the service of their country. Tullus, having received the consent of the Horatii, which their father approved, in the presence of the Roman army, solemnly consecrated the brothers, and devoted them to the protection of the gods. The same was done also on the side of the Albans. The field of battle was then marked out by both sides, on a large plain, after they had sworn, on the common altar of sacrifice, that the country of the conquered should submit to that of the conquerors. The champions then stepped forth into the place marked out for the contest. The combat was furious; two of the Romans soon fell: the Albans gave a shout of joy; the Romans encouraged the surviving Horatius. The contest was unequal, but art compensated for the inferiority of strength. The Horatius saw his antagonists faint with the loss of blood. He himself remained unwounded. In order therefore to separate them from one another, he feigned flight, and, while they pursued him as well as their wounds would permit, he suddenly turned back, slew his antagonists, thus separated from each other, and thus decided the sovereignty of his country over the Albans. He was conducted back to the city amidst the rejoicings of the Romans, adorned with the spoils of the slain. There he saw, in the crowd, his sister, in tears for the death of her betrothed Curiatius. She uttered with loud lamentations the name of her lover, whose military cloak, which she herself had wrought for him, hung, a bloody trophy, over the shoulders of her brother. Provoked that her lamentations for her lover should mingle with the rejoicings of the nation on his victory, the brother plunged his dagger into her breast. According to the strict justice which the Romans ever exercised, he should have been condemned to death. This indeed was done, without regard to the deed by which he had rendered such services to his country. The sentence was already about to be put in execution, when Horatius, by the advice of Tullus, appealed to the people. The people could not endure the tears of the old father, who, but a short time before surrounded by his children, was now about to be deprived, by a shameful death, of the last of his sons. The deliverer of his country was absolved from the pain of death; nevertheless, he was obliged, in order to satisfy the law and atone for the murder, to march, with his head covered, under a beam placed across the street (as if under the yoke), which was considered by the Romans as an ignominious punishment.

Horatius Cocles. When the Etrurian king Porsenna, to whom the banished Tarquins had fled, advanced against Rome (B. C. 507), tradition relates that a courageous man of this name opposed himself singly to the enemy, and held them in check, till the bridge over the Tiber was broken down behind him at his own request. Though enfeebled by wounds, he then plunged into the stream with his armor, and, in the midst of the darts of the enemy, reached the opposite bank of the Tiber in safety. The nation rewarded him with a monument, and his fellow-citizens gratefully hailed him as the savior of his country. He is said to have been a relation of the Horatii (q. v.), and to have received the surname of *Cocles*, from the circumstance of having lost an eye in battle.

Horatius Flaccus, Quintus. Quintus Horatius Flaccus was born at Venusium, a city lying on the borders of Lucania and Apulia, Dec. 7, 689 A. U. C. (B. C. 65). His father, a freedman, but, as the son says, of a pure life and heart, was possessed of a small fortune, which he employed for the education of his son. For this purpose he went to Rome, where he became a broker or a receiver of taxes, and afforded the young Horace the best opportunities for the cultivation of his mind, that his means would allow. He caused him to be taught the liberal arts, supported him in the same manner as youths of the best families lived, and was himself a watchful guardian of his morals and an example of virtue, as the grateful son informs us in his Satires (Book I, Serm. 6, 66—92). Orbilius Pupillus, a grammarian, who explained the poems of Homer and Livius Andronicus, was the first teacher of Horace, who, while yet young, made great progress in the study of Greek literature. At the age of 20 years, he went to Athens to continue his studies. At this time, the most important changes

were taking place in Rome. Julius Cæsar was assassinated; Brutus and Cassius, the last props of the sinking republic, leaving Italy, came to Athens, prepared themselves there for the war, and received into their army the Roman youth who studied there. Among these was Horace, who followed Brutus to Macedonia. While at Rome, M. Lepidus, M. Antony and Octavius Cæsar declared themselves triumvirs of the republic for five years, and divided the provinces among themselves. Horace was legionary tribune in the army of Brutus, and fought in the last battle for the freedom of Rome, at Philippi in Macedonia (B. C. 42). Brutus and Cassius fell; Horace saved his life by flight. Some persons, understanding neither his fine irony nor his delicate turn of expression, have concluded, from one of his odes (Book II, Ode 7), that the poet fled in a disgraceful manner; but Lessing has victoriously defended him from this, as from other charges. (See the *Defence of Horace*, Lessing's complete works, vol. 3, page 191.) Liberty of return was granted to the vanquished, and Horace availed himself of the opportunity. His father was now dead; his paternal estate was confiscated; poverty, as he himself says (Epistles, Book II, Epistle 11, 49 et seq.), compelled him to make verses. Whether this expression was meant literally, as many believe, is uncertain, as he had a moderate support from the station of clerk to the questor. But he could not have employed his leisure hours in a nobler manner than in the exercise of the talent which nature had so richly bestowed upon him; nor could he have chosen a better way to soothe those feelings which, in contemplating the occurrences of his time, must often have powerfully disturbed his inmost soul. But he also had recourse to philosophy. He chose therefore a species of poetry particularly adapted to a poetical and philosophical spirit—the didactic. The seventh satire of the first book is the first poem of this kind which he preserved. The talent which he displayed procured him the friendship of two eminent poets, Virgil and Varius, and to them he was indebted for his first acquaintance with Mæcenas, a refined man of the world, who, without leaving his private station, was the friend and confidant of Augustus Cæsar, and who expended his wealth willingly for the embellishment of social life, by the encouragement of literature and the arts. Nine months after, Mæcenas received Horace into the circle of his intimate friends, and, after some years, presented him with the Sabine estate, which Horace so often mentions in his poems. If the poet did not acquire a still more splendid fortune, the fault lay in himself. The recollection of the republic and the party which he served continued too vivid in his heart, to permit him to court the favor of the powerful usurper. The three notes of Augustus to him, which Suetonius has preserved in the life of the poet, prove that he rather avoided it. He even declined the proposal which Augustus made to him through Mæcenas, to enter his service and undertake the management of his private correspondence, under the pretence of ill health. Having witnessed such striking examples of the instability of fortune, he withdrew from the tumult at Rome, and preferred the retirement of his Sabine farm to a more brilliant life. Almost all his poems addressed to Mæcenas celebrate love and freedom, and express indifference to that happiness which depends on the will of another, and contentedness in a situation in which he found himself rich above his wishes. He did not, however, make a parade of rusticity, or deem a strict, morose manner of life necessary to virtue: he rather displayed a genuine urbanity, which finds a tone adapted to every circumstance. He has left us four books of odes; a book of epodes, so called, which differ from the odes not only in metre, the second verse being always shorter than the first, but also in the sentiment, which would rather rank them among the satires, in which he took Archilochus as a pattern; two books of satires, and two books of epistles, one of which (that addressed to the Pisos) is often cited as a separate work, under the title of *Ars Poetica*. In appreciating Horace as a lyric poet, it must not be forgotten that he was the first among the Romans who formed the Roman language for lyric poetry, and applied it, with no small labor, to the difficult Greek metres. Uninterrupted study and perseverance only could have effected so masterly a structure of the verse. It is said, indeed,—and it cannot be denied,—that the greater part of the odes of Horace are only imitations of Greek masters—Archilochus, Alcæus, Stesichorus, Sappho and others—and therefore so full of Greek forms, terminations and constructions, in particular parts, indeed, mere translations from the Greek. Many have made use of this objection to detract from the poetical fame of Horace. But, granting that originality cannot be attributed to Horace as a lyric poet, no one can deny it to him as a

satirist. As didactic satire in general was a Roman invention, so it was Horace who, following Ennius, Pacuvius and Lucilius, by whom its form and object had been defined, gave it a peculiar tone. The satires of Horace, among which may be included his epistles, since they differ little from the others, except in their title, and in being addressed to an individual, have more or less a comic character, and are to be judged only in this point of view. Horace does not expose vices so much as follies, which he places in a ridiculous light: he sees more folly than vice in the world, and even declares himself not exempt from a portion of it. Nevertheless, he seeks to amend follies as far as possible, because he considers them pernicious. To prejudices and errors he opposes his philosophy, which, so far from imbittering or even forbidding the enjoyments of life, only exhorts to a prudent vigilance, and teaches all the virtues, without which happiness is impossible. The easy, agreeable manner in which he philosophizes without appearing to do it, the salt with which he seasons his thoughts, the delicacy and ease with which he expresses himself, afford the most agreeable entertainment. We know not which most to admire, his accurate knowledge of the human heart and of the different classes of men, his love of truth, candor and ingenuousness, the agreeable tone, the urbanity which, in seriousness or derision, never forsakes him, the delicacy with which he presents the ridiculous without bringing it out in bold relief, or his skill in delineating characters. He seems not to hunt after follies, or, where he does this, his ridicule is not bitter, and is accompanied with so much good humor, that the person ridiculed might laugh at the picture. His expression is easy and unaffected, and he manages the hexameter with such skill, that he seems to tread the natural path of social conversation. His descriptions are still applicable and interesting, and the poet will therefore ever remain the favorite of those whose morality does not exclude the refinements of life. He composed, at the express command of Augustus, the secular ode for the festival of the centennial games. He died suddenly, in the year of Rome 746, and the 9th B. C., in the 57th year of his age, not long after the death of his patron and friend, Mæcenas, near whose tomb, on the Esquiline, he was interred. Among his earlier commentators are Acron, Porphyrion, and the scholiast of Cruquius; among his later editors and commentators, we will only mention Dan. Heinsius (first 1605), John Baxter, Bentley (first 1711), Sanadon, Gesner, Zeune, Jani, Mitscherlich (only the odes and epodes (first edition, Leipsic, 1778—82, 2 vols.; 2d edit., Leipsic, 1800, 2 vols.), Döring (Leipsic, 1803; 2d edit., 1815), Eichstädt, Preis, Heindorf, Fea (Rome, 1811, 2 vols.). Wieland's translation of the epistles and satires of Horace contains illustrations of the genius of Horace and his age, and the peculiarities of his works.

Horeb (Arabic, *Djabel Musa*), a mountain in the northern part of Arabia, of the same ridge as mount Sinai, which lies not far distant from it, is memorable in the history of Moses. The monks on mount Sinai still point out the rock on Horeb from which water issued at the blow of Moses.—A small party of Hussites called the mountain between Ledetz and Lipniza, in Bohemia, where they assembled, *Horeb*, and themselves *Horebites*.

Horehound (*marrubium vulgare*); a labiate plant, with whitish, cottony leaves and stem, now naturalized in the U. States, and growing in waste places, &c. Like other plants of the same family, it possesses an aromatic odor; but, in this instance, it is strong and unpleasant, and the taste is bitter and penetrating. It is a popular remedy in pulmonary complaints.

Horizon; the line that seems to link the land or sea and sky; and it is either *rational* or *sensible*. The *rational*, *true* or *astronomical* horizon, which is also called simply and absolutely *the horizon*, is a great circle, whose plane passes through the centre of the earth, and whose poles are the zenith and nadir. It divides the sphere into two equal parts or hemispheres. The *sensible*, *visible* or *apparent* horizon is a lesser circle of the sphere, which divides the visible part of the sphere from the invisible. Its poles are likewise the zenith and nadir; and, consequently, the sensible horizon is parallel to the rational, and it is cut at right angles, and into two equal parts, by the vertical. These two horizons, though distant from each other by the semi-diameter of the earth, will appear to coincide, when continued to the sphere of the fixed stars, because the earth, compared with this sphere, is but a point. The sensible horizon is divided into eastern and western. The *eastern* or *ortive* horizon is that part of the horizon wherein the heavenly bodies rise. The *western* or *occidual* horizon is that wherein the stars set. By *sensible horizon* is also frequently meant a circle which determines the segment of the sur-

face of the earth over which the eye can reach; called, also, the *physical horizon*. In this sense we say, a *spacious horizon*, a *narrow, scanty horizon*. It is manifest, that the higher the spectator is raised above the earth, the farther this visible horizon will extend. On account of the refraction of the atmosphere, distant objects on the horizon appear higher than they really are, or appear less depressed below the true horizon, and may be seen at a greater distance, especially on the sea. Legendre says, that, from several experiments, he is induced to allow for refraction a 14th part of the distance of the place observed, expressed in degrees and minutes of a great circle. Thus, if the distance be 14,000 toises, the refraction will be 1000 toises, equal to the 57th part of a degree, or 1′ 3″.

Horizon of a Globe; the broad, wooden, circular ring in which the globe is fixed. On this are several concentric circles, which contain the months and days of the year, the corresponding signs and degrees of the ecliptic, and the 32 points of the compass.

Horizontal Dial is one drawn on a plane, parallel to the horizon, having its gnomon or style elevated according to the altitude of the pole of the place it is designed for. (See *Dial.*)

Horizontal Range of a piece of ordnance is the distance at which a ball falls on or strikes a horizontal plane, whatever be the angle of elevation or direction of the piece. When the piece is pointed parallel to the horizon, the range is then called the *point-blank*, or *point-blank range*. The greatest horizontal range, in the parabolic theory, or in a vacuum, is that made with the piece elevated to 45 degrees, and is equal to double the height from which a body must freely fall, to acquire the velocity with which the shot is discharged. But in a resisting medium, like the atmosphere, the elevation of the piece, to shoot farthest, is always below 45 degrees, and gradually the more below it as the velocity is greater; so that the greater velocities with which balls are discharged from cannon with gunpowder, require an elevation of the gun equal to but about 30 degrees, or even less. And the less the size of the balls is, too, the less must this angle of elevation be, to shoot the farthest with a given velocity. (See *Gunnery.*)

Hormayr, Joseph, baron of, knight of the Leopold order, aulic counsellor of the emperor of Austria, and historiographer, was born June 20, 1781, at Innspruck, in Tyrol. An uncommon memory early attracted him to history. When eight years old, he wrote, in Latin, a history of Bavaria, and, when 13 years old, published a history of the dukes of Meran. He studied law from 1794 to 1797. In 1798, he began the Contributions to the History of Tyrol in the Middle Ages, for which he himself discovered most of the sources. In 1805, he published his History of Tyrol. In 1801, he went to Vienna, after having been made a major in the Tyrolese militia. Here he became attached to the department of foreign affairs, and soon rose in rank. After having served in different capacities, he published, in 1807, his Austrian Plutarch. In 1809, he went to Tyrol to rouse to action the insurrectionary spirit, which his writings had already kindled. The people rose, and, under his guidance, an animated contest was carried on against the French and Bavarians. In 1813, he was arrested, with other distinguished Tyrolese, and exiled. In 1815, he was made imperial historiographer. In 1817—19 appeared his General History of the Latest Times, from the Death of Frederic the Great, to the Second Peace of Paris. He also edited the Vienna Archives for History, Geography, Statistics and Literature. In 1823, he published, with others, *Wiens Geschichte und Seine Denkwürdigkeiten*. His zeal is great, but the highest qualities of a historian—unbiased love of truth, comprehensive views, profound conceptions, and clear-sighted discrimination between the important and the unimportant—are wanting to him.

Horn, in physiology; a tough, flexible, semi-transparent substance. The hollow horns of the ox, goat, &c., the hoof, the horny claw and nail, and the scale of certain insects, as the shell of the tortoise, resemble each other in chemical characters; but they differ very widely from stag's horn, ivory, &c. Horn is distinguished from bone, in being softened very completely by heat, either applied immediately or through the medium of water, so as to be readily bent to any shape, and to adhere to other pieces of horn in the same state. It contains but a small portion of gelatine, and in this it differs from bone, which contains a great deal. Horn consists chiefly of condensed albumen, combined with a small and varying portion of gelatine, with a small part of phosphate of lime. The fixed alkalies readily and totally dissolve horn into a yellow saponaceous liquor. With some animals, the horn is an instrument of defence; with others, not. In some species of animals, the males only have horns; as, for instance, the stag. Female sheep sel-

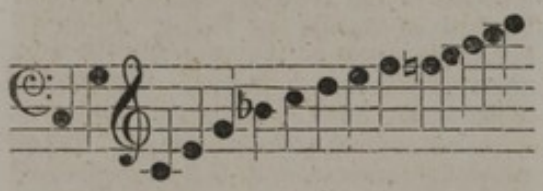
dom have horns. The female goats have horns, but they are always smaller than those of the male. In cattle, the horn is particularly developed. The bull generally has a shorter, denser, firmer horn than the cow. There are, however, hornless cattle. In the case of most horned animals, the horns are not entirely developed, until they have become capable of continuing their species. Horns admit of being divided into four kinds, at least: 1. those of the rhinoceros; 2. of the ox, antelope, goat and sheep; 3. of the camelopard or giraffe; 4. of the deer kind. The horns of the rhinoceros are composed entirely of a horny substance. They are situated not upon the *os frontis*, but on the nasal bones, and are attached to the skull only at the surface of their basis. They appear to be composed of a number of fibres, resembling strong hairs consolidated together. They are not deciduous, but increase from the root or base in proportion as they wear. Those of the second sort are most common. They belong to many of the ruminating quadrupeds, and some birds have similar processes on their heads. They consist of three parts—an osseous substance, a vascular investment, and the external sheath. The bone is first formed. It appears as a knob, covered with skin, and movable on the *os frontis*. As it elongates, the skin becomes callous, and appears to wear off, when the osseous process is found to be clothed in a real case of horn. It then becomes fixed to the *os frontis* by anchylosis. The horny case grows from the roots, and the increase in each year is marked by a circular groove near the root of the horn. The third sort are the short, straight processes on the head of the camelopard, which are a porous bone, united to the *os frontis* by anchylosis, and terminating in a convex knob; the stem is covered with the skin, but the bulb on the end sustains a number of short, strong hairs, analogous to the fibres composing the horns of the rhinoceros. Those of the fourth kind are peculiar to the deer genus. They are composed entirely of bone, and are shed and reproduced annually. They first appear like two small knobs under the skin. These develope their different branches in succession, still covered with the skin, and a delicate, soft hair, forming together what has been called their *velvet coat*, which is extremely vascular. When the horn is completely formed, the velvet coat becomes insensible and dry, and is rubbed off by the deer. (See *Deer*.) The horns of the deer appear to be entirely analogous to the osseous parts of the horns of the other ruminant quadrupeds. The horns of the rhinoceros, and those of the deer, are the two extremes in these organs. The one wants the osseous basis, the other the horny covering. Those of the camelopard and ox exhibit examples of the intermediate structure. Instances are given of horses, cats, and particularly hares, found with horns, but they want confirmation. The human body sometimes produces horny protuberances on various parts. The horns of animals, literally speaking, formed the most ancient drinking cups. Pindar, Æschylus and Xenophon make mention of them as being appropriated to this purpose. Philip of Macedon is said to have made use of one. It is from this ancient usage that the general name of *horns* has been given to a species of drinking cup, as, after the actual employment of the animal substance had been discontinued, the shape remained in use. The horns of victims sacrificed to the gods were gilt, and suspended in the temples, more especially in those of Apollo and Diana. From the most remote times, the altars of the heathen divinities were likewise embellished with horns, and such as fled thither to seek an asylum embraced them. Originally, the horns were doubtless symbolical of power and dignity, since they are the principal feature of gracefulness in some animals, and instrument of strength in others. Hence these ornaments have been frequently bestowed on pictorial representations of gods and heroes; ancient medals frequently present the figures of Serapis, of Ammon, of Bacchus, and of Isis, with these additions. The kings of Macedon were actually in the habit of wearing the horns of a ram in their casques, and the same thing is asserted of various other princes and chieftains.

Horn of Plenty. Amalthæa, daughter of Melissus, king of Crete, fed Jupiter with goat's milk: hence some authors have called her a goat, and have maintained that Jupiter, to reward her kindnesses, placed her in heaven as a constellation, and gave one of her horns to the nymphs who had taken care of his infancy. This horn was called the *horn of plenty*, or *cornucopiæ*, and from it issued fruits and flowers, and, in short, all the riches of art and nature. The cornucopiæ is found on an infinite number of antiques, and is the characteristic attribute of the goddess styled Εὐθυμία by the Greeks, and *Abundantia* by the Romans. It is placed in the hands of figures representing countries or

towns, to indicate the richness of their territory; and in those of rivers, to express the fertility produced by them. The beautiful statue of the Nile, of which a copy may be seen in the palace of the Tuileries, holds a horn of plenty, full of the productions of Egypt; and on the reverse of the medals of the kings of Egypt, we find two cornucopiæ attached together.

Horn, or Bugle-Horn; a wind instrument, chiefly used in hunting, to animate the chase and call the dogs together. The hunting horn was formerly compassed, whence the old phrase to "wind a horn."

Horn, French. The French horn, or *cor de chasse*, is a wind instrument, consisting of a long tube twisted into several circular folds, and gradually increasing in diameter from the end at which it is blown to that at which the sound issues. The intervals of the natural scale of the French horn are conformable to those of the trumpet, but its pitch is an octave lower. The natural tones of a horn are,



In order to produce tones which the horn does not otherwise yield, the performer puts his hand into the horn, so as to prevent, more or less, the egress of the air. The Germans have done most for the horn, and by their inventions of valve-horns, and even machine-horns, have carried this instrument to much perfection. The horn is not proper for the expression of the grand, but the tender and plaintive. Nevertheless, in Germany, some of the rifle regiments have only horn music, which sounds very finely.

Horn, Cape; a promontory on the south coast of Terra del Fuego, the southern extremity of America. Lon. 67° 46′ W.; lat. 55° 58′ S. (See *Cape Horn.*)

Horn, or Hornes, Philip II of Montmorency-Nivelle, count of, one of the most illustrious victims to the policy pursued by Philip II, king of Spain, to maintain the Catholic faith in the Netherlands, was the grandson of John de Nivelle, who, being disinherited by his father, had lost his barony and his paternal fiefs. Philip of Horn, born 1522, sovereign of Horn, Altona, Meurs, &c., one of the richest lords in the Netherlands, was captain of the Flemish guards of the king of Spain, president of the council of state of the Netherlands, and admiral of the Flemish seas. He distinguished himself in the battle of St. Quentin, and had an important share in the victory of Gravelines. The ties of blood which united him with the great Egmont, caused him to share his political opinions on toleration. Their connexion with William, prince of Orange (q. v.), destroyed both. Far from approving his resistance to the royal authority, they remained inaccessible to all his representations. In vain did Orange represent to them that there was no alternative, but either to humble themselves under the absolute will of an inexorable minister, or seek their safety under the banners of freedom. His prophecy was true: duke Alva arrested them both. They were tried and beheaded on the 4th of June, 1568. Philip's brother, Floris of Montmorency, was likewise beheaded, and thus the race of Montmorency-Nivelle became extinct.

Hornbeam. The American hornbeam (*carpinus Americana*) is a small tree, rarely attaining the height of 30 feet, sparingly diffused over the whole of the U. States. The leaves resemble those of some species of birch, but the fertile flowers are in large leafy aments. The wood is fine-grained, tenacious, and very compact, but is little used, on account of its inferior size. The European hornbeam, on the contrary, attains large dimensions, and the wood, being similar in properties to the American, is employed for a variety of useful purposes.

Hornblende, or Amphibole, is one of the most abundant and widely-diffused substances in the mineral kingdom, next to quartz, feldspar and mica, and is very remarkable on account of the various forms and compositions of its crystals and crystalline particles, and of its exceedingly diversified colors, thus giving rise to almost numberless varieties, many of which have obtained distinct appellations. The primitive form of the species is an oblique rhombic prism of 124° 30′ and 55° 30′, in which the terminal planes are inclined to the obtuse lateral edges, under angles of 105° and 75°. The former planes are easily developed, by cleavage from its crystals and crystalline masses; but the latter have never been obtained in this way, having been inferred from calculation. The crystals of hornblende are generally long, and destitute of regular terminations; they are often deeply striated longitudinally, and much disposed to intersect each other, sometimes in such a manner as to give rise to a sheaf-like or to a

stellular composition. Perfectly regular, implanted crystals do occur occasionally; and these present, for the most part, the following shapes: six-sided prisms, from the truncation of the acute lateral edges of the prism, acuminated by four planes, corresponding either to the lateral edges or to the lateral faces of the prism; the same with an acumination of three planes; the same with dihedral summits; and the primitive form with dihedral terminations, of which the faces correspond to acute edges of the prism. The massive varieties frequently offer a granular structure, in which the individuals are of various sizes, and strongly coherent, often with a tendency to a slaty fracture; more commonly, however, the composition of massive varieties is columnar, the individuals being sometimes very long, parallel or diverging, and, when delicate, producing a silky lustre. The lustre of hornblende is vitreous, inclining to pearly, upon the faces of cleavage, in the varieties possessing pale colors. Color, various shades of green, often inclining to brown, white, and black, with every intermediate shade; nearly transparent in some varieties; in others opaque; brittle; hardness about the same with feldspar; specific gravity, 3.00. Three varieties, analysed by Bonsdorf, gave the following results:

	A white Variety.	*A green Variety.*	*A black Variety.*
Silex,	60.31	46.26	45.69
Magnesia,	24.23	19.03	18.79
Lime,	13.66	13.96	13.85
Alumine,	0.26	11.48	12.18
Protoxide of iron,	0.15	3.43	7.32
do. of manganese,	0.00	9.36	0.22
Fluoric acid,	0.94	1.60	1.50
Water and foreign substances,	0.10	1.04	0.00

Of those varieties of the present species which have obtained distinct names, and which, in some systems of mineralogy, have even been regarded as forming separate species, the following are the most remarkable, viz., *hornblende*, *tremolite*, *actynolite*, and certain kinds of asbestos. Hornblende differs from the rest principally by its dark, blackish, or greenish colors, and is divided into three sub-varieties, *basaltic hornblende*, *common hornblende*, and *hornblende slate*. The first consists of black and perfectly-cleavable crystals, which are always found imbedded in basaltic or volcanic rocks; the second refers to imbedded crystals of various colors, but always of dark shades, and in which cleavage is less easily obtained; it includes, besides, all massive, granular, or columnar varieties, except such as are black, easily cleavable, and of a shining lustre, which have been distinguished by the name of *carinthin*. Hornblende slate comprehends such varieties as consist of minute and closely-aggregated particles, united in such a manner as to produce a slaty fracture. Tremolite consists of the pale green, gray, bluish and white varieties, and has been subdivided into *common*, *glassy*, *asbestiform* and *granular* tremolite. The first occurs in crystals, rarely with perfect terminations, and in massive varieties; the second in columnar compositions, or coarsely fibrous, with a high degree of transparency; the third refers to very thin or capillary crystals; and the fourth consists of granular particles. The varieties of actynolite differ from those of tremolite by their deep (often grass-green) colors. The asbestiform tremolite and asbestiform actynolite form a passage into asbestos, which term is applied not only to minute columnar, and variously-interwoven individuals of this species, but to those also of augite or pyroxene, and may be said to denote rather a peculiar state of aggregation in these species than the substance of a distinct mineral. (For an account of the varieties of asbestos, see *Asbestos*.) The best crystals of basaltic hornblende come from near Teysing and Teplitz, in Bohemia. Common hornblende abounds at Arendal, and other places in Norway and Sweden; a light greenish variety, imbedded in granular limestone, at Pargas, in Finland, has received the name of *pargasite*. The varieties of actynolite and tremolite abound in numerous places in Europe; the former occurring in talcose slate, and the latter in limestone and dolomite rocks. In the U. States, this species is also widely disseminated. The iron mine of Franconia, in New Hampshire, produces the common hornblende, in long, slender, black crystals; the talcose slate formations of Vermont afford the varieties of actynolite; the deposits of dolomite, in the north-western parts of Connecticut and the south-western of Massachusetts, abound in the varieties of tremolite; and the white, granular limestone of Orange county, New York, furnishes also many very handsome colored varieties of crystallized common hornblende.

Horn-Book is a copy of the alphabet, set in a frame and covered with a thin plate of horn, to prevent the paper from being thumbed to pieces by the children who were made to study it. It is now almost, if not quite, antiquated, as an instrument of elementary education.

Horneck, Ottocar of, one of the oldest historians in the German language, lived in the latter half of the 13th and the beginning of the 14th century. His native country was Stiria, where his family castle, Horneck, is still to be found. He was instructed in the art of a *minnesinger* by Conrad of Rotenburg. He died after the decline of the Hohenstaufen, when the golden age of chivalric poetry was past. After having been present at the battle of Weidenbach, and accompanied Rodolph of Hapsburg to Bohemia, he returned to his native country, which was delivered from the Bohemian yoke, and enjoyed the favor of the Stirian governor, Otho of Liechtenstein, who resided in the castle at Gratz. He employed his talents in writing and rhyming on historical subjects, for which the German prose was not yet adapted. About the year 1280, he composed a work on the great empires of the earth, which concluded with the death of the emperor Frederic II, and is still extant in manuscript, at Vienna. Being encouraged to note down the important events of his own time, he wrote a chronicle, consisting of more than 83,000 verses, which the Benedictine friar Pez, in 1745, published as the third folio volume of his *Scriptores Rerum Austriæ*. It extends from the death of Manfred to the emperor Henry VII, and is therefore important as illustrative of the history of Rodolph and Ottocar, Adolphus of Nassau, and Albert of Austria. It is rich in remarkable events, which the author witnessed, in portraits of eminent men whom he had known, and in description of festivals, tournaments and battles, at part of which he was himself present. (See the *Aus und über Ottokars von Horneck Reimchronik*, by Th. Schacht, Mentz, 1821.)

Hornemann, Frederic Conrad, a celebrated traveller, was born in 1772, at Hildesheim, studied theology at Göttingen, and received an appointment in Hanover. An ardent desire to visit the interior of Africa, induced him, in 1795, to request Blumenbach, the famous naturalist in Göttingen, to recommend him to the African society in London. After having fully convinced himself of the great zeal and capacity of the young aspirant, Blumenbach wrote to sir Joseph Banks, and Hornemann's proposal was accepted. He immediately drew up a plan, which he laid before the society, and devoted himself to natural history and the Oriental languages, with the greatest zeal. In Feb. 1797, he was in London, where the society gave him their instructions; he then went by the way of Paris to Marseilles, where he embarked. After having visited Cyprus, he landed at Alexandria, and remained some months in Cairo, to learn the language of the Maugrabins or Southern Arabians. When the landing of the French in Egypt became known, he, like all the other Europeans, was detained in the castle, in order to save them from the rage of the people. General Bonaparte, being informed of Hornemann's plans, gave him passports, and showed a disposition to promote his objects in every way possible. Sept. 5, 1799, Hornemann left Cairo with the caravan of Fezzan; on the 8th, he entered the Lybian desert, reached Siouah on the 16th, an oasis already visited by Brown, and arrived, after a tedious journey of 74 days, at Mourzouk, the capital of Fezzan. Here he staid some time, and made an excursion to Tripoli, which he left again, Jan. 29, 1800. April 12, he wrote that he was on the point of setting out with the great caravan of Bornou. From that time, nothing certain was known of him till 1818, when Von Zach, in his *Correspondence Astronomique*, communicated a letter from the English captain Smith, according to which Hornemann died on his return from Tripoli to Fezzan, of a fever, caused by drinking cold water, after being exposed to great fatigue, and lies buried at Aucalus. His companion, the bey of Fezzan assured the captain, that he had sent Hornemann's papers to the British consul at Tripoli. Hornemann himself had sent his journal from Tripoli to England. It was written in German, and, in 1802, the African society published a translation of it. In the same year, the original was published by Charles König. It contains much valuable information, with useful notes, by Rennel, Young and Marsden.

Hornpipe; a dance, of which the name is probably derived from the instrument played during its performance. That it was not unusual to give to certain airs the names of the instruments on which they were commonly played, appears from the word *Geig*, which, with a little variation, is made to signify both a *fiddle* and the air called a *jig*. The instrument called the *horn-pipe* is common in Wales. Its name in Welsh is the *pib-corn* (horn-pipe). It consists of a wooden pipe, with holes at stated distances, and a horn at each end.

Hornstone. (See *Quartz*.)

Hornthal, Francis Louis, born 1760, one of the most able among the German political writers, was a long time in the service of the last prince bishop of Bam-

berg, and, when this bishopric was incorporated with the kingdom of Bavaria, he was one of the most active and successful officers of the Bavarian government, in the agitated period when Napoleon ruled over Germany. Bavaria received a constitution in 1818, and the city of Bamberg elected Hornthal its representative. In the house of representatives, he has always shown himself a friend to liberal ideas, and, during late years, years which have been marked by the prosecutions of liberal men in Germany, every such act of injustice has been censured by him. In short, Hornthal belongs to those few public characters in Germany, who have steadily defended the rights of their fellow-citizens.

Horology. (See *Watch* and *Clock Making*.)

Horoscope (from ὥρα, time, and σκόπειν, to observe); a careful observation of the moment of birth, and of the position of the celestial bodies at the time, for the purpose of predicting the fortune of the infant. It is also used for a scheme or figure of the position of the heavens at any time. The heavens were divided by astrologers, for this purpose, into 12 parts, called *houses*, to each of which was assigned its particular virtue or influence. The ascendant was that part of the heavens which was rising in the east at the moment; this is the first house, or house of life, and contained the five degrees immediately above the horizon, and the 25 beneath it; the second was the house of riches, &c.; the seventh, or angle of the west, the house of marriage; the eighth, the house of death. (See *Astrologer of the 19th Century* (1825), and *Manual of Astrology*, 1828.)

Horrox, Jeremiah; an English astronomer of the 17th century, born about 1619, and educated at Cambridge. He accurately observed the transit of Venus over the sun's disk, Nov. 24, 1639. He died Jan. 3, 1641, only a few days after he had finished his treatise entitled *Venus in Sole visa*. Other productions of his pen, left in an imperfect state, were collected and published by doctor Wallis, in 1673, under the title of *Opera posthuma*. Horrox seems to have been the first who ever predicted or observed the passage of Venus over the sun's disk, from which he deduced many useful observations, though not aware of the full advantages to be derived from an examination of that important phenomenon. His theory of lunar motions afforded assistance to Newton, who always spoke of Horrox as a mathematical genius of the highest order.

Hors d'Œuvre (*French*); meaning a thing of secondary importance, often used for a secondary dish at entertainments. It is also used for an unnecessary deviation from the chief subject in works of art.

Horsa. (See *Hengist*.)

Horse (*equus caballus*, Lin.). The genus *equus* belongs to the third family of the *pachydermata*, the *solidungula*, or those animals having but one apparent toe, and this covered by an undivided hoof. They are distinguished by having six incisors in each jaw, which, in their young state, are marked by a furrow on the crown. The molars, which are 24, are square, having their crown divided by numerous plates of enamel, disposed in a crescent form. The male has two small canine teeth in the upper jaw, and sometimes the same number in the lower; these are almost always wanting in the female. Between those canines and the molars is a vacant space. The stomach of the horse is simple, and of a moderate size, but the intestines are very long, and the cœcum enormous. The mane is long and flowing, and the tail covered with long hair. The horse is known to most nations as the most useful and manageable of those animals that live under the sway of man. In gracefulness of form and dignity of carriage, he is superior to almost every other quadruped; he is lively and high-spirited, yet gentle and tractable; keen and ardent in his exertions, yet firm and persevering. The horse is equally qualified for all the various purposes in which man has employed him; he works steadily and patiently in the loaded wagon or at the plough; becomes as much excited as his master in the race; and appears to rejoice in the chase. The horse feeds on grass and grain, and defends himself with his hoofs and teeth. Besides his invaluable services whilst alive, after death his skin is used for a variety of purposes; the hair of his mane and tail for chair bottoms, mattresses, &c. His flesh, although rejected among civilized nations, is much used among several rude tribes; and from the milk of the mare, the Calmucks and other Tartars prepare a spirituous drink of considerable strength. The period of gestation is about 290 days. The young horse does not acquire his canine teeth till about his fifth year. The voice of this animal is peculiar, and well known under the name of *neighing*. The life of the horse, when not shortened by ill usage, extends from 25 to 30 years. The most certain knowledge of the age of a horse, is

to be obtained from the teeth. The 12 cutting teeth begin to shoot about two weeks after the birth of a foal. These, or, as they are termed, *colt teeth*, are round, short, not very solid, and are cast at different periods to be replaced by others. At two and a half years, the four middle ones are shed; in another year, four others drop out; at four years and a half, the four last are cast; these latter are replaced by others called *corner teeth*. They are easily known, being the third above and below, counting from the middle of the jaw. They are hollow, and have a black mark in their cavity. When the horse is four and a half years old, they are scarcely visible above the gum, and the cavity is very sensible: at six and a half, they begin to fill, and the mark continually diminishes and contracts till seven or eight years, when the cavity is filled up and the black mark obliterated; after this, the age is to be judged by the canine teeth or *tushes*. The two in the lower jaw usually begin to appear at three years and a half, and those of the upper jaw at four, continuing very sharp-pointed till six. At ten, the upper seem blunted, worn out and long, the gum leaving them gradually; the barer they are, the older is the horse; from 10 to 14, there is little to indicate the precise age. The age of a horse may also be ascertained, though less accurately, by the bars in his mouth, which wear away as he advances in years. The horse, like the other tame animals, was no doubt originally wild, but his domestication happened at so early a period, as to leave no record of the event, and it is now impossible to ascertain, with any certainty, in what country he originated. Wild horses, it is true, are found in various parts of the world, but in most cases it is impossible to say whether they are the remains of the ancient stock or are derived from the domesticated animal; though, as respects those found in the American continent, there is no doubt but that they were originally introduced by the Spaniards.—Desmarest gives upwards of 20 varieties of the horse, and his catalogue is by no means complete. We shall only be able to notice the principal. The wild horses of Tartary are smaller than the domestic; their hair, particularly in winter, is very thick, and generally of a mouse color. Their heads are larger, in proportion to their bodies, than those of tame horses, and their foreheads remarkably arched. These horses are very watchful of their common safety. Whilst a troop is feeding, one of their number is placed on some eminence as a sentinel; when danger of any kind approaches, he warns his companions by neighing, and they all betake themselves to flight. The Calmucks take them by riding among them on very fleet tame horses, or destroy them by arrows. The *kumiss* or vinous liquor, which the Tartars prepare from mares' milk, is made by adding to any quantity of that milk, soon after it is drawn from the animal, one sixth part of water, and an eighth part of very sour cows' milk, or a portion of old *kumiss:* this mixture is kept in a wooden vessel covered with a thick cloth, and placed in a situation where it is kept warm: it soon turns sour, and a thick curdy substance is found at top; this is intimately mixed with the sour fluid beneath, by churning for a length of time, when it becomes fit for use. The most esteemed horses are the Arabian. These are seldom more than 14 to 14½ hands high, more inclined to be lean than fat; they rise higher from the ground than other blood horses, and gather much more quickly. The breed in Arabia is never crossed as in other countries, but preserved unmixed with the utmost solicitude. The Arabs prefer the mare, as being more capable of bearing hunger, thirst and fatigue; and these must neither bite nor kick, or they are deemed vicious; indeed, it is no uncommon thing to see children play and fondle about the mare and her foal without fear or injury. Madden says, when an Arab sells his mare, he rarely sells all his property in her; he generally reserves the second or third foal. The genealogy of a full blooded Arabian horse must be proved at Mecca, for one race only is valued, which is that of Mohammed's favorite mare. That author also observes, that it is so difficult to get a thorough-bred Arab mare to send out of the country, that he doubts if any ever go to Europe; those usually sent as such being Dongola horses, which are very inferior, being worth only from 120 to $150, whilst an Arabian is worth from 1500 to $2000. The Arabians keep their horses picketed by the fore legs. They never lie down, night or day, being always kept standing; even after a long journey, they are only suffered to give a tumble or two on the sand, and then made to rise. The Persian horses are much esteemed, but not equal to the Arabian. The Barbary horse, which approaches the Arabian, is the origin of the Spanish and Italian. The Andalusian horse is much prized. It is small, but beautifully formed. The head is, however, rather large in proportion to the body, the mane thick; the

ears long, the eyes animated, the breast full, the legs finely shaped, the pastern large, and the hoof high. The Italian horses are not so much esteemed now as formerly; they are large, and move well, and are used for carriage horses and heavy cavalry. The Danish horses are stout and well built, but seldom elegant. The same may be said of the Dutch horse, which is preferred for the draught throughout Europe. The French horses differ much, according to the part of the country from whence they are derived. The breed of horses in England and the U. States is as mixed as that of the inhabitants, the frequent introduction of foreign horses having produced an infinite variety. The wild horses of America are descended from the Spanish, and partake of the form of their ancestors. They occur in immense numbers to the westward of the Missouri. In major Long's Expedition, it is stated that their habits are very similar to those of the domestic animal. They are the most timid and watchful of our wild animals. They show a great attachment to each other's society, though the males are occasionally found at a distance from the herds. It appears that they sometimes take long journeys, and it is worthy of notice, that along the paths which they make, large piles of dung are found, showing that this animal in the wild state has, in common with some others, the habit of dropping his excrement where another has done so before him. Our hunters have a mode of capturing them which appears peculiar to America. This, which is termed *creasing*, is shooting the animal through the neck, taking care not to injure the spine. When a rifle ball is received in the upper part of the neck, it occasions a temporary suspension of the powers of life, but does no permanent injury. As may be supposed, it requires no small degree of skill and precision for its successful performance. From the attention which has been paid in the U. States to the rearing of this species of animal, and by the judicious mixture of breeds, as well as a careful observance of every circumstance proper for improving the good qualities and correcting the defects or imperfections of the horse, we now have horses famous for all the different excellences of those of other countries. Without the horse, it may be asserted, that man could not have reached his present pitch of civilization, nor have been able to overcome the numerous obstacles to comfort and happiness. The want of these animals was one of the principal causes which rendered the aboriginal inhabitants of this country so inferior to their invaders; and the decided superiority of the white over the Indian, was owing almost as much to the horse as to the knowledge of fire-arms. In fact, next to the want of iron, the want of horses is, perhaps, one of the greatest physical obstacles to the advancement of the arts of civilized life. During the age of chivalry, no knight or gentleman would ride upon a mare, as it was thought dishonorable and degrading. No sufficient reason has been assigned for this singular custom. During that time, the breeds of horses most in repute, were those of Normandy and Flanders, from their great size and strength. When gunpowder was invented, however, from the heavy coats of mail being laid aside, this description of horse was consigned to the wagoner, and sedulous attention paid to animals of a lighter and more active character. Various tables have at different times been drawn up, as to the proper proportions of a horse, none of which have been found correct. The celebrated English horse Eclipse was neither handsome nor well proportioned, according to these rules, yet for speed and strength, the mechanism of his frame was almost perfect. An old writer, Camerarius, says, a perfect horse should have the breast broad, the hips round, and the mane long, the countenance fierce like a lion, a nose like a sheep, the head, legs and skin of a deer, the throat and neck of a wolf, and the ear and tail of a fox. The other species of this genus are the ass (*E. asinus*), the zebra (*E. zebra*), the quagga (q. v.) (*E. quagga*, Gm.), and the wild mule (*E. hemionos*). This animal, in its size and general appearance, is not unlike the common mule, the progeny of the horse and ass. Its head is large, forehead flat, becoming narrow towards the extremity of the nose; ears longer than those of the horse, and lined with a thick coat of whitish hair. The limbs are long and finely shaped. There is an oval callus within the fore legs, but none on the hinder. The hoofs are small, smooth and black; the tail naked for one half of its length, and covered on the other by long hairs. The hair is of a brown ash color, very long in winter, but short in summer. There is a blackish testaceous line extending from the mane along the ridge of the back to the tail. The height of this animal is about three feet nine inches; length six feet. It was well known to the ancient naturalists. Aristotle, who terms it *hemionos* or half ass,

says it was found in Syria; and Pliny, on the authority of Theophrastus, says it also occurred in Cappadocia. It is no longer an inhabitant of these countries, only being found in Tartary, where they chiefly frequent the country around the lake Taricnoor. They live in herds, consisting of mares and colts, with an old male: these herds seldom contain more than 20. The foal attains its growth in its third year, at which time the males expel them from the troop. Their neigh is louder than that of the horse. They are very timid and cautious, stationing sentinels whilst they are feeding. They are amazingly swift, even outstripping the antelope. The Tartars often take them alive when young, but have never been able to domesticate them. They are usually killed or taken in rainy or stormy weather, at which time they are less shy. The Mongol and other Tartar tribes prefer their flesh to any other food. (See *Ass.*)

Horse Power. A horse's power of draught or carriage, of course, diminishes as his speed increases. The proportion of diminution, according to professor Leslie, is as follows: If we represent his force when moving at the rate of 2 miles an hour by the number 100, his force at 3 miles per hour will be 81; at 4 miles, 64; at 5 miles, 49; at 6 miles, 36; which results agree pretty nearly with the observations of Mr. Wood (*Treatise on Rail-Roads*, page 239). At his height of speed, of course, he can carry only his own weight. A horse draws to the greatest advantage when the line of draught inclines a little upwards. Desaguliers and Smeaton consider the force of one horse equal to that of five men, but writers differ on this subject. The measure of a horse's power, as the standard of the power of machinery, given by Mr. Watt, is, that he can raise a weight of 33,000 pounds to the height of one foot in a minute. Care should be taken, when a horse draws in a mill, or an engine of any kind in which he moves in a circle, that the circle be large; for, since he pulls obliquely, and advances sideways as well as forwards, his fatigue is greater as the circle is smaller. In some ferry-boats and machinery, horses are placed on a revolving platform, which passes backward by the pressure of their feet as they pull forward against a fixed resistance, so that they propel the machinery without moving from their place. A horse may act within still narrower limits, if he stands on the circumference of a large vertical wheel, or on a bridge supported by endless chains, which pass round two drums, and are otherwise supported by friction wheels. Various other modes of applying the force of animals are practised, but most of them are attended with great loss of power, either from friction or from the unfavorable position of the animal.

Horse-Chestnut (*æsculus hippocastanum*); an ornamental tree, a native of the northern parts of Hindoostan, and frequently cultivated in Europe and the U. States. It is one of the few plants belonging to the class *heptandria* of Linnæus, or having seven stamens. The leaves are opposite, composed of five or seven leaflets radiating from a common foot-stalk. The flowers are white, spotted with red and yellow, and disposed in superb racemes. The fruit is a prickly capsule, containing one or two large seeds, externally somewhat resembling chestnuts, but possessing a bitter and disagreeable flavor. It was unknown to the ancients, and is now cultivated only for the sake of its beauty, the wood being of no value. With the exception of the above, and one other, whose habitation is unknown, all the remaining species of *æsculus*, five in number, are natives of the U. States, and are known under the name of *buckeye*. None of them inhabit the Northern and Eastern States: the south-western parts of the Alleghany mountains and the surrounding country seem to be their peculiar region. They are trees or shrubs, some of them with spiny and others with smooth fruit, remarkable for the elegance of their flowers and foliage, but their wood is soft, and destitute of any useful properties. One of them attains large dimensions, reaching sometimes the height of 60 or 70 feet, with a trunk 3 or 4 feet in diameter. The horse-chestnut is one of our most admired ornamental trees. Its large and bright green foliage, its full and rich form, and the profusion of spikes of flowers, of the most delicate and brilliant colors, with which it is covered, render it one of the most showy trees to be found. In Europe, the fruit is used for feeding various kinds of cattle, who are said to be fond of it. For this purpose, it is first soaked in lime-water or an alkaline solution, which deprives it of its bitterness; it is then washed, and boiled to a paste. In Turkey, it is ground and mixed with provender for horses. It has been made into starch, and forms a paste or size, which is preferred, by book-binders, shoemakers, &c., to that made from flour. In France and Switzerland, it is used for cleaning woollens, and in the washing and bleaching of linen, and it is supposed that

it might be made to answer the purpose of soap in washing and fulling. The powder, snuffed up, excites sneezing, and has been used with benefit in affections of the eyes. This tree was first brought to Europe from the northern parts of Asia, about the middle of the 16th century. It is very easily raised, and grows with greater rapidity than any tree we know, the whole length of its spring shoots being complete in about three weeks from the first opening of the buds.

Horse-Guards; a building opposite Whitehall, London, so called because the horse-guards usually do duty here. In this building is the office of the commander-in-chief of the English army, and we find therefore many important papers dated from it.

Horsemanship. The earliest writer on this subject, whose work has come down to us, is Xenophon: in his treatise Περι ἱππικης, he gives rules for judging of horses, dressing them, and riding. The Romans have left us no work on the manege, and, though the mounted hordes who overthrew the Roman empire, and the knights of the later period of chivalry, must have been skilled in the care and guidance of the horse, the earliest modern treatise on horsemanship was written in the 16th century, by Grisone, an Italian. "There are," says a French writer, "three principal European races, the Latin, the Teutonic and the Sclavonic, each of which is no less characterized by its manner of riding on horseback than by its language. The Poles and Hungarians, however, who belong to the Sclavonic race, have adopted the Teutonic manner; but the three Latin nations —the French, Italians and Spaniards—are all of the Italian school." The English, according to this very erudite division, belong to the Teutonic school; and, among the Noble and Royal Authors of Walpole, the duke of Newcastle appears as the author of two treatises, which later writers have done little more than to copy or abridge—*Méthode nouvelle de dresser les Chevaux* (Antwerp, 1658; in English, 1743, 2 vols., folio), and New Method to dress Horses (London, 1667). The principal matters in which the pupil is to be instructed at the manege are, to sit on horseback with firmness, ease and gracefulness, and to guide his horse accurately in going straight forward, to the right or left, or sideways, at a walk, trot or gallop, to halt at once, and to rein back without difficulty. (For an account of the manner of training a horse, see *Manege*.) In mounting, the rider approaches the horse near the left shoulder, and, grasping the reins firmly, takes a handful of the mane in his bridle hand, puts the left foot into the stirrup, and, raising himself up, passes the right leg clear over the saddle. The reins must not be taken too short, lest it should make the horse rear, run or fall back; but they ought to be of equal length, and neither tight nor slack. The rider should be placed upright in the saddle, with the body rather back, and the head held up with ease, but without stiffness. The breast should be pushed out a little; the thighs and legs turned in without restraint, so that the fore part of the inside of the knees may press on the saddle, and the legs hang down easily and naturally, the feet being parallel to the horse's sides, neither turned in nor out, but so that the toes should be kept a little higher than the heels. By this position, the natural weight of the thighs has a proper and sufficient pressure of itself, and the legs are in readiness to act when necessary. For this purpose, they should always be near to the horse's sides, but without touching or tickling them. The body must be kept easy and firm when in motion; the left elbow should lean gently against the body, a little forward, and the hand, in general, should be of about the same height as the elbow; the right arm must be placed in symmetry with the left, only let the right hand be a little more forward or backward, as occasion may require. The left hand, which holds the reins, must be kept clear of the body, about two inches and a half forward from it, and immediately above the pommel of the saddle; the nails should be turned towards the buttons of the waistcoat, and the wrist a little rounded with ease, the joint being kept easy and pliable, yielding and taking occasionally, as necessary. A firm and well-balanced position of the body is of the utmost consequence, as it affects the horse in every motion. The body must always go along with the horse, and the leaning, therefore, should always be towards that side to which he moves. It is requisite, in horsemanship, that the hand and legs should act in correspondence with each other in every thing, the latter being always subservient to the former. Upon circles, the outward leg (the one from the centre) is the only one to be used, and that only for a moment at a time, to make the horse go true, if he be false. If the horse is lazy, or in any way retains himself, both legs must be used, and pressed to his sides at the same time. In general, however, the less the legs are

used the better. In reining back, the rider should be careful not to use his legs, unless the horse backs his shoulders, in which case they must both be applied gently, at the same time, and correspond with the hand. If the horse refuse to back at all, the legs must be gently approached, until the horse lifts up a leg as if to go forward, when the rein of the same side with the lifted leg will easily bring him backward. If he attempts to rear, the legs must be instantly removed and the reins slackened.

Horseradish (*cochlearia armoracia*); a cruciferous plant inhabiting the temperate parts of Europe, in moist situations. The stem is herbaceous, growing to the height of two or three feet, bearing alternate leaves and small white flowers. The radical leaves are very large, oval-oblong, and somewhat resemble those of the common dock. The root is cylindrical, penetrating very deeply into the ground, and, when fresh, forms a well known condiment, possessing a pungent taste and odor. It is also employed medicinally, as an antiscorbutic and stimulant. This plant is naturalized in some parts of the U. States, and is, besides, very commonly cultivated in gardens.

Horse-Tail. (See *Equisetum.*)

Horse-Tail, among the Ottomans and Tartars, is used as a standard. It is also a sign of distinction for the commanders, the number of horse-tails carried before them and planted before their tents being in proportion to their rank. Thus the sultan has seven horse-tails in war, the great vizier five, and the pachas three, two or one. This standard is said to have been introduced among these tribes on occasion of the loss of all their ensigns in battle; the commander, having fastened a horse's tail to a lance, rallied his troops and conquered. Its origin may also be naturally explained from the common use of the horse-tail as a military ornament among all nations acquainted with horses. The Turkish horse-tail consists of a pole, to which is attached one or several tails, and other ornaments of horse-hair. It is surmounted by a crescent.

Horsley, Samuel; a learned dignitary of the church of England, born in London, October, 1733. He was educated at Cambridge, where he took the degree of LL. B. in 1758. The same year, he became curate to his father. In 1767, he was chosen a fellow of the royal society; and the same year he published an elaborate treatise, entitled the Power of God deduced from the computable instantaneous Production of it in the Solar System (8vo.). In 1770 was printed, at the Clarendon press, his earliest mathematical publication—*Apollonii Pergæi Inclinationum, Libri ii.* In November, 1773, he was elected secretary to the royal society. In 1774, he published Remarks on the Observations made in the last Voyage towards the North Pole, for discovering the Acceleration of the Pendulum, in Latitude 79° 50′, in a Letter to the Honorable C. J. Phipps (4to.). In 1776, he published proposals for a new edition of the works of sir Isaac Newton, which was gradually completed, in 5 vols., 4to. He engaged warmly in the contest carried on in 1783 and 1784 with sir Joseph Banks, respecting his conduct as president of the royal society. About the same period, he commenced a literary controversy with the great champion of Unitarianism, doctor Priestley. In 1788, he was made bishop of St. David's. He showed himself the strenuous advocate for the existing state of things in religion and politics; and the merit of his conduct will accordingly be differently appreciated. He certainly advocated with ability the cause he had adopted. He was promoted to the see of Rochester in 1793, and made dean of Westminster; and, in 1802, he was translated to St. Asaph. He died Oct. 4, 1806. Bishop Horsley may at least claim the praise of consistency of conduct as an enemy of innovation; and he was probably honest and sincere, if not wholly disinterested, in his denunciations against religious and political heresy and heretics. Besides the works noticed, he was the author of Critical Disquisitions on the 18th Chapter of Isaiah (4to.); Hosea, a new Translation, with Notes (4to.); a Translation of the Psalms (2 vols.); Biblical Criticisms (4 vols., 8vo.); sermons; charges; elementary treatises on the mathematics; On the Prosodies of the Greek and Latin Languages; and papers in the Philosophical Transactions.

Hortense; wife of Louis Bonaparte, daughter of the empress Josephine. (See *Louis Bonaparte.*)

Hortensius, Quintus, the celebrated orator, and the rival of Cicero, held many military and civil offices, was consul 70 B. C., and was Cicero's colleague as augur. The faction of Clodius, which he opposed in common with Cicero, ill-treated him to such a degree, that he narrowly escaped with his life. His death was occasioned by an immoderate effort in the delivery of a speech. He was rich, and loved luxury and splendor. His speeches

are all lost. He often opposed Cicero (for instance, as the defender of Verres), yet they were excellent friends. The ancients commend the eloquence of Hortensius as flowery, full of ornament, and approaching the Asiatic style. He was elegant and acute in the conception and distribution of his matter, and succeeded by sudden effect. His delivery was graceful, and his voice good. (See *Cicero.*)

Horticulture (from *hortus*, garden, and *colo*, I till) includes, in its most extensive signification, the cultivation of esculent vegetables, fruits and ornamental plants, and the formation and management of rural scenery for the purposes of utility and embellishment. The earliest effort of man to emerge from a state of barbarism was directed to the tillage of the earth: the first seed which he planted was the first act of civilization, and gardening was the first step in the career of refinement; but still it is an art in which he last reaches perfection. When the savage exchanges the wild and wandering life of a warrior and hunter, for the confined and peaceful pursuits of a planter, the harvests, herds and flocks take the place of the simple garden. The mechanic arts are next developed; then commerce commences, and manufactures soon succeed. As wealth increases, ambition manifests itself in the splendor of apparel, of mansions, equipages and entertainments. Science, literature and the fine arts are unfolded, and a high degree of civilization is attained. It is not until all this has taken place, that horticulture is cultivated as one of the ornamental arts. Egypt, the cradle of civilization, so far perfected her tillage, that the banks of the Nile were adorned by a succession of luxuriant plantations, from the cataract of Syene to the shores of the Delta; but it was when Thebes, with its hundred brazen gates, and the cities of Memphis and Heliopolis, were rising in magnificence, and her stupendous pyramids, obelisks and temples, became the wonders of the world. The hills and plains of Palestine were celebrated for beautiful gardens; but it was not until the walls and temple of Jerusalem announced the power and intelligence of the Israelites, and the prophets had rebuked their luxury and extravagance. The queen of the East "had heard of the fame of Solomon;" his fleets had brought him the gold of Ophir, and the treasures of Asia and Africa; the kings of Tyre and Arabia were his tributaries, and princes his merchants, when he "made orchards," "delighted to dwell in gardens," and planted the "vineyard of Baalhaman." The Assyrians had peopled the borders of the Tigris and Euphrates, from the Persian gulf to the mountainous regions of Ararat, and their monarchs had founded Nineveh and Babylon, before we hear of the gardens of Semiramis The Persian empire had extended from the Indus to the Archipelago, when the paradise of Sardis excited the astonishment of a Spartan general, and Cyrus mustered the Grecian auxiliaries in the spacious garden of Celænæ. The Greeks had repulsed the invasions of Darius and Xerxes, and Athens had reached the height of her glory, when Cimon established the Academus, and presented it to his fellow citizens as a public garden. Numerous others were soon planted, and decorated with temples, porticoes, altars, statues and triumphal monuments; but this was during the polished age of Pericles, when Socrates and Plato taught philosophy in the sacred groves; when the theatre was thronged to listen to the poetry of Euripides and Aristophanes; when the genius of Phidias was displayed in rearing the Parthenon and sculpturing the statues of the gods; when eloquence and painting had reached perfection, and history was illustrated by Herodotus, Thucydides and Xenophon. Rome had subjugated the world, and emulated Athens in literature, science and the arts, when the superb villas of Sallust, Crassus, Pompey, Cæsar, Mæcenas and Agrippina were erected, and the palaces of the emperors were environed by magnificent gardens. The history of modern nations presents similar results. Horticulture long lingered in the rear of other pursuits. Most of the common fruits, flowers and oleraceous vegetables which had been collected by the Greeks and Romans, from Egypt, Asia and other distant climes, were successively extended over Western Europe; but so gradual was their progress, after the dark ages, that, till the reign of Henry VIII, scarcely any kitchen vegetables were cultivated in England, and the small quantity consumed was imported from Holland. Fuller observes, that "gardening was first brought into England, for profit, about the commencement of the 17th century. Peaches, nectarines, apricots, plums, pears, cherries, strawberries, melons and grapes, were luxuries but little enjoyed before the time of Charles II, who introduced French gardening at Hampton court, Carlton and Marlborough, and built the first hot and ice houses. At this period, Evelyn translated the Complete Garden-

er," and a treatise on orange trees, by Quintinyne; and, having devoted the remainder of his life to the cultivation of his rural seat at Sayes court, near Deptford, and the publication of his *Sylva*, *Terra*, *Pomona* and *Acetaria*, he "first taught gardening to speak proper English." In the Netherlands, France, Germany and Italy, a formal and very imperfect system of gardening was practised, with considerable success; but it was generally in a languishing condition, throughout the world, until the commencement of the 18th century, when it attracted the attention of some of the first characters of Great Britain; but the establishment of the present improved style of horticulture is of very recent date. "Bacon was the prophet, Milton the herald, and Addison, Pope and Kent the champions of true taste." The principles which were developed in their writings, and those of Shenstone, the Masons and Wheatly, were successfully applied by Bridgeman, Wright, Brown and Eames; the system soon became popular, and gradually extended over Europe, and ultimately reached the U. States. But the labors of the London horticultural society have mainly contributed to the perfection and present high estimation of gardening. That noble institution has given an impetus to cultivation, which is felt in the remotest countries. Its example has been followed in the most flourishing kingdoms of the eastern continent, and many similar institutions have been founded in the U. States. The effect of these is to diffuse through every country the knowledge and products of all. The history, literature and science of gardening, open a wide field for study and inquiry. The pleasure which gardens afforded men, even in the earliest times, appears from the scriptural account of the garden of Eden. The garden of Gethsemane, and that of the good and just Arimathean, are memorable in the sacred history of the Messiah. The Elysian fields were the heaven of classic mythology, and the devout Mussulman hopes to renew his existence in a celestial paradise. The bards, scholars and philosophers of the classic ages, have transmitted descriptions of the gardens of the ancients, from those in which Homer places the palace of Alcinous and the cottage of Laertes, to the splendid villas of Pliny and Lucullus. Among the ancient Greek writers, Hesiod, Theophrastus, Xenophon and Ælian treated of gardens to a certain extent; and the works of those who wrote after the seat of government was removed to Constantinople, were collected under the title of *Geoponica*, and have been translated by Owen. Among the Latins, Varro was the first author, to whom succeeded Cato, Pliny the Elder, Columella and Palladius. Passages are to be found, relative to the subject, in Martial, Virgil and Horace; but Pliny's Natural History, and Columella's book on gardens, contain the most correct information on Roman horticulture. Literature and the arts having revived in Italy, that country was the first to produce books on agriculture and gardening, and that of Crescenzia became celebrated. The field and garden cultures of Italy are so nearly allied, and horticulture and agriculture have been so blended by the writers, that it is difficult to ascertain under which department to include their works. The best for general information on the tillage of that delightful region, is the *Annali dell' Agricultura*. The Germans, as in all the branches of letters, science and arts, have an immense number of books in the department of gardening, especially on the subject of planting and forest trees. Those which furnish the best idea of the state of culture in that country, are Dietrich's *Wörterbuch*, with the supplement of 1820, and Sickler's *Deutsche Handwirtschaft*. The Dutch excel more in the practice than the literature of gardening. They have no work of very recent date; that of Commelin, which was published about the middle of the 17th century, is among the earliest; and those of La Court and Van Osten are said to be among the best that have appeared. The Journal of a Horticultural Tour in Holland and Flanders, by a deputation of the Caledonian horticultural society, gives the most satisfactory account of gardening in that part of the continent, in 1817. The Transactions of the Stockholm and Upsal academies furnish the chief information which is to be obtained, in relation to the rural economy of Sweden. The first author was Rudbeck, who was a contemporary of Commelin. Russia and Poland have produced but very few original books on horticulture. The Agricultural Transactions, occasionally published by a society in Warsaw, with those of the Economical Society of St. Petersburg, may be considered as affording the most accurate intelligence as to the culture of those countries. In the latter city is an extensive imperial botanical garden, which, being under the direction of able professors, emulates those of the more favored portions of southern Europe. The only recorded source for obtaining any knowledge of Spanish tillage,

are the Transactions of the Royal Agricultural Society of Madrid. The horticultural literature of France is of an early date, and the authors are not only numerous, but many of them in the highest repute. Etienne and Belon were the pioneers, while Du Hamel, Girardin, D'Argenville, Rosier, Tessier, Calvel, Noisette, Du Petit Thours, Jean and Gabriel Thouin, Bosc and Vicomte Hericart de Thury, may be considered as among the most able of their followers, in the various branches of rural economy. For a general knowledge of French culture, the *Nouveau Cours d'Agriculture*, in 13 volumes, published in 1810, should be consulted; but the most valuable publications on the existing mode of gardening, are the monthly *Annales de la Société d'Horticulture*, the *Annales de l'Institut Royal Horticole de Framont*, and the *Bon Jardinier*, an annual publication, compiled by professor Poiteau and Vilmorin. The first English treatise on rural economy was Fitzherbert's Book of Husbandry, which was published in 1634. The works of Tusser, Googe and Platt soon after appeared, and, early in the 18th century, the celebrated treatise of Jethro Tull excited much attention; and several new works of considerable merit were announced before 1764, when the valuable publications of Arthur Young, Marshal, and numerous other authors, spread a knowledge of cultivation, and cherished a taste for rural improvements, throughout Great Britain. The literature of horticulture rapidly advanced; but as many of the most eminent writers have been named, in treating of the science and art of gardening, it is unnecessary to mention them in this place. The citizens of the U. States have been chiefly dependent on England for books relating to agriculture and gardening. Still several have appeared by native writers, which are highly creditable to the authors and the country; especially those which relate to the botanical department. Mulenburg, Bigelow, Eliot, Torry, Colden, Bartram, Barton, Hosack, Mitchel, Darlington, Ives, Dewey and Hitchcock, are entitled to great praise for their successful attempts to illustrate the American flora. One of the earliest writers on husbandry was Belgrove, who published a treatise on husbandry, in Boston, in 1755; and in 1790 Deane's New England Farmer appeared; but McMahon, Cox, Thacher, Adlam, Prince, Bundly, Butler, Nicholson and Fessenden, since the commencement of the present century, have produced works on the various cultures of the U. States, which are generally circulated, and held in great estimation. The scientific relations of horticulture are numerous, and require an extensive acquaintance with the various branches of natural history and physics. Botany, mineralogy, chemistry, hydraulics, architecture and mechanics must furnish their several contributions, which it is the province of the artist to apply. After the illustrious Linnæus published his System of Nature, botany became a popular science, and a variety of interesting elementary works awakened attention to the beauties of nature, and a passion for experimental and ornamental planting was induced, which has been productive of great results. Mineralogy enables us to obtain accurate knowledge of terrestrial substances, and the mode of distinguishing the divers kinds of earths which constitute a cultivable soil; and chemistry instructs us as to the nature and properties of these various earths, having for its objects, when applied to horticulture, all those changes in the arrangements of matter, which are connected with the growth and nourishment of plants, the comparative value of their produce as food, the constitution of soils, the manner in which lands are enriched by manure, or rendered fertile by the different processes of cultivation. Inquiries of such a nature cannot but be interesting and important, both to the theoretical horticulturist and the practical gardener. To the first they are necessary in applying most of the fundamental principles on which the theory of the art depends. To the second they are useful in affording simple and easy experiments for directing his labors, and for enabling him to pursue a certain and systematic plan of improvement. To hydraulics belong, not only the conducting and raising of water, with the construction of pumps and other engines for those purposes, but the laws which explain the nature of springs and fountains. By the principles of that science, artificial lakes, canals and aqueducts are formed, irrigations projected, and water rendered subservient to the useful purposes of life, as well as to the embellishments of pleasure-grounds by *jets d'eau*, cascades and streams. Architecture, as a branch of horticulture, is of the first importance. Without its aid, it would be impossible to give that propriety and elegance to the scenery, and to produce that pleasing effect, which is the chief object of landscape gardening. Mechanics, in all its branches, is required for the purposes of horticulture. Great improvements have been effected in garden-

ing within the last half century. During the age of Cicero, a formal kind of gardening prevailed, characterized by clipped hedges and long avenues of trees. Pliny the Younger has given an account of his villa at Laurentum, and from the description, it was rather distinguished for its numerous superb edifices, extensive prospects, and the systematical arrangement of the pleasure grounds, than for the improvements and decorations of the surrounding scenery, in accordance with those principles which are derived from a close observance of the pleasing effects of nature. The rural residences of the Romans appear to have been mere places of temporary retreat, and were planted with odoriferous flowers and shrubs, and ornamented rather by the civil architect than the horticultural artist. From the establishment of the papal government to the commencement of the 13th century, the monks were the only class of persons who attended to ornamental gardening. After that period, the style prevalent throughout Europe consisted in tall hedges, square parterres fantastically planted, straight walks, and rows of trees uniformly placed and pruned. In fact, but little improvement was made from the time of the emperors Vespasian and Titus until the reign of George III of England. It is true, Hampton court had been laid out by cardinal Wolsey; Le Nôtre had planted Greenwich and St. James's park during the reign of Charles II; and, in that of George II, queen Caroline had enlarged Kensington gardens, and formed the Serpentine river; but lord Bathurst was the first who deviated from straight lines, as applied to ornamental pieces of water, by following the natural courses of a valley. Still, what has been emphatically called the *Dutch system* universally prevailed, and the shearing of yew, box and holly into formal figures of various kinds, and the shaving of river banks into regular slopes, went on until their absurdity became contemptible, and a better and more natural taste was induced. Verdant sculpture, regular precision in the distribution of compartments, and rectangular boundary walls, yielded to more chaste designs. Bridgeman succeeded to London and Wise, and became a distinguished artist; he rejected many of the absurd notions of his predecessors, and enlarged the bounds of horticulture. Other innovators departed from the rigid rules of symmetry; but it was reserved for Kent to realize the beautiful descriptions of the poets, and carry the ideas of Milton, Pope, Addison and Mason more extensively into execution. According to lord Walpole, he was painter enough to taste the charms of landscape, sufficiently bold and opinionative to dare and to dictate, and born with a genius to strike out a great system from the twilight of imperfect essays. He leaped the fence, and saw that all nature was a garden. The great principles on which he worked were perspective, light and shade. Groups of trees broke a too extensive lawn; evergreens and wood were opposed to the glare of the champaign, and, by selecting favorite objects, and veiling deformities, he realized the compositions of the great masters in painting. Where objects were wanting to animate his horizon, his taste as an architect could immediately produce them. His buildings, his temples, his seats, were more the work of his pencil than of his science as a constructor. He bade adieu to all the stiff modes of canals, circular basins, and cascades tumbling over marble steps. Dealing in none but the true colors of nature, and seizing upon its most interesting features, a new creation was gradually presented. The living landscape was chastened or polished, not transformed. The elegant works of Repton, the unrivalled essays of Price on the picturesque, and the valuable publications of Gilpin, Madock, Panty, Sang and Loudon, with those of many other writers, on landscape and ornamental gardening, have had an extensive influence in promoting correct ideas of natural scenery. The improved style of horticulture, every where apparent in Great Britain, attracted the attention of the other nations of Europe, and English gardening became the designation for all that was beautiful in that pleasing art—the synonyme of perfection in rural culture. At the period when this new system of laying out grounds was gaining converts, and began to be practically adopted, viscount Girardin, a French military officer of high rank, travelled through England, and, on his return, he not only improved his seat at Ermenonville in conformity to that style, but published a work of great celebrity on the *Composition des Paysages sur le Terrain, ou des Moyens d'embellir la Nature près des Habitations.* The French style of laying out gardens had been settled by Le Nôtre, during the reign of Louis XIV, and continued in repute for upwards of a century; for it appears to have been in vogue as late as 1770. The court and nation wished to be dazzled by novelty

and singularity, and his long, clipped alleys, triumphal arches, richly decorated parterres, his fountains and cascades, with their grotesque and strange ornaments, his groves full of architecture and gilt trellises, and his profusion of statues, enchanted every class of observers. His principal works were the gardens of Versailles, Meudon, St. Cloud, Sceaux, Chantilly, and the terrace of St. Germain. Gray, the poet, was struck with their splendor when filled with company, and when the water-works were in full action; but lord Kaimes says, they would tempt one to believe, that nature was below the notice of a great monarch. Le Nôtre was succeeded by Dufresny, who, differing considerably in taste from that great artist, determined on inventing a more picturesque style; but his efforts were rarely carried into full execution. He, however, constructed, in a manner superior to his predecessor, the gardens of abbé Pajot and those of Moulin and Chemin creux. After the peace of 1762, the English system began to pass into France, and portions of ancient gardens were destroyed, to make way for young plantations *à l'Anglaise*. Laugier was the first author who espoused the English style, and the next in order was Prevot. It was at this time that viscount Girardin commenced his improvements at Ermenonville, and the change of the horticultural taste in France, may be referred to the last quarter of the 18th century. The English style has gradually found its way into most civilized countries. Only 25 years have elapsed since the London horticultural society was established, and there are now more than 50 similar institutions in Great Britain, which still maintains the first rank in the art; but France is making great efforts to rival her. A horticultural society was established in Paris in 1826, and has already more than two thousand members, and the number is rapidly increasing. It has been patronised by the court, and most of the nobles and men of distinction in France have eagerly united with the proprietors of estates and practical cultivators to collect and disseminate intelligence throughout that flourishing empire. In the various provinces where horticultural societies have not been founded, those of agriculture, or of the sciences and arts, have established departments expressly devoted to that interesting pursuit; and during the year 1827, a practical and theoretical institution was founded at Fromont, by the enlightened and munificent chevalier Soulange Bodin, for educating gardeners, and introducing improvements in every department of horticulture. The garden contains about 130 acres, and is divided into compartments for every variety of culture. Extensive green-houses, stoves and orangeries have been erected, and all the other appendages furnished, which are requisite for rendering the establishment effectual for instruction and experiment. The nursery of the Luxembourg long supplied a great part of Europe with fruit trees. The *jardin des plantes*, in Paris, includes compartments which may be considered as schools for horticulture, planting, agriculture, medical botany and general economy, and is unquestionably the most scientific and best managed establishment in Europe. The flower garden of Malmaison, the botanical garden of Trianon, and numerous nursery, herb, medicinal, experimental and botanical gardens, in various parts of the kingdom, are preëminent for the variety, number and excellence of their products. Holland has been distinguished, since the period of the crusades, for her flower gardens, culinary vegetables, and plantations of fruit trees. The north of Europe and the U. States are still dependent upon her florists for the most splendid varieties of bulbous-rooted plants; and her celebrated nurseries, which have long replenished those of Europe, have been recently fortunate in the acquisition of Van Mons and Duquesne. Some of the finest fruits of our gardens were produced by these indefatigable experimentalists, and, with the excellent varieties created by Knight, promise to replace those which have either become extinct, or are so deteriorated in quality, as to discourage their cultivation. From St. Petersburg to the shores of the Mediterranean, horticulture has made a rapid progress, and each nation is emulous to perfect its culture, in accordance with the most improved principles of science, art and taste. In the U. States, a like spirit has been more recently developed. Horticultural societies have been instituted in New York, Philadelphia, Boston, Albany, Geneva and South Carolina, and a zealous disposition evinced to compete with the nations of the eastern continent. The environs of many of the cities are in a high state of cultivation, and the markets are beginning to be well stocked with numerous varieties of fruits and vegetables. It is now the duty of American cultivators to reciprocate the benefits which they have so long received from their transatlantic

brethren, and to develope the resources of a country, which offers such an extensive range of research to the naturalist. Many of the most useful and magnificent acquisitions of the groves, fields, gardens and conservatories of Europe are natives of the western hemisphere. The indigenous forest trees, ornamental shrubs, flowers, fruits, and edible vegetables of North America, are remarkable for their variety, size, splendor or value. Extending from the pole to the tropics, and from the Atlantic to the Pacific, North America embraces every clime, and every variety of soil, teeming with innumerable specimens of the vegetable kingdom. With such advantages, most of which are included within the U. States, it is to be expected that the citizens will be as distinguished for their advancement in rural economy as in civil and religious freedom. The natural divisions of horticulture are the esculent or kitchen garden, seminary, nursery, fruit trees, and vines, flower garden, green-houses, *arboretum* of ornamental trees and shrubs, the botanical and medical garden, and landscape or picturesque gardening. Each of these departments requires to be separately studied before it can be managed so as to combine utility and comfort with ornament and recreation. To accomplish this on a large scale, artists, scientific professors, and intelligent and experienced practical superintendents, are employed in Europe, but they have not as yet been much required in the U. States. The owners of the soil have generally designed and executed such improvements as have been made in the conveniences and embellishments of country residences. The kitchen garden is an indispensable appendage to every rural establishment. In its simplest form, it is the nucleus of all others. Containing small compartments for the culture of esculent vegetables, fruits and ornamental plants, these may be gradually extended, until the whole estate assumes the imposing aspect of picturesque or landscape scenery. The details of the several grand divisions of horticulture are to be learned from the numerous authors who have devoted their especial attention to each, and those which have been named, with many others, should be consulted by every gentleman who wishes to participate in the comforts and luxuries of a garden. The most valuable and interesting branches of gardening to the citizens of the U. States, generally, are of course those which include the culture of esculent vegetables, fruits and ornamental plants. These may be enjoyed, in various degrees, by all the proprietors of the soil. It is only necessary that information should be disseminated, and examples presented by the more intelligent and opulent, to remove the too common prejudice, that gardens are costly and useless appendages, requiring great expenditure and labor, without any adequate profit or satisfaction. So far from this, there is not a farmer, not an owner of an acre of land, who will not be enriched or gratified by devoting a portion of his industry to the tillage of a garden: they may find many hours which can be thus profitably and pleasantly employed. Personal attention, with judicious arrangements, and a proper division of labor, will accomplish much. Many of the most valuable products of agriculture were first introduced, and their qualities tested, in the garden. "If therefore," says the learned and eloquent Poiteau, "we would ascend to the origin of Agriculture, it is in the garden that her cradle will be found. There, like the young Hercules, she first tried her powers, and prepared, like him, to overrun the world, which she speedily cleared of monsters, and bestowed upon man the laws of civilization." Although commendable efforts have been made, in several parts of the country, to introduce and multiply all kinds of esculent vegetables, most of the choice varieties of fruits, and many of the ornamental trees and plants, still there is a general and lamentable negligence of this delightful culture. In England, the eye is continually struck with cottages embowered amidst fruit trees, shrubs and flowers, while a neat compartment of esculent vegetables supplies much of the food for the support of the inmates. In Germany, Holland, and a portion of Italy, it is the general attention which all ranks bestow upon the grounds surrounding their habitations, that gives such a pleasing aspect to those countries. But little attention has been paid in the U. States to the planting of forest trees, ornamental shrubs and flowers, although the native varieties are numerous, highly valued in other countries, and constitute the most interesting exhibitions in those celebrated establishments, which are enriched by collections from all quarters of the globe. Arboriculture claims attention, not merely for the purposes of rural embellishment, but to replace the valuable timber trees, which are fast disappearing throughout the Atlantic states. The forest trees of North America exceed 140, while in Europe there are

only 37. There are 53 species of the oak, 17 of the pine, 15 of the walnut, and 8 of the maple. Of those magnificent trees which compose the genus of the *magnolia*, but 15 are known, 9 of which belong to the U. States. In all ages and countries, flowers have been universally cherished. "Who," asks Boursault, "does not love flowers? They embellish our gardens; they give a more brilliant lustre to our festivals; they are the interpreters of our affections; they are the testimonials of our gratitude; we present them to those to whom we are under obligations; they are often necessary to the pomp of our religious ceremonies, and they seem to associate and mingle their perfumes, with the purity of our prayers, and the homage which we address to the Almighty. Happy are those who love and cultivate them." The ancients paid particular attention to flowers. They were in great request at the entertainments of the wealthy; they were scattered before the triumphal chariots of conquerors; they formed the distinguishing insignia of many divinities; they glitter as gems in the diadem of the seasons, and constitute the mystical language of poetry. We are told that Descartes prosecuted, with equal ardor, astronomy and the culture of flowers. The great Condé devoted his leisure hours to that delightful pursuit, and the vase of flowers was daily renewed upon the table of lord Bacon, while composing the volumes of his sublime philosophy. In the cities of Europe, flower-markets, for the sale of bouquets and ornamental plants, are as common as those for fruits. In this new world, these delicate daughters of the sun have not received that attention which indicates the highest state of civilization; but a taste for floriculture is increasing throughout the Union, and ornamental plants embellish the country seats of the opulent and the dwellings of honest industry. Botanical gardens have been established in several of the states, and the large cities can now boast of their marts and exhibitions of flowers. One of the greatest impediments to the progress of horticulture in the U. States has been the deficiency of nurseries, both as to number and extent. They are not only requisite for furnishing the various kinds of trees and plants which are demanded for utility and embellishment, but to give publicity to the most valuable and interesting species, as well as to excite a taste for their cultivation. These establishments, however, have been much increased and improved within a few years, and there are several in the vicinity of Boston, New York, Albany, Philadelphia, and in the district of Columbia, which are highly creditable to the proprietors and to the country. Among the books on agriculture, those of Cox, Thacher and Deane on fruit trees, Adlum and Prince on the vine, Green on ornamental flowers, and Mc Mahon, Fessenden and Prince on gardening generally, may be recommended to American cultivators as excellent elementary works. Their works contain sufficient theoretical and practical information for the successful management of such limited cultures as are usually undertaken in the U. States. Among the European productions on horticulture, there is no single work in the English language so valuable as Loudon's Encyclopædia of Gardening; but all the numerous publications of that distinguished writer, in the various branches of rural economy, are remarkable for the fund of intelligence which they contain. To Peters, Hosack, Lowell, Perkins, Buel, Powel, and other gentlemen, the Americans are under the greatest obligations. By precept and example they have fostered a taste for cultivation, and successfully promoted all the various departments of agriculture and gardening. The progress now making in their cherished pursuits, the results of their experiments, and the influence of their labors, bear witness to their services. (See *Gardening*.)

Hortus Siccus. (See *Herbarium*.)

Horus, the son of Osiris and of Isis, commonly represented as a child in the arms of his mother, and sucking at her breast, was the last of the deified kings who reigned in Egypt. When Typhon killed Osiris, he also sought every where for Horus; but his mother had given him to Latona, who kept him concealed. Nevertheless, he was killed by the Titans; but his mother restored him to life, and made him immortal. She also taught him the healing art, and endowed him with the power of prophecy, which he used for the advantage of men. His father ascended from the infernal regions, and taught him the art of war. When he was grown up, he levied troops, and made war against Typhon, whom he succeeded eventually in conquering. (See *Typhon*.) Hammer declares him to be Janus, or Amenthes.

Horus Apollo. (See *Horapollo*.)

Hosanna (*help him, God!*) was a solemn salutation of the Jews, with which they addressed their kings and heroes. They

also gave this name to a prayer which they pronounced on the feast of tabernacles. Rab. Elias says that the Jews called the palm branches, which they bore on this day, also *hosanna.—Hosanna Rabba*, or *Grand Hosanna*, is a name which the Jews give to their feast of tabernacles, which lasts eight days, because, during the course thereof, they are frequently calling for the assistance of God, the forgiveness of their sins, and his blessing on the new year.

Hosea; the first among the minor prophets of the Old Testament. His book was admitted into the canon after the Babylonish captivity. He appeared in the kingdom of Israel about 770 B. C., to denounce the vices of his contemporaries, and threaten them with divine punishment. He has represented, in the three first chapters of his book, the guilty violation of their covenant with God, by an allegory, very common among the Hebrew poets, of a marriage covenant which the wife has violated, referring to the covenant which God had concluded with the Israelites. The remaining chapters treat of the same subject, under different figures, with reproaches, exhortations and threats; he predicts the approaching exile of his countrymen, and the consoling promise of the final return of an improved people forms the conclusion of this prophetical book. He is remarkable for his laconic style, hastening from image to image, and from reflection to reflection. The stream of a powerfully excited fancy forces him irresistibly onward. Hence he does not exhibit the roundness, grace and harmony which characterize the other prophets. The frequent and sudden interruptions, and the abrupt peculiarity of his images, render his book, in many places, obscure, and the coarseness of his expressions frequently oversteps the bounds of delicacy. Still, on account of his marked originality, the depth and truth of his sentiments, and the strength of his language, he will always maintain a distinguished rank among the Hebrew poets.

Hospital; a building appropriated for the reception of sick, infirm and helpless paupers, who are supported and nursed by charity; also, a house for the reception of sick or insane persons, whether paupers or not; or an establishment for seamen, soldiers, foundlings, &c., who are supported by charity. Hospitals for the sick and wounded, and also those for the poor or infirm, were wholly unknown among the ancients. In Athens, those who had suffered in the public service were fed in the *prytaneum*, but there was no asylum for them in case of sickness. In Sparta, where all the citizens ate together, there was no institution for the sick. In Rome, neither Numa nor Servius, neither the consuls nor the emperors, thought of making any provision for the poor or the infirm. The first establishment of hospitals must be ascribed to Christians; some attempts had already been made by them in Rome, about the end of the fourth century. Fabiola, a pious Roman lady, established an institution for receiving poor and sick persons; and, after the establishment of Christianity, the emperors at Constantinople built many hospitals for poor infants, for aged people, for orphans, for strangers, &c. The emperor Julian attributed the rapid progress of the Christian religion, in great part, to these charitable institutions, and proposed to imitate the example of the Christians, in his attempts to restore paganism. Piety impelled many individuals to appropriate a part of their funds to religious and charitable purposes. Institutions thus formed were of great benefit to the sick poor, but soon became liable to abuses. The funds devoted to charitable purposes were unalienable, and the monastic institutions with which they were connected were contaminated with looseness and extravagance. In Catholic countries, the hospitals are generally attended by nuns, sisters of mercy, &c., of whom even Voltaire says, that there is nothing nobler than the sight of delicate females, sacrificing beauty, youth, often wealth and rank, to devote themselves to the relief of human miseries, under the most revolting forms. Hospitals are an honor to the nations of Europe and their American descendants. In less civilized countries, we find them to be frightful abodes of misery. The plague-hospital, at Alexandria, described by Madden, or the insane hospital at Cairo, presents a scene of horrors not inferior to Dante's description of the feverish people, one above the other, in his *Inferno*. If possible, it is best, in infirmaries, to separate certain patients. Thus, in all populous cities, there should be an hospital for incurables. It is never advisable to have the insane hospital nor the lying-in hospital connected with others; still less, as is the case in many places in Europe, to connect the work-houses and the hospitals. In Paris, there are 32 hospitals; in London, about the same number. Those in Paris are supported by government. The name of *hôpital* is generally applied to the establishments for the sick, and that of *hospice*

to those in which the aged, children and infirm people are received. More than 15,000 beds are made up at these different establishments, and the annual expenditure is over a million of dollars. From 40 to 50,000 persons are annually accommodated in *hôpitaux*, or about 4000 at a time. The *hospices* generally contain nearly 10,000 persons at the same time. The hospitals of Paris are generally clean and in good order, for which they are indebted to the *sœurs de la charité*, who wait upon the sick, and nurse them with the greatest care. They are not always favorably situated, being often too much confined. The *Hôtel des Invalides* is destined for military veterans, and contains 7000 men. It has a library of 20,000 volumes. The *Hôtel Dieu* is the most ancient hospital in Paris, and is situated in the most populous part of the city. Before the revolution, 5000 sick were here huddled together in 1400 beds; but several monasteries were then converted into hospitals, and lying-in women, scrofulous patients, lunatics, children, &c., who had all been crowded together, were separated, and placed in different establishments. The *Hospice de la Salpétrière* generally contains several thousand poor women, who are kept at work. In one part is a prison for prostitutes. The *Hôpital de la Charité* receives only men attacked by acute diseases; the *Hôpital St. Louis* is used as a pest-house; the *Hospice des Enfants Trouvés* is for foundlings, about 6000 of whom are annually born or received in it; the *Hospice de l'Accouchement* receives about 3000 women annually; the *Hôpital des Quinze Vingts*, or for 300 blind persons, admits only the indigent; the actual number is over 400. Among the hospitals in London and vicinity, are the Foundling Hospital; the Magdalen Hospital, for reclaiming prostitutes; the Greenwich Hospital and Naval Asylum (see *Greenwich*); Guy's Hospital, for sick persons and incurable lunatics; Middlesex Hospital; Bethlem Hospital (commonly called *Bedlam*), for lunatics, &c. The Chelsea Hospital is appropriated for the reception of sick and superannuated soldiers; the number of pensioners is about 400, besides the out or extraordinary pensioners. The hospitals in the U. States are on a smaller scale than those of Europe, and fewer in number, but very well managed.

Hospital Fever is a malignant form of fever, which has received this title from its being most frequently met with in places of this sort, especially in military and other large hospitals, where many men are shut up in a small space and in close air. Under such circumstances, almost any fever will assume a more malignant character, and become more or less contagious. The causes of common hospital fever are to be found in the want of good and wholesome provisions, fatigue, care and anxiety, and, more especially, the corruption of the air, which is always produced by many men living in even a large building, or by fewer, if shut up in a small space; and these causes are found to produce this effect, not only upon the soldier, but upon the poor, of all kinds, and in all places. A similar disease is developed among those confined in prisons and ships, and among the inhabitants of damp, narrow huts, and is called *gaol*, *ship*, or *typhus fever*. The common fever, which often prevails under the last name, has not, indeed, all the characteristics of this form of fever, although it easily assumes them. The *hospital fever* is only a high degree of that form of disease which is usually called a *putrid*, or *putrid nervous fever*; that is, a fever with diminished power and action of the whole nervous system. The contagion produced by hospital, or putrid fever, is capable of producing fever in others, although the fever so produced is often of a different character and appearance; and it should be remarked, that it almost ceases to be contagious by removal to a pure air and well-ventilated apartments. The form assumed by the disease is much affected by the general state of the weather, and by the constitution of the individual. In strong, young, well-fed and full-blooded persons, in whom the arterial system is full, and an inflammatory disposition much developed by stimulating drinks, or a dry, cold air, which is very favorable to inflammation, an inflammatory excitement of the whole nervous system takes place, which may even run to the height of an inflammation of the brain, with delirium, &c. In others, who have been much reduced by bad diet, and by exposure to warm, moist weather, a gastric form of fever is developed, attended also with violent nervous symptoms. If it happens to seize persons in whom the nervous and circulatory systems are much debilitated by any of the causes abovenamed, a fever more like the true hospital fever is produced, which is termed a *typhus*, *putrid*, or *adynamic fever*. In truth, we scarce ever see a form of this fever which is quite unmixed, but all the forms pass into each other, with innumerable shades of accidental difference, arising from difference of the parts most affected,

&c. It will therefore be at once evident, that no universal mode of treatment can be laid down, but that the treatment must be varied according to the causes of the disease, the state, constitution and previous habits of the sick, &c., and according to the changes which are constantly occurring in the course of the disease. The most important modes of guarding against the hospital fever, are to remove the causes of it, to purify the air, to improve the nourishment, allowing a generous diet, and to prevent the sick from being accumulated in great numbers in one apartment. The wards or rooms in which they are or have been collected, should be purified by the vapors of strong mineral acids, which are easily obtained by mixing common salt and red lead or manganese in a vessel of any sort, and then stirring into it a portion of oil of vitriol or sulphuric acid. But above all, the rooms should be well ventilated, and the clothes of all kinds should be changed daily.

Hospital, the chancellor. (See *Hopital.*)

Hospital, the marquis. (See *Hopital.*)

Hospitality. The rites of hospitality were acknowledged and practised from the earliest antiquity, and in the most barbarous ages. Natural feeling taught men to receive the stranger with kindness, in times when there was no commercial intercourse between different countries, and nothing but necessity could induce an individual to leave his home. We find hospitality enjoined in the Mosaic writings, in the poems of Homer, as well as among the Arabs, the Germans, and almost all the nations of antiquity; but different ideas were held in different places as to the degree and extent of the service which was due to the guest. In this respect no people surpass the Arabs. Among them the host receives the stranger who comes to his tent with fraternal kindness. If his provisions fail, he conducts the guest to his neighbor, who now entertains them both with equal generosity. This simple custom was consecrated among the Greeks by their religion. Jupiter, who was hence surnamed the *hospitable* (Xenios) was the guardian of strangers, and the avenger of the injuries offered them. As we learn from Homer, the belief that the immortals sometimes appeared on earth in human shape contributed to the observance of the rites of hospitality. In the early times of Greece, when increasing commercial intercourse compelled men to make frequent journeys, individuals entered into agreements to afford each other mutual entertainment, whenever business should bring either of them to the country of the other; and this they promised not only for themselves, but for their children and posterity. In Homer we find this custom spoken of. The visitor was kindly saluted. He was bathed, clothed, entertained, and his conversation listened to with pleasure. After nine days, if the stranger had not previously made himself known, the question might be put to him, "Who and whence art thou?" If he declared himself to be connected by ancient ties of hospitality between their ancestors, his host was rejoiced to have renewed the ancient bond. Still more welcome was the guest, if he could show the half of the ring broken between their fathers, in perpetual token of their agreement. The host made presents to the guest at his departure, which were carefully handed down in the family.

Hospitium (*Latin;* an inn) signifies either a little convent belonging to a religious order, occupied by a few monks, and destined to receive and entertain travelling monks, or houses in uninhabited mountains, erected for the purpose of receiving travellers who have lost their way or are exhausted by fatigue. The most famous of the latter are the *hospitium* on St. Bernard (q. v.), that on the Simplon, built by Napoleon, with another of earlier origin, the *hospitium* at Val d'Obbia in Piedmont, that on St. Gothard (q. v.), that on the Grimsel, and that on the Luckmaner.

Hospodar signifies, in the Sclavonic language, *lord*, and is the title of the princes of Moldavia and Walachia. (q. v.)

Host (from the Latin *hostia*, a victim for sacrifice.) *Hostia* means, in the Latin of the Christian church, Jesus Christ, in so far as he sacrificed himself for men; and *hostia*, or *host*, is also used for the bread (or wafer) and wine in the eucharist, as containing the body and blood of Christ, among those Christian sects who believe in the presence of Christ in the bread and wine. As the wafer alone is given to laymen in the Catholic church, as containing both the body and blood of the Redeemer, the term *host* is usually applied to the consecrated wafer. Common bread was originally used at the Lord's supper; but bread baked particularly and solely for this purpose, large, round *oblatæ*, came into use, in the 4th century, which it was customary to break after consecration into as many pieces as there were communicants. The hosts, or smaller wafers,

were introduced into the Latin church in the 12th century. The Greeks use, for the eucharist, leavened bread, whilst the Roman Catholics use unleavened wafers; which custom was followed by the Lutherans. It is well known, that the Calvinists on the continent, not believing in transubstantiation or consubstantiation, prefer unleavened bread to the wafers. This bread has been adopted in Prussia in the new ritual for the united Lutherans and Calvinists; yet any person, preferring the wafer, may have it, as, at the end of the celebration of the Lord's supper, it is offered to them. The Protestants in England and America use common leavened bread. (For the elevation of the host, see *Elevation*, and for more information, see *Mass*.)

Host, Jens-Kragh; a Danish scholar, doctor of law, born at St. Thomas, Sept. 15, 1772. In 1801, Host was made judge of the royal and municipal court, but, in 1808, was deprived of this place by a decision of the superior court. He appears to have injured his fortune by the freedom of his language. He has contributed much to Danish literature and history. With Guldberg and Haste, he conceived the idea of uniting Sweden and Denmark by literary ties. With Nyerup, Pram and Baggesen, he founded the Scandinavian literary society, of which the publication of the Scandinavian Museum was the consequence. Denmark and Sweden are also indebted to him for many fugitive productions, for many excellent translations, and for the extension of their literary fame. Besides his *Nordia*, we will mention his *Svenske Blade*, his *Euphrosyne*, *Iris*, *Dannora* and *Dana*; and among his translations, his *Odins*, or the Emigration of the Asen, after Leopold and his Wreath of Romances, from the French and the German. He also published a Swedish grammar and dictionary for Danes. In 1810, he wrote Memorials of the Reign of Christian VII; in 1813, Sketch of a History of the Danish Monarchy under Christian VII; 1815, Clio, one vol.; On Politics and History, 5 vols. (1820, &c.). His most important work is Count Struensee and his Ministry (in Danish), (Copenhagen, 1824, 3 vols.), in which the history of that period is, for the first time, correctly and impartially given, and the errors relative to it are corrected.

Hostilius. (See *Tullus Hostilius*.)

Hotel (*French*); the mansion of a grand personage; for instance, *Hôtel de Condé*. Formerly the palace of the king was simply called *l'hôtel*; hence *grand prévôt de l'hôtel*. *Hôtel-Dieu* is the appellation for the ordinary hospitals of the sick; hence the nuns of Hôtel-Dieu. *Hôtel de Ville* is, in France, the town-house. *Hôtel* is also used for an inn, like the Italian *osteria*, with which it has a common origin, both being derived from *hostis*. In this sense, it has passed into the English language.

Hot Springs, in Bath county, Virginia, 40 miles south-west of Stanton. The common temperature of the water is said to be 112°; but it is sometimes so hot as to boil an egg. It is considered useful in curing some diseases. Here is a post-office. (For the *Hot Springs* in Arkansas, see *Arkansas*.)

Hottentots. The natives of the southern part of Africa are reducible to two distinct families, the Hottentots, and the Betjuanas or Bushwanas (q. v.), to whom the Caffres (q. v.) are related. To the former, or Hottentot family, belong also the Bosjesmans or Bushmen, the Koranas and the Namaquas. When the European colony was first established at the Cape, the inhabitants of the country between it and Orange river were Hottentots, divided into various tribes. Of a moderate height, lean, with high cheek bones, thick lips, small, half-closed eyes, woolly hair, a mild expression, but indolent and unenterprising, they were despised and oppressed by the colonists. Their filth and indolence, and the harshness and poverty of their language, led the Europeans to consider them as little better than brutes, and by their treatment they almost reduced them to that condition. But a kinder treatment, introduced by the Moravian missionaries, has shown them to be capable of civilization, and not to be wanting in ingenuity and industry. The colonial Hottentots, who were at one time rapidly diminishing on account of the mode of life to which they were reduced, increased in number from 17,431 to 30,549 between 1807 and 1823. Their mutual affection, kindness, integrity, chastity and hospitality are commended by travellers who saw them while yet comparatively independent. A *kros* or *karos* (sheep-skin) serves the Hottentot as a dress by day, a bed by night, and a winding sheet in the grave. A thick plaster of dirt and grease covers his head and body; a blunt javelin (*assagay*) and a dart were formerly his only weapons. The Hottentots eat animal food voraciously, but are often reduced to great abstinence. Milk and water are their common beverage, and they smoke hemp when they cannot get tobacco.

Their villages, called *kraals*, are a circular cluster of beehive-shaped huts, which are covered with mats woven by the women; an opening in front serves as a window, a door and chimney. The Bushmen (q. v.), or wild Hottentots, resemble the Hottentots, strictly so called, in their features and language. The Koranas lead an indolent, wandering life, on the Orange river and its vicinity. The Namaquas are a Hottentot tribe, inhabiting the country on each side of the Orange river, in the lower part of its course.

Hottinger; a Swiss family, which has produced several distinguished scholars, particularly theologians:—1. *John Henry* the elder, born at Zurich in 1620, made such progress in the ancient languages at school, that he was sent to foreign universities at the public expense. In 1638, he set out for Geneva, and went thence to France and Holland. He here studied the Oriental languages in Gröningen. In 1641, he returned, through England, back to his native country, enriched with large stores of knowledge. In 1642, he was appointed professor of ecclesiastical history in his native city, and, in 1643, professor of catechetics and the Oriental languages, and contributed much to promote the study of Oriental literature. His reputation was widely spread by his numerous writings upon this subject. He explored the relations of the Eastern languages with uncommon assiduity, and showed what advantages might be thence derived for the interpretation of the Scriptures, in his *Grammatica quatuor Linguarum, Hebr., Chald., Syr. et Arab. Harmonica* (Zurich, 1649, 4to.); in his *Etymologicum Orientale* (Frankfort, 1661); *Thesaurus Phil. seu Clavis Scripturæ* (Zürich, 3 edit., 1696, 4to.), by which book he contributed greatly to the revival of the study of Oriental literature; and in many other works. In close connexion with this study, he also pursued that of Eastern history and archæology, and shed much light on the history of the Jews and Mohammedans, as generally on the religions and religious sects of the East, in his *Historia Orientalis* (Zürich, 1651 and 1660, 4to.); *Promtuarium seu Bibliotheca Oriental.* (Heidelberg, 1658, 4to.), and other works, as likewise in his very valuable *Historia ecclesiastica N. T.* (Zürich, 1651—67, 9 volumes), extending to the reformation, which, although derived from authentic sources, is not free from prejudices, and is somewhat irregular in its arrangement and unpolished in its style. He endeavored, especially, to obtain accurate information concerning the state of the Eastern churches; and the results of these inquiries are scattered through his writings. His reputation in the literary world was so great, that the elector palatine, by a letter written with his own hand, obtained permission from the council at Zürich for him to spend a few years at Heidelberg, to revive the university there, which he did from 1653 to 1661, with the happiest results. But his endeavors to unite the Protestant sects, which the elector favored, encountered the usual obstacles. In 1658, he accompanied the elector to the diet at Frankfort, where he became acquainted with the first men of Germany, and intimate with the great Orientalist Ludolph. They formed a plan of sending young men, skilled in Eastern literature, at the prince's expense, to make inquiries into the state of the African and particularly the Ethiopian churches. After his return to Heidelberg, the elector prevailed on the council at Zürich to prolong his leave of absence. He finally returned, in 1661, to Zürich, loaded with honors. Here he was appointed perpetual rector of the university, and received many other honorable offices. He was even sent ambassador to Holland. In 1667, he was on the point of complying with a repeated invitation to visit the university at Leyden; but death prevented him; he was drowned in the Limmat, with three of his children.—2. His son *John James*, born at Zürich, 1652, began his studies under his father's superintendence, and afterwards held many clerical offices; was, in 1698, professor of theology at Zürich, and died in 1773. J. J. Lavater has written his life. The most valuable of his works is his Ecclesiastical History of Switzerland *(Helvetische Kirchengeschichte)*, in which he endeavored to prove the excellence of his church.—This latter is not to be confounded with *John James Hottinger*, who was born 1750, was professor at Zürich, and died Feb. 4, 1819, known by his editions of the classics, as Sallust and the work of Cicero *De Divinatione*, his translation of this work and of the Offices, the characters of Theophrastus, and many others. This acute and elegant scholar acquired a high reputation, not merely as a philologian, but also for his works of general criticism, and his other literary productions. His Essay towards a Comparison of the German with the Greek and Roman Poets, is among the most excellent works of the kind.

Houdon, N.; a distinguished French sculptor, a member of the institute, and of the legion of honor. In 1782, he had already laid the foundations of his fame.

His Diana and his sitting statues of Voltaire, are particularly worthy of mention. The two last are executed from the same model. One of them is placed in the peristyle of the great French theatre. He has also modeled an excellent bust of Rousseau, taken after his death. Besides these works, he has executed busts of D'Alembert, Barthélémy, the late margrave of Anspach, marshal Ney, Napoleon, the empress Joséphine and many others. His statue of Cicero, which is placed in the hall of the former conservative senate, represents the orator as denouncing the traitor Catiline to the assembly, and produces a fine effect. Houdon has also executed, for the use of the academy, two models of the human frame, represented without the skin, and showing great knowledge of the muscles. The statue of Washington and the bust of Lafayette in the capitol at Richmond, Virginia, are also by Houdon.

Houlieres, Madame. (See *Deshoulières.*)

Hound (*canis sagax*, L.). The hound forms one of the varieties of spaniels, and is distinguished by its long, smooth and pendulous ears. The bloodhound (q. v.) has already been described, and appears to have been the origin of the other sub-varieties, the principal of which are the foxhound, harrier and beagle. England, perhaps, excels all other countries in her breed of hounds, not only from the climate being congenial to them, but also from the great attention paid to their breeding and management. The points of a good hound are thus laid down:—His legs should be perfectly straight, his feet round and not too large, his shoulders back, his breast rather wide than narrow, his chest deep, his back broad, his head small, his neck thin, his tail thick and bushy. As to the size, most sportsmen have their prejudices, some preferring them small, and others large; for general service, however, it appears that a medium is the best; this is the sentiment of Somerville:

> "For hounds of middle size, active and strong,
> Will better answer all thy various ends,
> And crown thy pleasing labors with success."

It is very essential that all the hounds in a pack should run well together; to attain which they should be of the same sort and size. The management of hounds may be considered as a regular system of education, from the time they are taken into the kennel. The feeding of a kennel of foxhounds is one of the most striking illustrations of the power of training to produce complete obedience. The feeder stations himself at the door, and calls each dog individually; the animal instantly advances; the rest, however impatient they may be, remaining quiet till their turn arrives. In these kennels, a barbarous custom of these dogs towards each other has sometimes been observed. If a hound gets down of his own accord from a bench on which he has been lying, no notice is taken of it by the others; but if he should unfortunately fall from the bench by accident, his companions fly at him and worry him to death. The beagle is the smallest of the dogs kept for the chase, and is only used in hunting the hare, and, though far inferior in speed to that animal, will follow, by its exquisite scent, with wonderful perseverance, till it fairly tires the hare. The harrier differs from the beagle in being somewhat larger, as well as more nimble and vigorous; they are also used almost exclusively in the chase of the hare. One of the most extraordinary hunts of this animal took place in England some years since, showing the perseverance of her pursuers. After a hard chase of 16 miles, the timid creature, finding herself closely pushed by the dogs, took to the sea, and, being followed by the whole pack, after braving the ocean for near a quarter of a mile, fell a sacrifice to her stanch pursuers, and was brought safe on shore by one of them.

Hour; the 24th part of a day (q. v.). In many countries, the hours are counted from midnight, and 12 hours are twice reckoned. But in some parts of Italy, 24 hours are counted, beginning with sunset, so that noon and midnight are every day at different hours. Each hour is divided into 60 minutes, these into 60 seconds, these into 60 thirds, &c. Many nations are totally unacquainted with the division of the day into 24 equal parts; with others, the hours of the (natural) day are longer or shorter than those of the night. (See *Day*, and *Sidereal Time.*) The fixed stars complete their apparent revolution round the earth in 24 hours of sidereal time, and therefore pass through 360 degrees in 24 hours, or 15 degrees in 1 hour. If we suppose two observers 15 degrees of longitude distant from each other, one of them has the fixed star one hour of sidereal time, or the sun one hour of solar time, later in his meridian than the other. Meridians are thence called *hour-circles*, or *horary circles*, by which name they are known in dialling. A *horary angle* is that angle which any hour-circle makes with the meridian of the observer. If, for in-

stance, it is 10 o'clock A. M. according to the sun-dial at the place of observation, and the sun is therefore two hours distant from the meridian, its hour-circle makes an angle of 30° with the meridian. (See *Dial.*)

Hours; with Homer, goddesses of the air and the winds, the portresses of heaven. The old Ionic bard does not fix their number, nor assign them names. But, according to an old tradition, the Athenians knew two—Thallo, the goddess of blossoms and of spring, and Carpo, the goddess of fruit-bearing autumn. We likewise find these two mentioned as Graces (q. v.), who, for a long time, were considered, if not the same with the Horæ, at least as very closely connected with them. They were not only portresses of heaven, but goddesses of the seasons: the idea of the Horæ was therefore changed, but not so much so that the latter representation may not be easily derived from the former. The idea of the goddesses of beauty, which was afterwards united with that of the Graces and Horæ, was also easily deduced from their original character. *Hora* signifies—1. originally, the air; with this idea is connected—2. the idea of time, which occurs frequently in Homer (*hora*, among the Romans, signified *hour*); and from this—3. the year. It is not with him, however, the expression for any particular season: when he wished to designate these, he added the term *spring*, *winter*, &c. We then find, in a narrower sense—4. *hora*, the season of spring or summer; and, because this is the most beautiful season—5. the time of the bloom of man, of youth, beauty. Why the Hours and Graces should be considered as goddesses of the seasons is not difficult to be understood, when we remember that the Graces (according to the etymology of the name, *Charites*) were the givers of joy. We here speak not of the later Graces, but of the early Attic—Hegemone, the governess of the year, and Auxo, the giver of increase. With these two, the Attic Hours were often confounded, and they were afterwards distinguished by making the Hours bring in the seasons, and representing the Graces as rendering them agreeable. Thus far, the difficulty of explaining this fable is not very great; but it increases, when we consider the later representation of the Hours in Hesiod. According to this poet, there are three Horæ, daughters of Themis, whose names are Dike (Justice), Eunomia (Order) and Eirene (Peace). It is obvious that these have nothing in common with the portresses of heaven or the goddesses of the seasons; a physical idea lying at the foundation of the latter, and a moral idea forming the foundation of the former. The Hours experienced the same changes as the Graces. As the idea of the latter was transferred from the physical pleasure to moral beauty, so, in the former, there was a transition from the physical to moral order, while they still continued the goddesses of beauty and loveliness. But how happened it that three political, moral abstractions, such as the Hours, could so supplant the goddesses of time and of the year, that the latter should almost sink into forgetfulness? Without doubt, Themis was here the turning point of the transition. The Hours, as goddesses of time, were the daughters of Themis, as she was at first conceived of as the goddess of physical order, particularly in regard to time. These daughters may have had, in the beginning, entirely different names. When Themis is afterwards considered as moral order, these moral abstractions are attributed to her as daughters, and these supplant either the early Attic, or the still earlier nameless Homeric goddesses. In this way beauty is also again received as the quality of the Horæ, so that the goddesses of beauty are looked upon as goddesses of law and order. That all these ideas were often confounded together, and thus rendered the mythology of the Horæ very complicated, appears from the double list of them in Hyginus, who twice names 11 Hours. All these names are significant, and, in the first catalogue, we find merely the daughters of Themis as seasons and authors of civil prosperity; but, in the second, they appear in a narrower signification, as divisions of the day and of life. According to the usual accounts, however, there are three Horæ, who, in the words of Hesiod, bring to perfection all the undertakings of men. Statuary, in the earliest times, represents only two; for example, on the throne at Amyclæ. On the other hand, there were three on the throne of the Olympian Jupiter. On a candelabrum in the villa Albani, they are represented in the attitude of dancers, with their robes gathered up by a loop fixed on the side. The first figure bears in her hand a fruit-dish, and near her lie fruits, a symbol of autumn; the other two hold nothing in their hands, but at the feet of one burns, upon an elevated stone, a fire, the emblem of winter, and at the side of the third is placed a flower, the emblem of spring. Their

heads are crowned with garlands of leaves. On a candelabrum in the Farnese palace, there are four figures; those on a sarcophagus in the villa Albani are remarkably beautiful and expressive.

Houris; virgins who, in Mohammed's paradise, are one of the rewards of the blest. According to the description of the Koran, they surpass, in their dazzling beauty, both pearls and rubies; they are subject to no impurity, and reserve the languishing glances of their dark black eyes for individual admirers. They dwell in green gardens, beautiful beyond description, where they are to be found in bowers lying upon green cushions, and the most beautiful tapestry, and flourishing in perpetual youth. Mohammed has omitted nothing to render his paradise delightful to the voluptuous inhabitants of the East. But he had a pattern in the religion of the Parsees, in whose paradise, called *Behisht* and *Menou*, the black-eyed nymphs, *Hurani bishisht*, are endowed with no unsubstantial loveliness. A paradise for women is also provided, abounding in pleasures of every kind. A further hope is held out to affectionate wives, for it is left optional with their husbands to take back their wives in the place of the Houris.

House. (See *Domicil*, Appendix to vol. 4.)

House-Breaking. (See *Burglary*.)

House-Burning. (See *Arson*.)

Household Troops. (See *Guards*.)

Houseleek (*sempervivum tectorum*); a succulent plant, having the leaves, which are all radical, disposed somewhat in the form of a double rose. The stem rises to the height of 8 or 10 inches, and bears a few purplish flowers, which have 12 or 15 petals and as many ovaries. It is a native of Europe, where it grows in the clefts of rocks, on old walls and the roofs of cottages. The other species of *sempervivum*, nearly 30 in number, are all natives of Madeira, the Canaries, and the countries about the Mediterranean.

Houstonia (*cærulea*); the delicate cruciform flowers of this, one of our earliest spring plants, are familiar to almost every observer; and yet, strange as it may seem, it has no where, to our knowledge, received a common name. It usually grows in patches, which are conspicuous even at a distance, though the flowers individually are inconsiderable in size. The stems are slender and dichotomous, about four inches high, and bear small opposite leaves. The flowers are light blue, or sometimes white. The tube of the corolla is longer than the calyx, and is divided at the summit into four spreading segments. It belongs to the *tetrandria monogynia* of Linnæus. All the species of *houstonia* are exclusively confined to North America.

Houtmann, Cornelius, founder of the Dutch East India trade, was born at Gouda, in the middle of the 16th century. Being obliged to spend some time in Lisbon, he made inquiries, from curiosity, concerning the trade with the Indies, which then exclusively enriched Portugal, and concerning the routes followed by the Portuguese. He soon became sensible of the great advantages which his countrymen might derive from this commerce; but all such inquiries being strictly forbidden to foreigners, Houtmann was suspected, imprisoned, and condemned to a large fine. Being unable to pay this, he offered to the merchants of Amsterdam to reveal every thing relating to the India trade, if they would free him from his confinement. They accordingly ransomed him, and, in 1594, he returned to his native country, and performed his promise. The merchants then formed a company, which they called the *company of remote parts*, fitted out four vessels, and made Houtmann supercargo. The flotilla set sail April 2, 1595, and arrived before Bantam, Java, June 23, 1596. They were kindly received, but the Portuguese soon involved them in difficulties with the natives. They made many attempts upon the Indian islands, but were at last compelled to return, their forces being diminished to less than one third of their original number. They arrived again, Aug. 14, 1597, in the harbor of Amsterdam. Although this expedition had brought but little profit, it was immediately determined to fit out another. After the example of Amsterdam, similar companies were formed in other ports of the United Provinces, and, finally, all united into an East India company, which destroyed the trade of the Portuguese, and drove them out of the East Indies, and which continued to monopolize the trade till the end of the 18th century. Houtmann went again, in 1598, to the East Indies, as commander of the second expedition, and was this time more successful. After he had visited Madagascar, the Maldives and Cochin-China, he landed at Sumatra, where he was at first kindly received by the king, but was afterwards thrown into prison. The ships, which were already laden, returned home, and it was believed that Houtmann was dead. But, Dec. 31, 1600, he came with three sailors on board a Dutch ship, lying off Acheen,

and declared that he did not wish to escape, as he hoped to receive his freedom, and to conclude with the king a treaty which would be advantageous to his countrymen. The king was really favorably disposed towards him, but yielded to the influence of the Portuguese, and sent Houtmann into the interior of the country, where he afterwards died. Many interesting accounts appeared of these first voyages of the Dutch, but they published nothing officially concerning their later voyages.

Houwald, Christopher Ernst von; born November, 1778, in the Lower Lusace. While a boy, he displayed poetical talents. He studied in Halle, and afterwards devoted himself to the public service, and became eventually syndic of the margraviate of Lower Lusace. He is the author of many novels, tales and poems, which are much esteemed as books for children. He is also the author of several dramas, which are still performed.

Hoveden, Roger de; an English historian, who flourished in the reign of Henry II. He was born at York, and, entering the church, was for some time professor of theology at Oxford. He was also a lawyer, and he is said to have served the king in the capacity of chaplain, and in other confidential offices. After the death of Henry, he applied himself to the compilation of English history, and wrote Annals in Latin, commencing at 731, the period at which Bede finished, and bringing down affairs to the third year of John, 1201. His style is defective, but he is highly esteemed for his diligence and fidelity, and, according to Leland, surpasses all the writers of his class who preceded him. Vossius asserts that he is author of a history of the Northumbrian kings, and of a life of Thomas-à-Becket. Such was his authority, that Edward I caused a diligent search to be made in all the libraries for copies of Hoveden's Annals, in order to ascertain the homage due from the crown of Scotland. This work was published in sir Henry Savile's Collection of ancient English Historians (1596—1601, folio).

Howard, Thomas, duke of Norfolk; an eminent statesman and warrior in the reign of Henry VIII. He was born about 1473, and was grandson of the first duke of the Howard family, who lost his life at the battle of Bosworth, fighting for Richard III. His father, who was also in arms on that occasion, was restored by Henry VII to his title and estates, which he had forfeited. The son was made a knight of the garter soon after the accession of Henry VIII, and he obtained early distinction by his talents, both as a naval and military commander. In 1513, he became high-admiral of England. The same year, he commanded, with his father, at the battle of Flodden, in which James IV, king of Scotland, was defeated and slain. For their services on this occasion, the father was made duke of Norfolk, and the son earl of Surrey. The latter was sent to Ireland as lord-lieutenant, in 1521, where he suppressed a dangerous insurrection under O'Neal. His father dying in 1524, he succeeded to the dukedom. He was afterwards a leading member of the king's council, and was considered as the head of the Roman Catholic party, though he acted with so much prudence as to retain the favor of his capricious sovereign till near the close of his long reign. In 1536, he was employed against the Catholic insurgents in the north of England, and, in 1542, against the Scots. In 1544, he went to France with the king, in a hostile expedition, and commanded at the siege of Montreuil. All his services could not secure him from the suspicious jealousy of Henry, who, on slight grounds, had condemned him to suffer the death of a traitor on the 29th of January, 1547. The king's death the preceding night procured him a respite; but he was detained a prisoner in the Tower during the reign of Edward VI. He was released and reinstated in his rank and property on the accession of queen Mary; and he sat, as high-steward, on the trial of the duke of Northumberland. He died in August, 1554.

Howard, Henry, earl of Surrey, eldest son of the preceding, an accomplished nobleman, and the best English poet of his age. His birth is dated by some writers in 1515, and by others in 1520. He was placed at cardinal Wolsey's college at Oxford, now Christ-church, where he studied polite literature with great success. He then made the tour of Europe; and, in Florence, he signalized his courage and romantic spirit, by publishing, in the style of a knight-errant, a challenge to all comers—Christians, Jews, Saracens, Turks or cannibals—in defence of the surpassing beauty of his mistress, the fair Geraldine; and he was victorious in the tournament instituted by the grand-duke on the occasion. In 1540, he distinguished himself at a tournament held before the court at Westminster; and, not long after, he was honored with the order of the garter. In 1542, he served under

his father as lieutenant-general of the army sent against Scotland; and, in 1544, he accompanied the troops with which the king invaded France, and was field-marshal of the army before Boulogne. On the surrender of that place in 1546, he was made captain-general and commander of the garrison left for its defence; but the same year, being defeated by the French in an attempt to intercept a convoy, he was superseded in his command by Seymour, earl of Hertford. On his return to England, conscious of his former services, and smarting under what he conceived to be unmerited disgrace, he dropped some reflections on the king and council, which, being reported to his majesty by the earl's enemies, proved the cause of his ruin. He had quartered in his escutcheon the royal arms of Edward the Confessor, to which he had an hereditary right, and is said to have aspired to the hand of the princess Mary. On these and other charges of a more frivolous nature, he was, together with his father, committed to the Tower, in December, 1546, and, January 13, was tried at Guildhall, before a common jury, by whom he was obsequiously found guilty of high treason, notwithstanding he made an eloquent and skilful defence. Six days after, he suffered the sentence of the law, by decapitation, on Tower Hill. Doctor Heylin, in his Church History, says, "He was beheld, in general, by the English, as the chief ornament of the nation, highly esteemed for his chivalry, his affability, his learning, and whatsoever other graces might either make him amiable in the eyes of the people, or formidable in the sight of a jealous, impotent and wayward prince." Lord Orford, in speaking of him, observes, "We now emerge from the twilight of learning to an almost classic author, that ornament of a boisterous, but not unpolished court, the earl of Surrey, celebrated by Drayton, Dryden, Fenton, Pope, illustrated by his own muse, and lamented for his unhappy death; a man, as sir Walter Raleigh says, no less valiant than learned, and of excellent hopes." His works consist of Songs and Sonnets (in a collection published in London, in 1557, of which there were several reprints in the 16th century); the second and fourth books of Virgil's Æneis, translated into blank verse (London, 1557, 12mo.); a translation of Ecclesiastes, and some of the Psalms; Satires on the Citizens of London; a translation from Boccaccio; and some smaller pieces. The entire works of Henry Howard, earl of Surrey, and those of sir Thomas Wyatt, were published, with notes and memoirs, by doctor Nott (2 vols., 4to., 1816).

Howard, Charles, earl of Nottingham; a distinguished naval commander in the reign of queen Elizabeth. He was the son of William lord Howard of Effingham, and grandson of the second duke of Norfolk. He was born in 1536, and, while a youth, served in several expeditions under his father, who was lord high admiral. In 1559, he went on an embassy to France, and he subsequently acted as general of the horse, in the army sent against the rebel earls of Northumberland and Westmoreland. In 1573, he succeeded to his father's title, and to the office of lord chamberlain, and was made a knight of the garter. But the principal occasion on which this nobleman signalized himself, was in the defeat of the famous Spanish armada, in 1588, when he was commander-in-chief of the English fleet. In 1596, he had the command of the naval force sent against Cadiz, while the earl of Essex led the military branch of the expedition. The following year, he was created earl of Nottingham, and also made chief justice in eyre, south of the Trent. His latest public service of importance in Elizabeth's reign was the suppression of the ill-concerted rebellion of the unfortunate earl of Essex, whom he took into custody. James I continued him in his employments, and availed himself of his services in an embassy to Spain, and on other occasions. He died in 1624.

Howard, Thomas, earl of Arundel, an English nobleman, distinguished as a patron of the fine arts, was earl-marshal in the early part of the reign of Charles I, and was employed in several foreign embassies by that prince and his father. In the early part of the reign of Charles I, he sent agents into Greece and Italy to collect for him, at a vast expense, whatever was curious and valuable of the works of ancient artists, which had escaped destruction. His museum of antiquities was divided at his death. Henry, sixth duke of Norfolk, about the year 1668, presented to the university of Oxford a considerable part, including the celebrated Parian Chronicle, which, with the other ancient inscribed stones accompanying it, have been termed the *Arundelian marbles*. (q. v.) Lord Arundel died at Padua, in 1646.

Howard, Frederic, earl of Carlisle, was the eldest son of Henry the fourth earl, by his second wife, Isabella, daughter of William fourth lord Byron. He was born May 28, 1748, and succeeded to the

family titles and estates Sept. 3, 1758. At the expiration of his minority, he took his seat in the house of peers, and was afterwards selected as one of the commissioners despatched, in 1778, to America, with a view of healing the breach between the mother country and the colonies. In 1780, he was appointed viceroy of Ireland, which office he retained for a period of two years, when the sudden dissolution of the Rockingham administration recalled him to his native country. From this period, lord Carlisle continued in opposition till the breaking out of the French revolution, when he ranged himself on the side of the ministers. In 1773, he published a quarto volume, containing miscellaneous pieces, original and translated. In 1801 appeared a complete edition of the Tragedies and Poems of Frederic earl of Carlisle, K.G., &c. The earl of Carlisle was a liberal patron of the fine arts, and had made a valuable collection of paintings at his seat, Castle Howard, where he died, in his 78th year, Sept. 4, 1825.

Howard, John, the celebrated philanthropist; born in 1726. His father dying while he was young, he was bound apprentice to a wholesale grocer in the metropolis; but on the approach of his majority, he purchased the remaining term of his indentures, and indulged his taste by making a tour in France and Italy. Returning home in a state of ill health, he took lodgings at Stoke Newington; and, on his recovery, he married his landlady, an elderly widow, out of gratitude for her care in nursing him. She died in 1756, about three years after the marriage, and Mr. Howard commenced a voyage to Lisbon, to view the effects of the recent earthquake. The vessel in which he embarked being captured, he was consigned to a French prison. The hardships he suffered and witnessed previously to his release first roused his attention to the subject of his future researches. When he reached England, he was induced to lay before the commissioners of the sick and hurt office the information he had gained, and his communication was well received. At Cardington, where he then resided, he indulged the benevolence of his disposition in building cottages for the peasantry, establishing schools for gratuitous instruction, and other plans for the encouragement of industry among the lower orders. Horticulture at this time was his principal amusement; and he also made some experimental researches in natural philosophy, and communicated them to the Royal Society, of which he was a member. In 1773, he served in the office of sheriff for the county of Bedford. In applying to the necessary duties of this station, the subject of prison discipline came under his notice; and, finding that many abuses existed in the management of gaols, he resolved to devote his time to the investigation of the means of correcting them. With this view he visited most of the English county gaols and houses of correction, and in March, 1774, he laid the result of his inquiries before the house of commons, for which he received a vote of thanks. In 1775 and 1776, he visited many of the continental prisons, as well as those of Scotland and Ireland; and the substance of his investigations appeared in a work he published in 1777, entitled the State of the Prisons in England and Wales, with Preliminary Observations, and an Account of some Foreign Prisons (4to.). In 1778, he repeated his visit to the continent, and extended his tour into Italy. After his return from this journey, he made a fresh survey of the prisons throughout the British empire, to which he added an examination of the public hospitals; and the result of his inquiries was communicated to the public in an Appendix to the former work, published in 1780 (4to.). In 1781 and 1782, he made a tour through the northern parts of Europe, including Denmark, Sweden, Russia and Poland. In 1783, he visited Spain and Portugal; and, having again surveyed the prisons of his own country, he printed, in 1784, a second Appendix, comprising the additional information he had obtained; and at the same time was published a complete edition of his State of the Prisons, with all the supplementary matter. A new subject now engaged his attention, namely, the management of lazarettos, and the means of preventing the communication of the plague and other contagious diseases. In order to obtain accurate information, he went to Smyrna, where he knew that the plague prevailed, for the purpose of proceeding to Venice, with a foul bill of health, that he might be subjected to all the regulations of quarantine in the lazaretto, and thus become experimentally acquainted with them. On his return home, through Vienna, he was introduced to the emperor, Joseph II, whose curiosity was excited by the fame of Howard's philanthropic investigations. In 1789, he published an Account of the principal Lazarettos in Europe, with various Papers relative to the Plague, together with farther Observations on some Foreign Prisons and Hospitals, with additional

Remarks on the Present State of those of Great Britain and Ireland (4to.). At the end of this work, he announced an intention of revisiting Russia and European Turkey, and extending his travels into Asia. In pursuance of this plan, he set off from London in the summer of 1789, and proceeded through Germany to Petersburg and Moscow. The greatest respect was every where paid to his exalted merit, and he seemed to be regarded as the general censor of the discipline and management of prisons and hospitals, which were thrown open for his inspection as a friendly monitor and public benefactor. He had taken up his residence at the town of Cherson, a Russian settlement on the Black sea. A malignant fever prevailed there, and, having been prompted by humanity to visit a patient laboring under the contagious disease, he received the infection, and died in consequence, Jan. 20, 1790. He was interred in the vicinity of Cherson, and every respect was shown to his memory by the Russian authorities. A cenotaph is erected in St. Paul's cathedral, exhibiting his statue in a Roman garb, executed by Bacon. The eulogium pronounced on Howard, by Edmund Burke, in his speech at Bristol, previously to the election, in 1780, must not be omitted: "I cannot," said the orator, "name this gentleman without remarking that his labors and writings have done much to open the eyes and hearts of mankind. He has visited all Europe, not to survey the sumptuousness of palaces, or the stateliness of temples; not to make accurate measurements of the remains of ancient grandeur, nor to form a scale of the curiosity of modern art; not to collect medals, or collate manuscripts;—but to dive into the depths of dungeons; to plunge into the infection of hospitals; to survey the mansions of sorrow and pain; to take the gauge and dimensions of misery, depression and contempt; to remember the forgotten, to attend to the neglected, to visit the forsaken, and to compare and collate the distresses of all men in all countries. His plan is original; and it is as full of genius as it is of humanity. It was a voyage of discovery; a circumnavigation of charity. Already the benefit of his labor is felt, more or less, in every country; I hope he will anticipate his final reward, by seeing all its effects fully realized in his own. He will receive, not by retail, but in gross, the reward of those who visit the prisoner; and he has so forestalled and monopolized this branch of charity, that there will be, I trust, little room to merit by such acts of benevolence hereafter."

Howard, John Eager, colonel, an officer in the American revolution, was born June 4, 1752, in Maryland, of a respectable family. When the colonies began their resistance to the mother country, he was appointed a captain; and, in December of the same year (1776), he was promoted to a majority in one of the seven regiments organized in his native state. June 1, 1779, he was appointed lieutenant-colonel; and, after the battle of Hobkick's hill, he succeeded to the command of the second regiment, in consequence of the death of lieutenant-colonel Ford. Colonel Howard was one of the most efficient and conspicuous coadjutors of general Greene in the south. At the battle of the Cowpens, he especially distinguished himself, and may be said to have turned the fortune of the day, by a charge with fixed bayonets, which he headed,—a mode of fighting then used for the first time during the war, and for which the Maryland line became remarkable. At one period in this battle, colonel Howard is said to have had in his hands the swords of seven British officers, who had surrendered to him personally. For his gallant conduct in this action, colonel Howard received the thanks of congress and a silver medal. In the battle of Eutaw, the Maryland line were ordered by Greene to attempt, by repeated charges, to drive the enemy from their position. In this service they were so cut up, that, of the whole corps, colonel Howard was left with only one commissioned officer, and 30 men. With this gallant little band, he was advancing again to the charge, when he received a severe wound, from the effects of which he never recovered entirely. He was, however, continued in his command till the army was disbanded, when he retired to his large patrimonial estate, near the city of Baltimore. He was also present at the battles of Germantown, White Plains, Monmouth, Camden, and Hobkick's hill. In November, 1788, he was chosen governor of Maryland, which post he filled for three years. In 1796, he was elected to the senate of the U. States, and continued a member of that body until March, 1803. In 1798, when Washington was appointed to command the American army, in the expectation of a war with France, colonel Howard was selected by him for the post of brigadier-general. The declaration of the late war with Great Britain found colonel Howard in complete retirement from the political

world. But when the soil was invaded, he was among the foremost to repel the aggression. In the city of Baltimore, as in the other cities along the coast, it was found necessary to organize a committee of vigilance and safety, to whom was intrusted, by universal consent, such powers as became necessary in time of danger, and which exceeded the limits of the usual authorities. Of this committee colonel Howard was a member. After the capture of Washington, when the enemy were advancing on Baltimore, it was suggested in this body, that it would be best to capitulate, to save the city from destruction. Indignant at the proposition, colonel Howard rose and exclaimed, "I have, I believe, as much property in the city as any one of the committee, and I have four sons in the field; but I will sooner see my property in ashes, and my sons in their graves, than consent to listen to any proposal of capitulation." After the war, he retired again to his estate, where he continued to reside until his death, in October, 1827. In private life, he was distinguished for the amenity of his manners, the soundness of his judgment, his hospitality, and his extensive and useful knowledge. As a soldier and patriot, he deserved, said general Greene, "a statue of gold no less than Roman and Grecian heroes."

Howe, Richard, earl, a celebrated English admiral, was the third son of Emanuel, second viscount Howe, and was born in 1725. After having received the rudiments of a liberal education at Eton, his strong predilection for the sea induced his father to place him, at the age of 14, in quality of a midshipman, on board the Severn, in which ship he sailed with Anson for the Pacific, and continued going through the usual gradations of the service under that admiral, till 1745, when, though only 20 years of age, he obtained the command of the Baltimore sloop of war. After having distinguished himself on many occasions, he sailed, as commander-in-chief, to the Mediterranean, in 1770, with the rank of rear-admiral of the blue, from which step he proceeded to those of rear-admiral of the white, and vice-admiral of the blue. On the breaking out of the war with France, lord Howe sailed for the coast of America, with a squadron destined to act against D'Estaign, who commanded the French force in that quarter, and on his return was raised, in 1782, to an English earldom. In the course of the same year, he sailed to the relief of Gibraltar, which he effected in spite of the combined fleets of the enemy. In 1783, he accepted the post of first lord of the admiralty, which, with a partial intermission, he continued to hold until 1793, when, on the breaking out of the war with France, he took the command of the English fleet, and, bringing the enemy to an action on the 1st of June, 1794, he obtained over them a decisive victory. The rank of general of marines, and the vacant garter, both conferred on this successful commander in the course of the next year, were the consummation of his honors. In 1797, lord Howe exerted himself with great success to quell the mutiny among the seamen at Portsmouth. His death took place Aug. 5, 1799.

Howe, sir William, brother of the preceding, succeeded general Gage in the chief command of the British forces in America, having landed at Boston with generals Clinton and Burgoyne, in May, 1775. General Howe commanded at the attack on Bunker hill, was besieged in Boston during the next winter, evacuated that town in the ensuing spring, and retired to Halifax. In June, 1776, he arrived at Staten Island, where he was joined by his brother, lord Howe. Here the brothers informed congress that they had received full powers to grant pardon to all the rebels who should return to their obedience; but the commissioners appointed by that body considered both the form and substance of the propositions too objectionable to deserve attention. August 27, general Howe defeated the Americans on Long Island, and, September 15, took possession of New York. After the campaign in the Jerseys, he set sail from New York, and entered Chesapeake bay, August 24. September 23, having previously secured the command of the Schuylkill, he crossed it with his army, advanced to Germantown on the 26th, and, on the 27th, lord Cornwallis entered Philadelphia. October 4, general Howe repelled the attack of the Americans at Germantown. In May, 1778, he was succeeded in the command by Clinton. He died in 1814.

Howel the Good, or Hywel Dda, a Cambrian prince, famous as a legislator in the 10th century, in 926 went to Rome to obtain information preparatory to the compilation of a code of laws for the Welsh. On the return of Howel, a kind of national convention was assembled of the heads of tribes, and learned clergymen and laymen, by whose coöperation a collection of laws was prepared, founded on the laws

of Dunwallo Molmutius, an ancient British sovereign; and this code was constitutionally established throughout the territories of Wales. Howel went again to Rome in 930, to procure the farther sanction of learned jurists for the confirmation of his laws, which were long held in great veneration among the inhabitants of Wales. These institutes are still extant, and may be found among the *Leges Wallicæ ecclesiasticæ et civiles, Hoeli Boni et aliorum Walliæ Principum*, published by Wotton, in 1730. "The laws and ordinances of Howel Dda," says Daines Barrington, "are the most regular of any extant, and have been wonderfully preserved, considering their antiquity; but though there are many provisions in them dictated by wisdom and sound policy, there are some which it is impossible to peruse without a smile, and others which should not be passed over without censure."

Howitzer; a piece of ordnance which ranks midway between the cannon and mortar. It is mounted upon a carriage, and throws its grenades in a curve approaching a horizontal line (at the highest 16°). The arrangement of the chamber, and the extensive range of the piece, resemble those of the mortar. The length of the tube amounts to five seventh times the caliber. The howitzer is used to throw grenades (q. v.), case-shot, and sometimes fire-balls. Its principal object, however, is the discharge of grenades. Troops upon an open plain, who are secure from the fire of cannon, can be reached and injured by the discharge and bursting of grenades. By the same means villages and towns can be set on fire, and garrisons dislodged from their works. Howitzers are of German invention, and bore, originally, the name of *Haufenitz*, when they were loaded with old nails, broken glass, &c. From thence is derived the French *obusier*, and the English *howitzer*.

H. R. R.; abbreviation for *Heiliges Römisches Reich* (holy Roman empire), met with in very many manuscripts, diplomas and books printed during the existence of the German empire, which, as is well known, was, in theory, the continuation of the old Roman empire.

Huarte, Juan; the only Spanish philosopher who is much distinguished beyond the limits of his own country. Nothing is known of his life, except that from the title-page of his works, it appears that he was born at San Juan del Pie del Puerto, in Navarre. Some have therefore called him a Frenchman, but, as Ferdinand the Catholic had taken possession of Navarre, and driven out king Jean d'Albret, Huarte may have been the son of Spaniards who had settled there. He is known to have been living about 1580, and to have been dead in 1590. In the preface to his work, he says, that no one ought to write before the age of 31, and every prudent man will lay down his pen when 50 years old. He was a physician by profession. His work is entitled *Examen de Ingenios para las Ciencias*, &c., or an examination of such geniuses as are born fit for acquiring the sciences, "wherein, by marvellous and useful secrets, drawn from true philosophy, both natural and divine, are shown the gifts and different abilities found in man, and for what kind of study the genius of every man is adapted, in such a manner, that whoever shall read this book attentively will discover the properties of his own genius, and be able to make choice of that science in which he will make the greatest improvement." This work has been translated into many languages; into English by Carew and Bellamy, under the title of the Tryal of Wits; into German by Lessing, under the title of *Prüfung der Köpfe*. Respecting the many paradoxes of the author, Lessing says, A good horse strikes out the brightest sparks when he stumbles. The work is full of practical wisdom, and continues to be in great esteem with the Spaniards; and don Vicente de los Rios, the author of the *Vida de Miguel de Cervantes*, calls Huarte *nuestro sabio Filosofo*. Huarte has been reproached for having published, as genuine, a spurious letter of Lentulus, the proconsul, from Jerusalem, in which a description of the Savior's person is given.

Hub; a provincialism for *nave* of a wheel. Mr. Pickering, in his Vocabulary of Americanisms, quotes Marshall's Rural Economy of the Midland Counties—"*hubs*, naves of wheels;" and doctor Bigelow, in his Elements of Technology, says, in a note, "This word, instead of *nave*, is so generally used in this country, that it would be a useless refinement to avoid it. The same is true of the word *factory* for *manufactory*, and also of many mechanical terms." Mr. Pickering, however, thinks *hub* a New-Englandism only, but even if used through the country, the propriety of adopting it in writing might be questioned. If we admit into books all words which become common in conversation, we should be likely to deviate greatly from the English standard.

Huber; a name of many distinguished authors, including,—1. *John James Huber*, born 1707, in Switzerland, died in 1778, professor of anatomy at Cassel.—2. *Ulrich Huber*, born at Dockum, in Friesland, 1636, died 1694, known by his work *De Jure Civitatis* (Leyden, 1667, 4to.). He was professor of law at Franeker.—3. His son, *Zacharias Huber*, born in 1669, died 1731, also known as a jurist.—4. *Mary Huber*, an ingenious writer, was born 1694, at Geneva, and died 1759, at Lyons. She was a deistical writer, and her principal work, *Lettres sur la Religion de l'Homme* (1739 and 1754), was translated into English and German.—5. *John James Huber;* born 1668, died 1748, a painter whom Füssli, in his History of Swiss Painters, calls the *Swiss Tintoretto*.—6. *Michael Huber*, born 1727, in Bavaria, died 1804, was professor of the French language in Leipsic, and translated several German works into French, which did much towards making the two nations better acquainted with each other.—7. *Louis Ferdinand Huber*, born at Paris, 1764, died 1804, son of the preceding. His *Sämmtliche Werke seit* 1802 were published at Tübingen (1807). He edited several journals.—8. *Theresa Huber*, born 1764, at Göttingen, daughter of the celebrated philologist Heyne, was married to Louis Ferdinand Huber. She is a popular German author. She wrote several novels, during her husband's life, which were published under his name. She also edited, for some time, the well known *Morgenblatt*.

Huber, Francis; a naturalist, born 1750, at Geneva. Having lost his way in a winter night, he was so blinded with snow and pinched with cold as to be deprived irrecoverably of his sight, which was previously weak, notwithstanding which the lady whom he loved gave him her hand; and her aid, with that of a young man named Burnens, who was employed in his service as a reader and amanuensis, enabled him to make such great progress in his studies. In 1796 appeared, in the form of letters, his *Nouvelles Observations sur les Abeilles* (second edition, Paris, 1814; English, London, 1806), in which he explains the manner of the queen-bee's impregnation, and demonstrates that this act takes place in the air by coition with the drones. In his *Mémoire sur l'Influence de l'Air et de diverses Substances gazeuses dans la Germination de différentes Plantes*, he relates the observations which he made in company with Sennebier. Huber was also intimately connected with Charles Bonstetten. His assistant Burnens having become one of the magistrates of his district, Huber instructed his own son in natural science. This son afterwards made some observations on ants, which have been printed under the title *Essai sur l'Histoire et les Mœurs des Fourmis Indigénes* (Paris, 1806, one volume), translated into English (London, 1820).

Hubert, St.; a saint of the Roman Catholic church, the patron of huntsmen. The legend says that he was a son of Bertrand, duke of Guienne, at the court of Pepin d'Heristal, and a keen hunter; and that being once engaged in the chase, on Good Friday, in the forest of Ardennes, a stag appeared to him, having a shining crucifix between its antlers, and he heard a warning voice. He was converted, entered the church, and became a zealous disciple of bishop Lambert, whom he succeeded as bishop of Mæstricht and Liege. He worked many miracles, and is said to have died in 727 or 730. His body was placed in the Benedictine convent of Andain, in the Ardennes, which received the name *St. Hubert's of Ardennes*. It is celebrated for St. Hubert's key, given him by St. Peter, which cures the hydrophobia, &c. November 3 is the day of the saint, and was formerly celebrated at many courts by a solemn chase.

Hubert, Order of St.; the oldest and highest order of Bavaria, founded in 1444; often re-formed,—the last time in 1808. It consists of one class of 12 members, who must be natives, and of ancient noble families.

Hubertsberg, a Saxon hunting seat in the circle of Leipsic, formerly very splendid, was destroyed in the seven years' war, and is now used as a corn magazine. In this castle, the peace of Hubertsberg, which put an end to the seven years' war, was signed between Prussia, Austria and Saxony, February 15, 1763. Peace had been concluded, at Paris, between Great Britain, France, Spain and Portugal, February 10, 1763. The peace of Hubertsberg placed the Prussian monarchy among the first powers in Europe. The empress queen Maria Theresa renounced all claims to the provinces of Silesia and Glatz, which had been ceded to Prussia by the peace of Breslau and Berlin, in 1742. Frederic II restored to the elector of Saxony, who was king of Poland, his electorate. The peace of Dresden (1745) was confirmed, and the German empire was expressly included in the treaty of Hubertsberg.

Hübner, John; a German scholar who rendered important services in geography. He was born in 1668, in Tyrgau, taught history and geography at the university of Leipsic, became rector of a gymnasium at Hamburg, and died 1731. His Short Questions from Ancient and Modern Geography went through 36 editions during his life, and was translated into several languages. He invented the plan of coloring maps methodically. He published many works, among others *Das Reale Staats-, Zeitungs- und Conversationslexicon.* His son revised, continued and edited anew several of his works, for instance, the *Museum geographicum*—an enumeration of the best maps (Hamb. 1746).

Hudson, Henry. This distinguished English naval discoverer sailed from London in the year 1607, in a small vessel, for the purpose of discovering a north-east passage to China and Japan, with a crew of only ten men and a boy besides himself, and, proceeding beyond the 80th degree of latitude, returned to England in September. In a second voyage, the next year, he landed at Nova Zembla, but could proceed no farther eastward. In 1609, he undertook a third voyage, under the patronage of the Dutch East India company. Being unsuccessful in his attempts to find a north-east passage, he sailed for Davis's straits, but struck the continent of America in 44° N. lat., and, holding a southerly course, discovered the mouth of the river Hudson, which he ascended about 50 leagues in a boat. His last voyage was undertaken in 1610. He sailed, April 17, in a bark named the Discovery, with a crew of 23 men, and came within sight of Greenland, June 4. Proceeding westward he reached, in latitude 60°, the strait bearing his name. Through this he advanced along the coast of Labrador, to which he gave the name of *Nova Britannia*, until it issued into the vast bay, which is also called after him. He resolved to winter in the most southern part of it, and the crew drew up the ship in a small creek, and endeavored to sustain the severity of that dismal climate, in which attempt they endured extreme privations. Hudson, however, fitted up his shallop for farther discoveries; but, not being able to establish any communication with the natives, or to revictual his ship, with tears in his eyes he distributed his little remaining bread to his men, and prepared to return. Having a dissatisfied and mutinous crew, he imprudently uttered some threats of setting some of them on shore; upon which a body of them entered his cabin at night, tied his arms behind him, and put him in his own shallop, at the west end of the straits, with his son, John Hudson, and seven of the most infirm of the crew. They were then turned adrift, and were never more heard of. A small part of the crew, after enduring incredible hardships, arrived at Plymouth, in September, 1611. An account of his last voyage is contained in the 4th volume of Purchas's Pilgrimage. His voyage in the service of the Dutch is contained in the collections published by that nation.

Hudson's Bay; a large bay of North America, situated north of Canada, reaching in its whole extent from lon. 78° to lon. 95° W., and from lat. 52° to lat. 68° N., in which are included the different gulfs and bays, such as James's bay, Welcome sea, &c., which are no otherwise to be distinguished than as being narrower. Its superficial area is about 296,000 square miles; its length from north to south being 1000 miles, and its breadth 800. It is navigable only a few months in the year, being completely frozen over or obstructed by drift ice during the other months. It is full of sand-banks, reefs and islands. The shores are rocky and steep, the climate is extremely rigorous, and the whole appearance of the surrounding country desolate and frightful. The bay contains few fish, though the beluga or white whale is taken. Shell fish are very scarce. The Hudson's bay company have several settlements and forts, especially on the west coast, where their agents carry on a traffic with the Indians, for beaver-skins and other valuable furs.

Hudson's Strait lies north of Labrador, and connects Hudson's bay with the Atlantic ocean.

Hudson's Bay Company. (See *Fur Trade.*)

Hudson or North River; a river of New York, which rises in a mountainous country west of lake Champlain, in the counties of Essex and Montgomery, about lat. 44° N., and communicates with the Atlantic, below New York city. It is navigable for the largest ships to Hudson, and for sloops to Troy. The tide flows up as far as Troy. It is remarkably straight for 200 miles, and is one of the finest rivers in America, and is a channel for an extensive navigation, particularly between the cities of New York and Albany, by means of steamboats and sloops. There are upon its banks a number of handsome and flourishing towns; and in passing up the river through the Highlands, there is

exhibited a fine and picturesque scenery. (See *Highlands.*)

Distances.

	Miles.	*Whole Dist.*
From its source to Sandy hill, about	100	100
Waterford	42	142
Troy	4	146
Albany	6	152
Hudson	30	182
Poughkeepsie	55	237
Newburgh	10	247
New York	65	312
The Narrows	12	324

It is connected with lake Champlain by the Champlain canal, with lake Erie by the Erie canal, with the Delaware river by the Hudson and Delaware canal and the Morris canal. (See *Canals*, ii. p. 464.)

Hudson City, the capital of Columbia county, and a port of entry, in New York, on the east bank of Hudson river, 28 miles south of Albany, 117 north of New York city, in lon. 73° 46′ W., and lat. 42° 14′ N. Population in 1830, 5392. It was founded in 1784; for several years, it was in a very flourishing state, and afterwards its prosperity was checked. It is pleasantly situated, and regularly laid out; the streets intersect each other at right angles. The city is tolerably well built, and is considerable both for trade and manufactures. Claverack creek, which flows on the eastern side of the town, and Abram's, or Factory creek, on the northern side, afford good seats for various mills and manufactories. The whale fishery has lately been undertaken from this place. Three vessels (1019 tons) are engaged in it.

Hudson and Delaware Canal. (See *Canals*, ii. p. 464.)

Hudson and Erie Canal. (See *Canals*, ii. p. 464.)

Huer. (See *Iceland.*)

Huet, Peter Daniel, a celebrated critic and classical scholar of the 17th and 18th centuries, a native of Caen in Normandy, was born in 1630, and was educated in the Jesuit's college at Caen. After gaining a general knowledge of literature, he went to Paris, where he indulged his passion for study by reading all the books he could procure, and cultivating the acquaintance of the most eminent scholars of his time. In 1652, he accompanied Bochart on a visit to the court of Christina, queen of Sweden, of which journey he wrote an amusing narrative in Latin verse. In 1661, he published a treatise on translation, in the form of a Latin dialogue, entitled *De Interpretatione;* and, in 1664, a collection of Greek and Latin poems. An edition of Origen's Commentaries on the Scriptures followed in 1667; a tract, by him, on the Origin of Romances, was prefixed to the Zayde of madame Lafayette. He was subsequently appointed preceptor to the dauphin, in conjunction with Bossuet. While he filled this office, he wrote his Defence of Christianity, published in 1679, under the title of *Demonstratio Evangelica*, which displays his vast erudition. At this time also he undertook, at the earnest recommendation of the duke de Montausier, governor to the dauphin, the plan of publishing all the Latin classics, with the ample illustrations which have made what are called the *Delphin editions* so well known and generally esteemed throughout Europe. The plan was executed under the direction of Huet, in less than twenty years, to the extent of 62 volumes, Lucan being the only ancient Roman author of importance who was omitted, the freedom of his political principles rendering his works objectionable to the French despot Louis XIV. Various Jesuits and other learned persons were engaged by Huet as editors of the different classics; one alone, namely, the *Astronomicon* of Manlius, was edited by himself. After the completion of his tutorship, having taken holy orders, he was made abbot of Aulnai, and subsequently nominated bishop of Soissons, which see he exchanged for that of Avranches. But after holding the episcopal office some time, he became so tired of the troublesome duties attached to it, that he abdicated the bishopric, contenting himself with the abbacy of Fontenai. He died January 26, 1721. Besides the works already mentioned, he wrote *Histoire du Commerce et de la Navigation des Anciens; Origines de Caen;* and memoirs of his own life in Latin, besides other pieces of less importance. A translation of the memoirs, with copious notes, was published in 1810 (2 vols., 8vo.), by doctor John Aikin.

Huethuetlapallan. In the province of Ciudad Real del Chiapa, in Guatemala, about four leagues from the town of Palenque, lie the ruins of this old Mexican city. Don Antonio del Rio, a Spanish captain, examined it in 1787, at the command of the viceroy of Guatemala. In 1794, it was explored by doctor Cabrera; but the reports respecting it remained, till 1822, in the archives of New Guatemala, when they came accidentally into the hands of an Englishman, Mr. Berthoud, who published the account contained in them,

in London, with 17 lithographic plates, representing the antiquities found there. These remarkable ruins, which the people of the country call by the above name, extend about 16 or 17 miles in length, and perhaps two to four miles in breadth, along the summit and declivity of a chain of hills. The spot is covered by a high wood. A group of fourteen large buildings forms the chief remains of the ancient city. They are furnished with pillars and architectural ornaments, and a subterraneous aqueduct of stone is to be seen. These ruins have a wonderful resemblance to the relics of Egyptian and Nubian antiquity. A further argument for a connexion between America and Egypt has been derived from a Mexican manuscript on deer-skin, published by Seyffarth at Rome, in which the gods of Egypt, Isis, Osiris, Horus, &c., are said to be distinctly indicated; likewise from the existence of pyramids in Mexico, and from the old traditions of the Mexicans.

Hufeland, Christian William, Prussian counsellor of state, born at Langensalza in 1762. His father was physician to the duke of Weimar. The son at first practised physic at Weimar; in 1793, was made professor at Jena, and, in 1801, physician in ordinary to the king of Prussia, director of the medico-chirurgical college, and first physician of the hospital called *Charité*, in Berlin. He is distinguished for his profound and extensive learning, and ingenious application of theory to practice. He is well acquainted with the spirit of the ancient and modern systems, and judiciously adopts what is good and practically useful, wherever he finds it. He has improved the method of treating the scrofula. The inoculation for the small-pox, as well as the general treatment of this disease, was improved by his observations on this subject, 1789. He has also written on the uncertainty of the appearances of death, and the danger of burying alive persons apparently dead. By the publication of the Journal of Practical Medicine, he has done a real service to the science. He was an opponent of the Brunonian system. His System of Practical Medicine is a valuable work. His lectures on dietetics led to his Art of prolonging Life (English, London, 1797).

Hugh Capet; son of Hugh the Great, a powerful duke in France; his capital was Paris. The last Carlovingians had been stripped of almost all their possessions, and at the same time of their power, by their restless vassals. One only still remained—Charles, duke of Lower Lorraine. He was passed over in the election of king, and Hugh, renowned for his boldness and sagacity, possessed himself (987) of the throne, to which he had no claim, by fraud and force. The duke of Lorraine endeavored, indeed, to enforce his claim by arms, but he was taken prisoner by Hugh, and died 992. Thus Hugh founded the third race of French kings, in three principal lines: the Capets, who filled the throne from 987 to 1328, the line of Valois to 1589, and that of Bourbon till Louis XVI (1793), occupied the throne 800 years, and, in 1814, after the abdication of Napoleon, returned to it in the person of Louis XVIII. In 1830, the elder line was deposed, and the line of Orleans called to the throne. The family estates of Hugh were converted into royal domains, except that the duchy of Burgundy passed over to his brothers, Otho and Henry, and to their successors. Hugh endeavored to confirm his power by courage and prudence, without taking vengeance on his earlier enemies. According to some, he obtained the name of *Capet* (q. v.) from his large head; according to others, from his sagacity; others consider it his family name. Hugh died 996. He made Paris the capital of the kingdom.

Hugo, Gustavus, doctor, professor of law in the university of Göttingen, one of the first living jurisprudents, particularly distinguished for his knowledge of Roman law and the history of law, was born at Lörrach, in Baden, in November, 1764, and received the first rudiments of his instruction at Montbéliard and Carlsruhe. He then studied at Göttingen from 1782 to 1785, where he paid particular attention to philosophy and history, and gained a prize. He was then instructer to the prince of Dessau, from 1786 to 1788, and was appointed in the latter year extraordinary professor of law at Göttingen, and, in 1792, ordinary professor. In the first year of his professorship, he translated Gibbon's View of the Civil Law (the 44th chapter of the History of the Decline of the Roman Empire), with notes; and afterwards Ulpian's Fragments, &c., upon which he lectured, and a new edition of which established his reputation. Contrary to the custom prevalent at that time, he lectured upon the modern Roman law not according to the succession of titles. He also divided the history of the law into periods, and treated the philosophy of positive law, in his course of lectures on civil law. Haubold and Savigny also labored in the same cause, and to them the Roman law is in-

debted for the present improved method of studying it. Hugo's writings are distinguished for research and learning, and generally relate to the afore-mentioned subjects. The 6th edition of his *Lehrbuch der juristischen Encyklopädie* (Berlin, 1792), and of his Institutes of Modern Roman Law (Berlin, 1789), appeared in 1820; and the 9th edition of his Manual of the History of Roman Law (Berlin, 1790), in 1823; the 4th edition of his Manual of Natural Law, as the Philosophy of Positive Law, in 1819. These writings are also contained in his Manual of a Course of Civil Law, in 7 vols. To the history of Roman law, and other departments, Hugo has made important contributions, as, for example, in the *Civilistischen Magazin*, edited by him (Berlin, 1790—1817), and in his papers in the Göttingen Literary Gazette. The acuteness of this jurist has sometimes led him into paradoxes.

Huguenots. This term, which was applied to the Protestants in France in contempt, is of uncertain origin. In public documents, they were styled *Ceux de la religion prétendue réformée*, or *Religionnaires*. The principles of Luther and Zwinglius had gained an entrance into France, during the reign of Francis I (1515—47). The doctrines of Calvin spread still more widely, although Francis endeavored to suppress them, by prohibiting Calvinistic books, and by penal laws, and, in some instances, by capital punishments. Under Henry II, the successor of Francis, these doctrines made greater progress, in proportion as they were more violently persecuted. The opinions and influence of queen Margaret of Navarre had no small share in this extension, and the parties at court contributed much to the bloody persecution of the Protestants. One party wished to enrich themselves by the estates of the heretics, who were executed or banished, and the other to gain the favor of the people by their punishment. The parties of the Bourbons and of the five princes of Guise, under the government of the weak Francis II, made use of this religious dispute, in order to advance their own political ends. The Bourbons belonged to the Protestant party; and the Guises, in order to weaken, and, if possible, to destroy their rivals, continued the persecution of the heretics with fanatical fury. In every parliament, there was a chamber established to examine and punish the Protestants, called by the people the *burning chamber* (*chambre ardente*), because all convicted of heresy were burnt. The estates of those who fled were sold, and their children who remained behind were exposed to the greatest sufferings. But notwithstanding this persecution, the Protestants would not have thought of a rebellion, had not a prince of the blood encouraged them to it, by the promise of his assistance. In 1560, the conspiracy began. The discontented inquired of lawyers and theologians, whether they could, with a good conscience, take arms against the Guises. The Protestant divines in Germany declared it proper to resist the tyranny of the Guises, if it were under the guidance and direction of a prince of the blood, and with the approbation of the majority in the states. The malcontents having consulted upon the choice of a leader, all voices decided in favor of the brave prince Louis of Condé, who had conducted the whole affair, and gladly seized the opportunity to make himself formidable by the support of the Huguenots. The name of the leader was, however, kept secret, and a Protestant gentleman of Perigord, John du Barry, *seigneur* of Renaudie, was appointed his deputy. It was determined, that a number of the Calvinists should appear on an appointed day, before the king at Blois, to present a petition for the free exercise of their religion; and, in case this request was denied, as it was foreseen it would be, a chosen band of armed Protestants were to make themselves masters of the city of Blois, seize the Guises, and compel the king to name the prince of Condé regent of the realm. This plot was betrayed. The court left Blois, the military were summoned, and the greatest part of the Protestants, who had armed themselves to carry the conspiracy into effect, were executed or imprisoned. Few of those who fell into the power of the court, found mercy; and about 1200 expiated their offence with their lives. The Guises now desired to establish the inquisition, but the wise chancellor, Michael de l'Hôpital, in order to avoid the greater evil, advised that all inquiries into the crime of heresy should be committed to the bishops, and that parliament should be prohibited from exercising any jurisdiction in matters of faith; and it was so ordered by the edict of Romorantin (1560). In the reign of the next king, Charles IX, during whose minority the queen mother, Catharine de' Medici, was at the head of the government, the contest between the parties became yet more violent, and their contending interests were more and more used for a pretence to accomplish unholy designs; and

it was only from motives of policy that the free exercise of their religion was secured to the Protestants, by the queen, in order to preserve the balance between the parties, by the edict of January (1562), so called. The Protestants thereby gained new courage; but their adversaries, dissatisfied with this ordinance, and regardless of decency, disturbed the Huguenots in their religious services. Bloody scenes were the result, and the massacre of Vassy (1562) was the immediate cause of the first civil war. These religious wars desolated France almost to the end of the 16th century, and were only interrupted by occasional truces. The suffering which these wars brought upon the people, is to be ascribed to the instability and bad policy of queen Catharine de' Medici, who exerted the most decided influence, not only over the feeble Charles IX, but likewise over the contemptible Henry III. She wished, in fact, for the extirpation of the Huguenots, and it was merely her intriguing policy, which induced her, much to the vexation of the opposite party, to favor the Protestants from time to time, and to grant them freedom of conscience. Always wavering between the two parties, she flattered herself with the expectation of holding them in check during peace, or of destroying the one by the other in war. Both parties were, therefore, generally dissatisfied with the court, and followed their own leaders. A wild fanaticism seized the people. Heated with passion and religious hatred, they endeavored only to injure each other; and, with the exception of some party leaders, who made use of this excitement for the accomplishment of their own ambitious schemes, their only object was to acquire the superiority for their own creed, by fire and sword. The horrible effect of Catharine's policy was the massacre of St. Bartholomew's (1572), of which she and her son, her pupil in dissimulation, had laid the plan with their confidants. Shortly before the line of kings of the house of Valois had become extinct with Henry III, and the way was opened for the house of Bourbon, the head of which was the Protestant Henry king of Navarre, the relations of the two parties became still more involved. The feeble king found himself compelled to unite with the king of Navarre against the common enemy, as the intrigues of the ambitious Guises, who openly aimed at the throne, had excited the people against him to such a degree, that he was on the point of losing the crown. After the assassination of Henry III, the king of Navarre was obliged to maintain a severe struggle for the vacant throne; and not until he had, by the advice of Sully, embraced the Catholic religion (1593), did he enjoy quiet possession of the kingdom. Five years afterwards, he secured to the Huguenots their civil rights, by the edict of Nantes, which confirmed to them the free exercise of their religion, and gave them equal claims with the Catholics to all offices and dignities. They were also left in possession of the fortresses which had been ceded to them for their security. This edict afforded them the means of forming a kind of republic within the kingdom, and such a powerful party, which had for a long time been obliged to be distrustful of the government, would always offer to the restless nobility a rallying point and a prospect of assistance. Louis XIII, the weak and bigoted son of the liberal and magnanimous Henry IV, allowed himself to be influenced by his ambitious favorite, De Luines, and his confessor, against the Huguenots, who were able to offer a powerful resistance, as they had become very numerous in many provinces. But in the first religious war, which broke out in 1621, the Protestants lost the greatest part of their strong places, through the faithlessness or cowardice of the governors. Some of these, however, and among the rest Rochelle, remained to them, when, disunited among themselves and weary of war, they concluded a peace. Rochelle enabled them to keep up a connexion with England; and Richelieu, who aimed to make the royal power, which he exercised under the name of Louis, absolute, used every means to deprive the Protestants of this bulwark of their liberty, and thus destroy every remnant of a league which recalled the times when civil factions had so often weakened the royal power. Rochelle fell into the hands of Louis, after an obstinate defence, in 1629; the Huguenots were obliged to surrender all their strong holds, and were thus left entirely at the mercy of the king. Freedom of conscience was indeed promised them, and Richelieu and his successor Mazarin did not disturb them in the enjoyment of it; but when Louis XIV abandoned his voluptuous life for an affected devotion, he was led by his confessors and madame de Maintenon, to persecute the Protestants, for the purpose of bringing them back to the bosom of the true church. In 1681, he deprived them of most of their civil rights, and, on the death of Colbert, who had generally op-

posed violent measures, he followed altogether the advice of his counsellors, who were in favor of persecution—his minister of war, Louvois, the chancellor Le Tellier, and the Jesuit La Chaise, his father confessor. Bodies of dragoons were sent into the southern provinces, where the Protestants were most numerous, to compel the unhappy inhabitants to abjure their faith. To prevent the emigration of the Protestants, the frontiers were guarded with the utmost vigilance; yet more than 500,000 Huguenots fled to Switzerland, Germany, Holland and England. Many, who could not escape, were obliged to renounce their faith. Lists of Protestants, who, it was pretended, had been converted, were sent to the king, and it was very easy for his flattering counsellors to persuade him that he had gained honor, by having almost extirpated the Protestants in France. Under this erroneous supposition, he revoked the edict of Nantes, Oct. 22, 1685. But he had still more than half a million of Protestant subjects, and this unjust and unwise revocation robbed France of a great number of useful and rich inhabitants, whose industry, wealth and skill found a welcome reception in foreign countries. But quiet was by no means restored in France. In the provinces between the Rhone and Garonne, the Protestants were yet very numerous, and the neighboring mountains of Cevennes afforded them shelter. There the Camisards (q. v.) maintained war for a long time, armed for the most part with clubs alone. The contest was not altogether unlike the war of La Vendèe in later times. After 20 years (1706), the government was finally obliged to come to terms with them; yet quiet was not perfectly restored. In the level country, especially at Nismes, a Protestant spirit still survived in secret; even the compassion of the Catholics was excited, and many persecutors of the Protestants became their defenders; and there were not wanting clergymen among the Huguenots who were kept concealed. In the reign of Louis XV, new but less severe measures were adopted against the Protestants, and, in 1746, they ventured to appear publicly in Languedoc and Dauphiny. By degrees, many voices were raised in favor of religious toleration. Montesquieu led the way; but Voltaire, shocked by the unhappy fate of John Calas (q. v.), effected still more by his Essay on Toleration, in 1762. From this time, Protestants were no longer disturbed; yet they did not dare to make pretensions to public offices. (See Browning's *History of the Huguenots*, London, 1829, 2 vols., 8vo.) The revolution restored them all the civil rights, and they frequently laid out their hitherto secreted treasures in the purchase of the national domains. It was not therefore strange, that, at the restoration, they appeared attached to the former government, which had granted them privileges that they were fearful of losing under the new. Although they did not offer any opposition to the new order of things, yet troubles took place, which were attended with bloodshed, at Nismes and the vicinity; but these were suppressed by the judicious measures of the government. (See *France*.)—Consult Aignan, *De l'État des Protestans en France* (2d edit., Paris, 1818).

Huissier (*French*); a kind of officers whose attendance is necessary at every judicial tribunal, from that of a justice of the peace to the court of cassation (q. v.). Their name is derived from what was originally their exclusive business, to wait at the doors (*huis*). This, however, is at present only a small part of their official duties; those who attend personally at the courts, are called *huissiers audienciers;* they answer in some respects to the sheriffs, clerks and criers of our courts. There are other *huissiers*, who have duties corresponding somewhat to those of English justices of the peace. The English word *usher* (q. v.) is derived from *huissier*.

Hull, or Kingston upon Hull; a seaport town of England, in the East Riding of Yorkshire. It is situated on the great inlet of the Humber, at the point where this receives the river Hull, and, from the facilities for trade which it thus acquires, has become a place of much commerce. The harbor is artificial, formed by deepening and widening the channel of the river, and large docks have been erected for the accommodation of the shipping. Hull has extensive navigable communications inland, either by rivers or canals. The foreign trade is principally to the Baltic and to the whale-fishery; but a regular traffic is also kept up to the southern parts of Europe, to the West Indies, and to America. The coasting trade for coals, corn, wool, manufactured goods, &c., is great; and the inland trade exceeds that of any other English port. Various manufactures of the coarser kinds are also carried on at Hull. The town itself has within the last 30 years been greatly enlarged. Among the public buildings is the Trinity church, which is a large and beautiful structure of Gothic

architecture, and of exquisite workmanship, partly built about the year 1312. The charter-house hospital was founded by Michael de la Pole, in 1384, for the support of poor pensioners; and there are, besides, seven other hospitals for the poor. The grammar school was instituted in 1436. In the market-place stands a beautiful equestrian statue of William III. The old dock was begun in 1775: it enters immediately from the river Hull, about 300 yards from its mouth; it is 700 yards long, 85 wide, and 22 deep, and will contain 130 vessels of 300 tons. It covers an area of 10 acres. The Humber dock was begun in April, 1807; it opens into the Humber by a lock which will admit a 50 gun-ship, and which is crossed by an iron bridge. There are also several dry docks for repairing vessels. The town sends two members to parliament, elected by the burgesses. Population, 28,591; but, including the county part, 31,425: 36 miles south-east of York; lon. 0° 16′ W.; lat. 53° 45′ N.

Hullin, Pierre Auguste, count, born at Paris, 1758, entered the service of Geneva, was one of the leaders of the attack on the Bastile, July 14, 1789, and was thrown into prison during the reign of terror, but set at liberty on the 9th Thermidor; afterwards became adjutant in general Bonaparte's Italian campaigns, and was made commandant of Milan (1797). After the battle of Marengo (1800), at which he was present, he was made general of division, and was president of the military commission which condemned the duke d'Enghien to death. (Respecting his participation in this affair, see *Enghien*.) He received the grand cross of the legion of honor, and, in 1804, was created count. He was commandant of Vienna in the campaign of 1805, commandant of Berlin in that of 1806, and, after the peace of Tilsit, commandant of Paris, and severely wounded in Mallet's conspiracy. He afterwards attended the empress Maria Louisa to Blois, in March, 1814, and, April 8, declared his adhesion to the new government. But in 1815, having joined Napoleon, he was again appointed commandant of Paris; and, on the second return of the Bourbons, was arrested under the ordinance of 24th July, 1815, and banished from France by the ordinance of 17th Jan., 1816. He then engaged in commerce, first at Brussels, afterwards at Hamburg. These are the most important circumstances in the life of general Hullin, who, 1819, obtained permission to return to France. He is at present blind. In 1824, he wrote a reply to Savary, concerning the death of the duke d'Enghien.

Humanities; used in schools and colleges, to signify polite literature, or grammar, rhetoric and poetry, including the study of the ancient classics, in opposition to philosophy and science. It is sometimes used in a narrower sense, for philology. In classical Latin, *humanitas* has the secondary sense of erudition, learning; and *studia humaniora* is used by modern writers for elegant literature, or belles-lettres. A *humanist* is he who pursues the *humaniora*.

Humboldt, Charles William, baron of, a Prussian minister of state, was born at Berlin, in 1767, and received, in his native city, a careful education in languages and in the sciences, whence his habits of thorough investigation, which have led him to the accurate study of more than one department of knowledge. His work upon Göthe's little epic, *Herrmann und Dorothea*, embraces comprehensive views of poetry in general. His investigations into the Basque language, which he studied on the spot, throw much light upon this dialect. (A Basque lexicon, compiled by him, may be found in Adelung's Mithridates, 4th vol.) His translation of the Agamemnon of Æschylus, is the result of the most indefatigable research into the language and metres of the Greeks. After having lived several years in Jena, where he enjoyed the friendship and daily society of Schiller, he entered upon his diplomatic career, as Prussian resident at Rome. He was afterwards appointed minister plenipotentiary to the same court. The king then placed him at the head of the department of ecclesiastical affairs and public education. The dependence of this department upon the ministry of the interior, which limited too much the activity of the head of it, probably caused him to resign this place. In the year 1810, he was made ambassador to Vienna, with the rank of a minister of state, in that important period when the north and the south of Europe resembled an avalanche, which only waited for a shock to precipitate itself upon the western part of the continent. He was sent to the congress of Prague, and was employed at the congress of Chatillon, and, at the peace of Paris, which he signed in 1814, with the chancellor Hardenberg. He was afterwards active at the congress of Vienna, and signed, in 1815, the peace between Prussia and Saxony. In July, 1816, he was sent to Frankfort as Prus-

sian minister plenipotentiary, for the settlement of the territorial questions in Germany. The king appointed him, soon after, a member of the council of state, and presented him with an estate. He was then ambassador extraordinary to London, and afterwards, in October, 1818, to Aix-la-Chapelle. In 1819, he was called to the Prussian cabinet. He remained at Frankfort on the Maine, as a member of the territorial committee, until its dissolution, July 10, 1819, when he entered upon the duties of his office in Berlin, from which, however, he was soon exempted. He belonged to the committee to which was committed the examination of the plan of a constitution. In 1825, the Paris academy of inscriptions and belles-lettres elected him a foreign member.

Humboldt, Frederic Henry Alexander, baron of, brother of the preceding, was born Sept. 14, 1769, at Berlin, studied at Göttingen, and Frankfort on the Oder, went to the commercial academy in Hamburg, and, in 1790, travelled with G. Forster and Van Geuns along the Rhine, to Holland and to England. This journey gave rise to his Observations on the Basalt on the Rhine, which was published, in 1793, at Brunswick. In 1791, he studied mining and botany at the mining school in Freyberg. (See his *Specimen Floræ Fribergensis subterraneæ*, Berlin, 1793.) Here his acquirements, his attractive and instructive conversation, his wit, and goodness of heart, gained him universal esteem and affection. In 1792, he was appointed assessor in the mining and smelting department, and soon afterwards removed to Baireuth, as overseer of the mines in Franconia. Here he introduced many improvements, among which was the establishment of the mining school at Steben; he likewise made valuable galvanic experiments, the results of which were published in Berlin, 1796, in two volumes. But in 1795, he voluntarily gave up this office, from a desire to travel, and went with the baron Hafter to Italy, and, in the autumn of the same year, travelled through a part of Switzerland, with his friend Freiesleben. In 1797, he went, in company with his brother, and a gentleman named Fischer, to Paris, where he became acquainted with Aimè Bonpland, a pupil of the medical school and botanic garden in Paris. Humboldt, who, ever since 1792, had cherished the design of travelling within the tropics at his own expense, went to Madrid, with a considerable collection of instruments, where the court, in March, 1799, granted him permission to travel through the Spanish colonies in America. He immediately sent for his friend Bonpland, and sailed with him from Corunna. Their plan was to travel for the space of five years, and was laid out on a larger scale than any journey before undertaken by private individuals. They landed at Teneriffe, where they ascended to the crater of Pico, in order to analyze the atmospheric air, and to make geological observations upon the basalt and porphyry-slate of Africa. In July, they arrived at Cumana in South America. In 1799 and 1800, they visited the coasts of Paria, the Indian missions, and the province of New Andalusia; and likewise travelled through New Barcelona, Venezuela and Spanish Guiana. After they had ascertained the longitude of Cumana, Caracas and other places, by the observation of Jupiter's satellites, and botanized on the summits of Ceripa and Silla de Avila, they went, in February, 1800, from Caracas to the charming valleys of Aragua, where the eye is delighted with the splendor of tropical vegetation, along the great lake of Valencia. From Porto Cabello, they travelled into the interior as far as to the equator; afterwards wandered through the extensive plains of Calabozo, Apura and the Llanos, where the thermometer of Réaumur stood in the shade at 33°—37° (106°—115° of Fahrenheit), and the hot surface of the earth showed, for more than 42,000 square miles, but a very slight difference of level. They also observed, upon the sand in this quarter, the phenomena of refraction and singular elevatinos. At San Fernando of Apura, they commenced a voyage of more than five hundred leagues in canoes, and surveyed the country with the assistance of chronometers, of Jupiter's satellites, and the moon's amplitude. They descended the Rio Apura, which empties into the Orinoco in the 7th degree of N. latitude, ascended the latter to the mouth of the Rio Guaviare, and passed the celebrated waterfalls of Atures and Maipure, where the cave of Atarnipo encloses the mummies of a nation which was destroyed in a war with the Caribs and Maravites. From the mouth of the Rio Guaviare, they ascended the streams of Atahapo, Tuamini and Temi. From the mission of Javita, they proceeded by land to the sources of the Guginia (Rio Negro). The Indians carried their canoes through the thick forests of *hevea*, *lecythis* and *laurus cinnamomoides*, to the Cano Pimichin, by which they arrived at

the Rio Negro, which they descended to the fort of San Carlos and the boundaries of Grand Para, the principal captaincy of Brazil. In order to determine the branch of the Orinoco, called Cassiquiare, which unites that river with the Amazon, Humboldt and Bonpland went from the Spanish fort of San Carlos, through the Black river and the Cassiquiare again to the Orinoco, and along this river to the mission of Esmeraldo, near the volcano of Duida, or to the source of the stream. But the Guairas Indians—a white and almost dwarfish race, but very warlike,—and the copper-colored Guajaribes—a ferocious race of cannibals, who inhabit the country to the westward,—made it impossible for them to reach the sources of the Orinoco. From Esmeralda they travelled 345 French miles (about 966 English), the whole length of the Orinoco, to its mouth at St. Thomas or Angostura in New Guiana. The travellers passed the waterfalls for the second time, to the southerly side of which neither Peter Gumilla nor Caulin had ever advanced. After severe hardships, they returned upon the Orinoco to Barcelona and Cumana, through the missions of the Caribbean Indians, a gigantic race. They now tarried some months upon the coasts, and thence proceeded to Cuba, stopping for some time in the southern parts of St. Domingo and Jamaica. Here they employed themselves three months, partly in determining the longitude of Havana, and partly in building a new furnace for boiling sugar. From hence they intended to go to Vera Cruz, from that place, through Mexico and Acapulco, to the Philippine islands, and from thence, if possible, through Bombay, Bassora and Aleppo, to Constantinople; but false reports in regard to Baudin's journey induced them to alter their plan. The American newspapers represented, that this French navigator would go first from France to Buenos Ayres, afterwards sail round cape Horn, and thence proceed to the coasts of Chile and Peru. Humboldt had, at his departure from Paris in 1798, promised the museum, as well as captain Baudin, that, if the French expedition should take effect during the course of his journey, he would unite himself thereto. Conformably to this promise, he sent his manuscripts, and the collections which he had made in 1799 and 1800, immediately to Europe, where they arrived safe, with the exception of a third part of the collections, which suffered shipwreck. He then hired a vessel in the harbor of Betabam to go to Carthagena, and from thence he intended going across the isthmus of Panama to the Southern ocean. In March, 1801, he left Betabam, sailed along the southern part of the island of Cuba, and took astronomical observations of different points in the group of islands called the Jardin del Rey, together with the landing places in the harbor of Trinidad. He remained a short time at Rio Sinu, where no botanist had ever before collected specimens. Humboldt afterwards observed the eclipse of the moon which took place March 25, 1801. As the season of the year did not permit them to sail from Panama to Guayaquil, they abandoned the plan of passing over the isthmus. The wish to find the celebrated *mutisia*, induced the travellers to spend some weeks in the forests of Turbaco, which were adorned with the most splendid flowers. They then descended the river Magdalena, of which Humboldt sketched a chart, while Bonpland spent his time in studying the productions of the vegetable kingdom, such as *heliconia*, *psychotria*, *melastoma*, *myrodia* and *dychotria emetica*. From Honda, where they landed, they travelled by difficult paths, through forests of oak and woods of *melastoma* and *cinchona*, to Santa Fé-de-Bogota, the capital of New Grenada. The splendid collections of Mutis, the waterfall of Tequendama, the mining works of Mariquita, Santa Anna and De Zipagnira, the natural bridge of Icononzo—two rocks separated from each other by an earthquake, and supporting another trembling in the air,—all these curious and remarkable objects occupied the attention of the travellers till September, 1801. Notwithstanding the unfavorable rainy season, they travelled to Quito, then descended to the valley of the river Magdalena, crossed the Andes at Quindiu, where the snow-capped summits of Tolina reared themselves in the midst of forests of storax, passion-flowers, resembling trees in size, bambusas and wax-palms. When they arrived, barefooted and wet, at the valley of the river Cauca, they rested at Cartago and Buga, and wandered through the province of Choco, the region of the metal platina. They now ascended to Popayan, at the foot of the snow-capped volcanoes of Purace and Sotara, through Caleto and the gold-washings of Quilichao. The thermometer, in this remarkable climate, always stood at 17°—19° of Réaumur (70°—74° Fahrenheit). They ascended at this time, though with laborious exertions, to the crater of the volcano Purace, the mouth of which is full of

boiling water, and, in the midst of snow, sends out a constant vapor of sulphureted hydrogen. They then passed on, avoiding the poisonous valley of Patia, over the steep Cordilleras of Almaguer, to Pasto, and travelled through Guachucal over the mountainous plains of the province de los Pastos. After four months of great fatigue, they at length reached the cities of Iberra and Quito in the southern hemisphere. They arrived at the latter city, distinguished for the superior education of its inhabitants, Jan. 6, 1802. They continued their geological and botanical surveys eight or nine months in the kingdom of Quito, remarkable for its huge mountains, its volcanoes, its vegetation, its old monuments, but more especially for the manners of its former inhabitants. They ascended twice to the crater of the volcano Pichincha, where they performed experiments to ascertain the composition of the air, its electrical, magnetical and hygroscopical qualities, its elasticity, and the degree of temperature of boiling water. Meantime they made several excursions to the mountains of Antisana, Cotopaxi, Tunguragua and Chimborazo, whose tops are covered with perpetual snow. The geognostical character of the Andes was also a subject of their particular attention. The trigonometrical and barometrical measurements of Humboldt have fully proved that some of these volcanoes have sunk considerably since 1753, and with this result the observations of the inhabitants perfectly coincide. At the same time, Humboldt was convinced that all these great masses were formed by crystallization. Charles Montufar, son of the marquis of Selvalegre of Quito, a man passionately devoted to science, in January, 1802, joined our travellers, and accompanied them throughout their remaining expeditions to Peru and Mexico. Being favored by circumstances, they ascended the summits of the most remarkable mountains, to a height hitherto never reached. They ascended Chimborazo, June 23, 1802, 3096 toises, 18,576 Fr. feet (3485 feet higher than Condamine reached, in 1745) above the surface of the sea. The blood started from their eyes, lips and gums, and they became almost torpid through cold. A narrow, deep valley hindered them from reaching the most remote summit of Chimborazo, which was about 224 toises (or 1344 feet) higher. From Quito they proceeded to the river Amazon and Trina, in the expectation of observing there the transit of Mercury over the sun's disk. They visited the ruins of Lactacunga, Hambato and Rio Bamba—a country which was overwhelmed, Feb. 7, 1797, by a terrible earthquake—went through the snowy fields of Assonay to Cuença, and thence through the Paramo of Saraguro to Loxa, where, in the forests of Gonzanama and Malacatos, they made valuable observations on the Peruvian bark. From Loxa they proceeded through Ayavaca and Gouncabamba to Peru, passing over the lofty Andes, in order to reach the river Amazon. They saw the splendid ruins of the road of Yega, which passes over the porphyry rocks of the Andes, between 12 and 1800 toises high, from Cusco to Assonay, and is provided with inns and public fountains. At the village of Chamaya, they embarked on a raft, followed the course of the river of the same name into the Amazon, and ascertained the astronomical situation of their junction. As Condamine had embarked upon the Amazon, below Quebrada de Chuchunga, and likewise had not ascertained any longitude except at the mouth of the Rio Napo, Humboldt followed the Amazon to the cataract Rentewa, and, at Tomependa, drew up an accurate plan of this unknown part of the river. Bonpland had, in the mean time, employed himself in botanical researches. Now, for the fifth time, our travellers passed the Andes, in order to return through Montan and Peru. They determined the point where the magnetic needle of Borda showed the middle point of declination, although under the seventh degree of south latitude, and examined the rich mines of Hualguayok, where silver is found 2000 toises above the surface of the sea. From Caxamarca, which is celebrated for its baths and ruins, they descended to Truxillo, in the neighborhood of which are included the ruins of the immense Peruvian city, Mansiche, decorated with pyramids, in one of which, in the 18th century, was found beaten gold to the value of more than 4,000,000 livres. On this westerly descent of the Andes, they had, for the first time, a magnificent view of the Pacific ocean, and of that long and narrow valley where rain and thunder are unknown. They followed the barren coasts of the southern ocean through Santa and Guarmey to Lima, where Humboldt was so fortunate as to observe pretty accurately, in the harbor of Callao de Lima, the termination of Mercury's transit over the sun. In January, 1803, our travellers took passage for Guayaquil, a harbor upon the bank of a mighty river, where palms, plumaria, tabernæmontana and banana plants appear in in-

describable splendor. After 30 days, they reached Acapulco. Although Humboldt wished very much to hasten his return to Europe, yet the beauty of New Spain, the hospitality of its inhabitants, and the fear of the black vomit, then prevalent at Vera Cruz, induced him to delay his departure till the middle of winter. Afterwards they employed themselves in the examination of plants, of the air, the hourly variations of the barometer, the appearances of the magnet, and especially the longitude of Acapulco, and then departed for Mexico. They passed through the sultry valleys of Mescala and Papagayo, where the thermometer stood, in the shade, at 32° of Réaumur (104° Fahrenheit); traversed the lofty plains of Chilpanzlugo, Theuilotepec and Tasco, where oaks, cypresses, fir trees and European grain flourished in a mild climate. Here they visited the mining works of Tasco, where the veins of silver appear alternately in limestone and mica slate, and contain within them gypsum in laminæ. In April, 1803, they ascended through Cuernaraca and the fogs of Cuchilaqua to the city of Mexico, which is very pleasantly situated, and is distinguished from all the cities of the new world by its scientific institutions. After a residence of some months, during which Humboldt corrected the longitude of Mexico, our travellers visited the celebrated mining works of Moran and Real del Monte, where the mines of Biscaya have already yielded to the count of Regla several millions of dollars. They then examined the *obsidian* of Oyamel, which lies imbedded in the layers of pearlstone and porphyry, and served the former inhabitants for knives. This whole country is full of basaltic blocks: amygdaloid and secondary calcareous formations afford the most striking appearances for the consideration of the geologist. These Del Rio, a scholar of Werner, had already analyzed. In 1803, they visited the southern part of the kingdom. They directed their researches to Hunhuetoca, and went thence through Queretano, Salamanca, and the fruitful plains of Yrapuato, to Guanaxuato, whose mines are far more considerable than those of Potosi. They were here occupied, during the space of two months, with measurements and geological investigations, examined the baths of Comagillos, whose temperature is 11° Réaumur (about 25° Fahrenheit), higher than that of those in the Philippine islands, and then went through the valley of St. Jago to Valladolid, the capital of the former kingdom of Mechoacan. Thence they descended, notwithstanding the constant autumnal rains, into the plains of Jorulo, on the coasts of the Pacific, where, in 1759, a volcano of 1494 feet in height was raised, in a single night, from the surface of the earth, in the midst of more than 2000 small openings, which are still smoking. They descended to the bottom of the crater, the air of which was very strongly charged with carbonic acid, which they analyzed. From the pleasant and fruitful kingdom of Mechoacan, they returned through the elevated plains of Tolucca to Mexico. At Tolucca, they visited the wonderful hand-tree, the *cheiranthostæmon* of Cervantes, of which, since the most ancient times, there has existed but one specimen. At Mexico, they employed themselves in arranging their herbariums and geological collections, in calculating the measurements which they had made, and on the geological atlas, for which Humboldt had taken sketches. They left this city in January, 1804, in order to explore the eastern declivities of the Cordilleras, and made geometrical measurements of both the volcanoes of Puebla, Popocatapetl and Itzaccihuatl. They then passed on through Perote to Xalapa. Notwithstanding the deep snow which covered it, Humboldt arrived at the summit of Cofre, which exceeds in height the Peak of Teneriffe by 162 toises, and determined its situation by observations made on the spot. He also took a trigonometrical survey of the Peak of Orizana. After a pleasant tour in this country, our travellers descended to the port of Vera Cruz, escaped the black vomit, which then extensively prevailed, and embarked on board a Spanish frigate for Havana, where they again took possession of their collections, which had been deposited there in 1800. They remained here two months, when they set sail for Philadelphia, which they reached, after a passage of 32 days. Here and at Washington, they remained two months, and arrived in Europe August, 1804. The rich collections which they brought with them are unique in their kinds, and of inestimable value: they contain, among other things, 6300 kinds of plants. The account of their travels, and of their important results, Humboldt published in the splendid work which appeared at Paris, Hamburg and London, 1810 et seq., *Voyage de Humboldt et Bonpland* (grand folio), the first division of which is devoted to general physics and to an account of their journey. The first part of this account is contained in the numbers already publish-

ed, under the separate title of *Vues des Cordillères et Monumens des Peuples de l'Amérique*, and is adorned with 50 or 60 engravings. The second division relates to zoology and comparative anatomy; the third contains a political essay on New Spain; the fourth is devoted to astronomy; the fifth to mineralogy and magnetism, and the sixth to botany. The whole series, which consists of 12 volumes, 4to., 3 volumes, folio, with two collections of maps, and one of picturesque engravings, is justly called, by a competent judge, "a work of gigantic extent and richness, to which the modern literature of Europe can hardly offer a parallel." Humboldt has since, with Gay-Lussac in Paris, rectified the theory of the situation of the magnetic equator, and laid before the academy of sciences, in 1817, his chart of the remarkable course of the river Orinoco. In October, 1818, he visited London, where it is said the allied powers requested him to sketch a plan of the political situation of the South American people. For the execution of his plan to undertake a scientific journey to the East Indies and Thibet, the king of Prussia, at Aix-la-Chapelle, in November, 1818, granted him a yearly pension of 12,000 dollars, and the use of the necessary instruments. But this journey was abandoned. Humboldt lived many years in Paris, devoted to the sciences, till, in the winter of 1822, he was called to Verona to accompany the king of Prussia on his journey through Italy. His residence at Naples was the cause of his inquiries into the formation of volcanoes, the result of which he gave to the public in a small essay. In the latter part of 1826, he returned from Paris to Berlin. In 1829, he made a journey to Northern Asia, as far as to the confines of China, in which he was much assisted by the Russian government, which wished to obtain, through him, more accurate information respecting the character and contents of the Ural mountains. Since his return, he has communicated several pieces of highly interesting information connected with his journey. According to the latest accounts, Humboldt has gone on a semi-diplomatic mission from Prussia to Paris.*

Hume, David, an eminent historian and philosopher, was born at Edinburgh, in 1711. His father was a descendant of the family of the earl of Home, but not opulent, and the subject of this article being his youngest son, his fortune was very small. Losing his father in his infancy, he was brought up under the care of his mother, a woman of singular merit, and was destined by his family for the law; but his passion for literature was so strong, that he could not confine himself to professional studies, and, as he observes in his memoirs, while his family fancied him to be poring over Voet and Vinnius, he was occupied with Cicero and Virgil. In 1734, he visited Bristol, with recommendations to some eminent merchants; but he was as little disposed to commerce as to law, and resolved to retire to some provincial town of France, with the intention of prosecuting his literary pursuits in privacy, and of supplying, by economy, his pecuniary deficiencies. He passed three years in France, in a manner very accordant with his own inclinations. In 1737, he went to London, and the next year published his Treatise upon Human Nature, the entire neglect of which proved a severe mortification. In 1742, he printed at Edinburgh his Essays, Moral, Political and Literary, which, owing to their more popular form and elegance of style, were very favorably received. In 1745, he took up his residence with the young marquis of Annandale, to whom he acted as a sort of guardian—an office which was rendered necessary by that nobleman's health and state of mind. He remained in this situation for a year, and then stood candidate for the professorship of moral philosophy at Edinburgh; but, although strongly supported, he was excluded by the negative of the presbytery, in consequence of his known scepticism. In 1746, he accompanied general Sinclair, as his secretary, in an expedition designed against Canada, but which ended in an attack upon the French coast; and, in 1747, attended the same officer in a military embassy to the courts of Vienna and Turin. Having been led to imagine that the neglect of his Treatise upon Human Nature originated from its too dry and systematic form, he cast the first part of the work anew, and caused it to be published, while he was abroad, with the title of an Inquiry concerning the Human Understanding. It, however, attracted very little more notice than at first, and, on his return, the author retired to Scotland, where he resided two years. In 1751, he repaired to the metropolis, where, in the next year, he pub-

* The emperor of Russia has lately presented him with a magnificent vase of aventurine. The substance is said to be confined to Siberia, and, in transparency and variety of tint, crystalline fineness of texture, and susceptibility of high polish, to resemble the finest sort of agate. The vase is eight feet high, of an antique shape, with carved arms of massive gold.

lished his Political Discourses, which were at once well received. Nearly about the same time, appeared his Inquiry concerning the Principles of Morals—a work that he himself deems "incomparably his best," but which met with but little attention. In 1752, he obtained the appointment of librarian to the faculty of advocates at Edinburgh, which, by affording him the command of a large and curious collection of books, seems to have inspired him with the idea of writing history. The History of England, under the House of Stuart, of which a quarto volume appeared in 1754, to use his own language, was received "with one cry of reproach, disapprobation, and even detestation." He attributes this reception to his favorable treatment of Charles I and lord Strafford, but it was much more owing to his equally contemptuous mention of the opposing religious parties; which, as far as they were sincerely actuated by their opinions, he regards as little more than votaries of superstition on the one side, and of enthusiasm on the other. The work was therefore not only decried, but neglected; and, had not a war broken out between the two countries, the author would have again retired to France. His constitutional equanimity, however, gradually prevailed, and he resolved to proceed in his task; in the mean time, he published his Natural History of Religion, and other pieces, the first of which was answered by Warburton, in the name of doctor Hurd. In 1756, he published the second volume of his history, which embraced the period from Charles II to the revolution, and was comparatively well received. He now resolved to take a wider range, and, in 1759, published his History of the House of Tudor, which excited almost as much clamor against him as his first volume. His reputation as a historian, however, gradually increased, and he was encouraged to complete his work from the earliest period, which he accomplished, in two additional volumes, in 1761; and his History of England became thenceforth a standard book. Although free from the narrow partialities and prejudices which so frequently influence national historians, and enlarged and philosophical in his general views of events and characters, his researches into the origin and progress of the English constitution are wanting both in depth and accuracy. He has too sweepingly regarded the liberty of the country as of modern date, and the mere result of concessions from the sovereign, and has sometimes even colored facts to support that conclusion. His predilection for the house of Stuart has also made him somewhat unfair to that of Tudor, and still more to the real patriotism of the motives of many of those who sought to curb the high pretensions and baleful extent of prerogative so imprudently claimed by that unhappy family. With every abatement, however, his reputation stands high, and, aided by his clear style,—which, although sometimes incorrect, and exhibiting Gallicisms, is frequently eloquent, and always agreeable,—will probably remain so. The copy money received for his History, added to a considerable pension obtained from the crown by the interest of lord Bute, finally secured him independence, and he was about to retire from his native country, when he was invited by the earl of Hertford, then proceeding as ambassador to Paris, to attend him, with a view of ultimately becoming the secretary of the embassy. He accordingly accompanied that nobleman to France, and received the expected appointment. He was also farther gratified by a most enthusiastic reception in the Parisian circles, in his character of historian and philosopher. He remained *chargé d'affaires*, after the departure of lord Hertford, in 1756, and returned to England in 1766, accompanied by Jean Jacques Rousseau, to whom he behaved with a delicacy and generosity which that eccentric person repaid with his usual ingratitude and suspicion. Mr. Hume, in 1767, became under-secretary of state, under general Conway, which post he held until the resignation of that minister, in 1769. He then finally retired to Edinburgh; and having, by this time, realized a thousand per annum, he drew round him a chosen set of suitable associates, among whom he lived, generally admired and respected. He died Aug. 25, 1776, in the 65th year of his age. Doctor Adam Smith depictures him as charitable, generous, urbane, and possessed of a degree of gayety and good humor which is seldom attendant on students so persevering as Mr. Hume. This temper even evinced itself on his death-bed, and it will be as difficult to deny the high personal moral claims of this writer, favored as he was with the rare talent of self-command, as the vigor and acuteness of his intellect. He doubtless takes the lead among modern philosophical sceptics, and, while open to the objections to which that system of philosophizing will ever be liable, he must be allowed to have upheld it with distinguished ability.

Hume, Joseph, esquire, born in 1777, is

a native of Montrose, in Scotland, and was educated to the medical profession. After completing his education, he went out to India, as assistant-surgeon in the company's service, to the presidency of Calcutta. The appointment of surgeon in India is very lucrative; but the abilities, which Mr. Hume exhibited, procured him other advantageous appointments, as a commissary, and also as Persian translator. He was also agent to a very lucrative contract, taken by some of his friends. From these various sources, he accumulated an easy and independent fortune, with which he returned to his native country, in 1808. He soon after visited Portugal and Greece, and in 1812, was elected member of parliament. He is generally distinguished in the house of commons by the appellation of the honorable member for Aberdeen. As soon as he was returned to the house of commons, he began to apply himself to the public accounts. He saw in what they were defective, and, by repeated motions in the house, he has obtained such a mass of information, as no one, we believe, but himself ever procured. The motions he has brought forward, and the speeches which he has made, on the subject of finance, show him to be one of the best financiers in the house of commons. He has exposed the extravagance of government, has dragged forth to public view the dirty jobs, and thrown much light over a business hitherto involved in darkness. The city of London has, with other corporations, bestowed on him their freedom. Great efforts have been made in the house to browbeat him, and, out of the house, to write him down; but he stands on ground too strong to fear the attacks of his opponents. It is said that the correspondence into which he has been led by his exertions to promote financial reforms, has compelled him to keep on foot an establishment of clerks equal to what the business of a first rate merchant requires.

Hummel, John Nepomuk, one of the first living pianists and composers, was born 1778, at Presburg, and received instruction in music from his father. At the age of seven years, he had already attracted notice in Vienna, and was presented to Mozart, who, notwithstanding his disgust at giving lessons, offered to instruct the boy, on condition that the pupil should be trusted entirely to his care and management. Hummel enjoyed his instruction in 1787, 1788, after which he began to travel with his father through Germany, Denmark, Scotland (where he published his first compositions, Variations for the Piano-forte), England and Holland. Except Mozart himself, no one had displayed so much power, or met with so much applause. Hummel was then engaged by prince Esterhazy, who was particularly fond of church music; and his first mass received the entire approbation of Haydn. In 1811, he left the service of the prince, and gave lessons, in Vienna, on the piano, on which his power of improvisation excited great admiration. Hummel is particularly distinguished as an instrumental composer. He has composed a great many variations, fugues, sonatas, trios, rondos, ballads, songs and *pot-pourris*, sacred music, and all kinds of dances (among others three ballets), comic and other operas, two high masses, &c. His greatest compositions are his two great piano concertos.

Humming-Bird (*trochilus*). These beautiful birds, which may be termed the gems of animated nature, are peculiar to America, and almost exclusively tropical. They are distinguished by their long and slender bill, and attenuated and retractile tongue, which is divided into two filaments from the middle to the tip. They feed on honey, though they are also insectivorous. Their flight is extremely rapid, and, whilst feeding, they remain doised in the air by means of the horizontal motion of their wings, which produces a humming noise, whence their common name is derived. The genus *trochilus* is very extensive. We have, however, only one species in the U. States, the *T. colubris*, belonging to the subgenus *mellisuga* (Bris.), or those having straight bills. This well known and splendid little bird arrives in Pennsylvania towards the end of April, and begins to build its nest early in May. This is usually fixed on the upper side of a horizontal branch, seldom above 10 feet from the ground. It is hemispherical, and about an inch in diameter, lined with vegetable down, and covered externally with lichen. The female lays two eggs of a white color. The humming-bird is very fond of tubular flowers, particularly those of the trumpet vine. When he alights, he always prefers the small dead twigs of a tree or bush, where he dresses and arranges his plumage with great dexterity. His only note is a single chirp, not louder than that of a cricket. The humming-bird is very irascible, two males scarcely ever meeting without a contest ensuing. They will also attack birds of a much larger size, as wrens or king-birds, and sometimes have contests for a favorite

flower with the humble-bee. From the beauty of this bird, many attempts have been made to domesticate them, but unsuccessfully, though they have been kept from three to four months with attention. They are exceedingly susceptible of cold, and droop and die when deprived of the animating influence of the sun's rays. There is every reason to believe that insects form no inconsiderable portion of their food. They begin to retire south in September, and, in November, take refuge, for the winter, in Florida. The humming-bird is three inches and a half in length, and four and a quarter in extent. The whole back, upper part of the neck, sides under the wings, tail coverts, and two middle feathers of the tail, are of a rich golden green; the tail is forked, and, as well as the wings, of a deep brownish purple; the bill and eyes are black; but what constitutes their chief ornament, is the splendor of the feathers of the throat, which, when viewed in a proper light, rival the ruby in brilliancy. These feathers are of singular strength and texture, lying close together, like scales, and varying, when moved before the eye, from a deep black to a fiery crimson and burning orange. The female is destitute of them. The young males begin to acquire them in September. (For fuller information, we must refer to Wilson, *Am. Orn.* vol. 2, from which we have condensed the above sketch.) That magnificent work, *Les Oiseaux Mouches*, vividly represents most of the known species.

Humoral, in medicine; what has relation to the humors or fluids of the system. The humoral pathology is a medical theory which long prevailed, and attributed all diseases to irregular changes in the fluid parts of the body, without assigning any influence to the state of the solids. The opposite theory is that which refers every thing to the nervous energy resident in the solids, and considers diseases as arising from irregularities in their functions. The humoral pathology is exposed, in many ways, to the objection, that it rests on hypotheses, and is very partial in its views. The views of the adherents of this theory have differed continually, with the progress of knowledge, from the days of Hippocrates and Galen, its great supporters, down to very late times. The nervous pathology is also liable to the objection of being of a partial and hypothetical character. Of late, the two systems have been blended, and both fluids and solids allowed a share in the changes of the body.

Hundred, in England; a division of a shire or county. It was so called, according to some writers, because each hundred found 100 *fidejussors*, or sureties of the king's peace, or 100 able-bodied men of war. Others think it to have been so called because originally composed of 100 families. Hundreds were first introduced into England by Alfred. They seem to have previously existed in Denmark; and in France, a regulation of this sort was made, above 200 years before, by Clothaire and Childebert, with a view of obliging each district to answer for the robberies committed in it. Something like this institution may be traced back to the ancient Germans, from whom were derived the Franks, who became masters of Gaul, and the Saxons, who settled in England; for both the thing and the name, as a territorial assemblage of persons, were well known to that warlike people. By various statutes, hundreds are liable to actions for injuries sustained by riots, robberies, malicious mischiefs, &c.

Hundred Court. (See *Courts.*)

Hundred Days. (See *Cent Jours.*)

Hundsrück (meaning *dog's back*); a continuation of the Vosges, of moderate height, in the Prussian province of the Lower Rhine, extending from east to west between the rivers Nahe, Rhine and Moselle. The range is calcareous, and covered with wood. The highest elevation is 1600 German feet. Flax thrives well. Some write the name *Hunsrück*, and derive it from a colony of Huns planted here by the emperor Gratian, or from a remnant of Attila's followers, who took refuge here after his defeat at Châlons.

Hungary; the country of the Magyars, or *Hungarians*, as they were first called by their Sclavonic neighbors in Russia. In their own language they are called *Magyars*, and their origin is by no means precisely ascertained. The older writers represent them as derived from the Huns of Attila. A supposed resemblance of their language to that of the Finns gave rise to the opinion that they were of Finnish origin. Fejer, keeper of the university library at Pesth, derives them from the Parthians (*Scientific Magazine*, in Hungarian, 1825), and Reinegg and Pallas found Magyar tribes on the east side of the Caspian. They appear to have emigrated from Asia into Europe towards the end of the 7th century, and, after occupying the country between the Don and the Dnieper for 200 years, they were pressed forward by the Petchenegues, and, in 894, they entered Hungary, under

their prince Almus. In 900, under Arpad, son of Almus, they completed its reduction, after having conquered the Bulgarians, Sclavonians, Walachians, Moravians, Germans, Italians, Croatians, Szeklers and Dalmatians, who then occupied the country. The conquered territory was at first distributed only amongst the chiefs of the tribes; but the duke soon acquired the right of rewarding the courage of the soldiers by the investiture of lands without regard to their rank. The Magyars next made predatory incursions into the neighboring countries, to which they were chiefly invited by foreign princes, and advanced to the north as far as Hamburg and Bremen, to the west into Provence, on the south to Otranto, and eastward as far as Constantinople. These formidable enemies, whose active cavalry it was almost vain to attack, were first defeated by Henry I, the German emperor, at Merseburg, in 933; they then invaded Franconia in 937, and Saxony in 938, were defeated at Stederburg, and in the Drömmling on the Ohra. Their last incursion into Bavaria, 954 and 955, terminated with their complete overthrow on the Lech, where Otho I, king of the Germans, conquered them. They gradually learnt, from the Sclavonians and Germans whom they conquered, and from the prisoners whom they had taken in their incursions, the arts of peace, agriculture and manufactures. The hospitality of Geysa, and the religious zeal of Sarolta, his wife, did much to attract strangers, from different countries and of all classes, into Hungary. The Hungarians violently opposed the introduction of Christianity by the bishops Pellegrin of Passau and Adelbert of Prague, and Geysa was obliged to leave the farther extension of it to his son Stephen, who finally prevailed by the assistance of Latin monks and German knights. Stephen was rewarded for his services in extirpating the heathens, by a crown from pope Sylvester II, part of which still remains on the *sacra regni Hungariæ corona*, and by a patriarchal cross, with the title of *apostolic king*. Thus Stephen founded the kingdom in 1000, which, according to the notions of that period, he endeavored to strengthen by the power of the hierarchy and the aristocracy. He established 10 richly-endowed bishoprics, and divided the whole empire into 72 counties,* with an officer at the head of each, responsible only to the king, and invested with full military and civil power. These officers and the bishops formed the senate of the kingdom, with whose concurrence king Stephen granted a constitution, the principal features of which are still preserved. The unsettled state of the succession to the crown, and the consequent interference of neighboring princes, and of the Roman court, in the domestic concerns of Hungary, the inveterate hatred of the Magyars against the foreigners, who were favored by Peter, the successor of Stephen, the secret struggle of paganism with Christianity, and particularly the arrogance of the clergy and nobility, long retarded the prosperity of the country. The religious zeal and bravery of St. Ladislaus, and the energy and prudence of Colomann, shine amidst the darkness of this period. These two monarchs extended the boundaries of the empire, the former by the conquest of Croatia and Sclavonia (1089), the latter by the conquest of Dalmatia (1102). They asserted, with firmness, the dignity of the Hungarian crown, and the independence of the nation, against all foreign attacks, and restored order and tranquillity at home by wise laws and prudent regulations. The introduction of German colonists, from Flanders and Alsace, into Zips and Transylvania, by Geysa II (1148), had an important influence on those districts; and the connexion of Hungary with Constantinople during the reign of Bela III, who had been educated in that city, had a favorable effect on the country in general. The Magyars, who had previously passed the greater part of the year in tents, became more accustomed to living in towns, and to civil institutions. Several court officers and a royal chancellor were created on the model of the Greek court. On the other hand, Hungary became connected with France by the second marriage of Bela (1186) with Margaret, sister to Henry, king of France, and widow of Henry, king of England. She introduced French elegance at the Hungarian court, and at this time we find the first mention of Hungarians studying at Paris; but

* The counties of Hungary may consist of two or more districts. Each one has its governor, a vice-governor, who is collector of the revenue, a notary, four superior and four inferior judges. All these civil officers must be chosen from the nobility who have estates in the county. In 12 counties the dignity of governor is hereditary, but in others it is connected with one of the high offices of the kingdom or with a bishopric, or the court appoints whom it will out of the nobility. The nobility elect the other officers of the county from three, whom the governor names. Those parts of Transylvania, Sclavonia and Croatia to which the name *Land of the Hungarians* is given, with the exception of the military settlements on the frontiers, are also divided into counties.

these improvements were soon checked. The rich nobility and the clergy availed themselves of the weakness of Andrew II to extend their influence and power. The former extorted a confirmation and extension of their privileges by the golden bull in 1222, the latter a favorable concordate. The reforms of Bela IV were interrupted by the invasions of the Mongols (1241), and the kingdom was in a most deplorable condition. After the retreat of these wild hordes, Bela endeavored to heal the wounds of his country. He induced Germans to settle in the depopulated country, and elevated the condition of the citizens by increasing the number of royal free cities; but the coronation of his son, as co-regent, gave rise to many disputes between them, which weakened the royal authority and hastened the decline of the state. With Andrew III the male line of the Arpad dynasty became extinct (1301). Under the princes of the house of Anjou, Hungary attained the summit of its power. These princes considered the prelates and the nobles as the supports of their thrones, yet they imposed certain obligations in return for the privileges granted them, such as that of maintaining troops. Charles I improved the currency, introduced a new system of taxation, which extended also to the peasants of the nobility and clergy, and substituted regular judicial proceedings for trials by ordeal, which were then practised. Louis I added Poland, Red Russia, Moldavia, and a part of Servia, to his kingdom. His expeditions and campaigns made the nation acquainted with foreign civilization. He founded a high school (1367) at Fünfkirchen, delivered commerce from exorbitant duties, and banished the Jews from the country. The reign of Sigismund is interesting from his disputes with the oligarchs, who even kept him in prison for several months, the invasion of Hungary by the Turks (1391), and the war with the Hussites. Although he was much engaged, as Roman emperor, with the affairs of Germany and the Catholic church, he introduced equality of weights and measures and the first military regulation into Hungary, raised the royal free cities to the privilege of an estate (1405), and founded an academy at Buda. From their first appearance, the Turks constantly disturbed the tranquillity of Hungary, which served as a bulwark to the rest of Europe. The death of Ladislaus I, in the unfortunate battle of Varna (1444), is the more to be regretted, as the plan of the hero John Hunniades, for driving the Turks from Europe, failed through the coldness of the Christian courts and the intrigues of his enemies. Matthias Corvinus, son of Hunniades, held the reins of government with a firm hand. Combining the talents of a diplomatist and a general, he silenced or defeated all his enemies at home and abroad, secured the public tranquillity, which had been but too often disturbed, by his judicial organization of the counties, and gained the love and confidence of the nation, notwithstanding the severe measures which he was often compelled to adopt. It is still a proverbial expression with the lower classes in Hungary, "King Matthias is dead, and justice with him." He showed his love of learning by the foundation of a new university at Presburg (Istropolis), 1467, by inviting learned men from foreign countries, particularly from Italy, and by his excellent library, in the royal castle at Buda, the treasures of which were scattered soon after his death. During the reigns of Ladislaus II and Louis II, the ambition and rapacity of the optimates, headed by Stephen Zapolya, and afterwards by his son John, excited domestic troubles, and caused an insurrection of the peasants, which was only suppressed by the severest measures (1514), while they destroyed the foreign influence of the kingdom. The battle of Mohacs (1526), in which Louis II lost his life, and which, for 160 years, made a great part of Hungary a Turkish province, was the natural consequence of this state of things. The rest of the country was in dispute between the rivals Ferdinand of Austria and John Zapolya. The contest was decided by the Protestants, who, fearing the persecution of Zapolya, declared for Ferdinand. Their adherence gave him the superiority, and Zapolya was compelled to rest satisfied with the possession of Transylvania and some counties of Upper Hungary; but this division of the kingdom caused continual disputes with the descendants of Zapolya, instigated by the Turks and the French, and, together with the persecutions of the Protestants (particularly after the admission of the Jesuits, 1561), gave rise to civil commotions, which were quieted by the treaties of Vienna, with Stephen Botskay (1606), of Nikelsburg, with Gabriel Bethlen (1622), and of Lintz, with George Rakoczy (1645). These circumstances delayed the expulsion of the Turks, in which Leopold I finally succeeded so far, that he retook Buda (1686), and, by the peace of Carlowitz (1699), recovered the rest of Hungary (except the Bannat) and

Transylvania. This treaty, however, and the establishment of the *commissio neo-acquistica*, to decide all claims on the countries recovered from the Turks, gave rise to new troubles, which were not quieted until the peace of Szathmar in 1711. The congress of Passarowitz (1718) restored the Bannat to Hungary, and the peace of Belgrade (1739) terminated hostilities with the Porte for a long time. Charles VI, by the pragmatic sanction, secured the inheritance of the Hungarian crown to the female descendants of the house of Hapsburg, and improved the administration of the kingdom, by giving the royal chancery and the viceregal office an organization better suited to the age. He also formed a standing army for Hungary, and established the military contribution for its support. Maria Theresa did much for the improvement of Hungary, by the promulgation of the rural code, called *Urbarium* (1765), the object of which was to fix the services, and improve the condition of the peasants; also by the formation of village schools (1770), and the abolishing of the order of Jesuits (1773). It cannot be doubted that Joseph II, one of the greatest sovereigns of his age, was influenced by the best intentions in the changes which he undertook in the Hungarian constitution, but his zeal made him forget the necessity of proceeding gradually in such reforms. The nation, far from entering into his views, opposed them, and Leopold II was compelled to revoke the ordinances of his brother, who, besides, had never been crowned in Hungary. Hungary, with its appendages, Croatia, Sclavonia, the Littorale and Transylvania, lies between the German provinces of Austria and Turkey. It is almost surrounded with mountains, among which the Carpathian, on the north, extend, in numerous branches, into the centre of the country. Between the two principal rivers, the Danube and the Theis, is a fertile plain containing more than 21,000 square miles. Rivers and streams water the country in every direction. Amongst the lakes, the Plattensee (45 miles long and 5 to 9 miles wide) and the Neusiedlersee (20 miles long, 4 to 7 miles wide), are the most extensive; and among the morasses, the Etseder morass (22 miles long, 6 or 7 miles wide), and the (so called) *Sárrét*, which has been partly drained, are the principal. The situation of Hungary, and particularly the nature of its surface, render it one of the healthiest countries in Europe. Protected from the north winds by high mountains, it is open to the mild sea breezes from the south, which are tempered by the great bodies of water. It is also owing to the variety of its surface that Hungary possesses so great a diversity of climate, which, combined with the fertility of the soil, abundantly supplies her with all the natural productions necessary for the comfort of man. All kinds of corn, a sort of maize (*Kukerutz*), rice, kitchen vegetables and garden plants of every description, melons (which are cultivated in open fields), Turkish pepper (*paprika*), fruits (particularly plums, for the sake of the brandy prepared from them, called *Slivovitza*), wines of different kinds (from 18,000,000 to 20,000,000 eimers—about 15 gallons each—annually), wood, gallnuts, potash, tobacco (300,000 quintals), hemp, flax, hops, saffron, woad, madder, sumach, cotton and rhubarb are among the products of Hungary. Horses, cattle (5,000,000), sheep (8,000,000), hogs, game (in the north, bears), poultry, fish (amongst which the sturgeon and salmon [*salmo dantex*] are the principal), bees and silkworms (which annually yield nearly 20,000 pounds of silk), are among the productions of the animal kingdom. Among the minerals are gold, silver, copper, iron, lead, zinc, cobalt, antimony, sulphur, arsenic, salt, soda, saltpetre, alum, vitriol, marble, coals, peat; amongst the precious stones, the opal and chalcedony are remarkably beautiful. No country has so many mineral and medicinal springs. The population of Hungary, exclusive of Transylvania, exceeds 9,400,000, in 52 free cities, 691 market towns, and 11,068 villages, upon a superficial area of 88,500 square miles. (Transylvania contains, besides, 23,500 square miles, with a population of 2,000,000, and the military frontiers, 12,000 square miles, with 934,000 inhabitants.) The principal towns, according to Aszalay's table, are Pesth (46,646 inhabitants), and Debreczin (40,695 inhabitants). The largest village on the European continent is Czaba, 85 miles from Pesth, which has over 20,000 inhabitants, all Sclavonians, and nearly all Protestants. The great number of distinct races, with entirely different habits, which is found in Hungary, is remarkable. The greater part of the plain country is occupied by the Magyars, whilst the Sclavonians, who are more numerous, inhabit the mountainous country, and the Germans are settled chiefly in the towns. Walachians, Greeks, Armenians, Clementines, French, Italians, Jews (whose tax for being tolerated amounts to 120,000

guilders), and Gypsies (the musicians of the Magyars, and the smiths of the villagers, about 40,000), are all mingled together. Of this number, about 4,000,000 are Roman Catholics, about 1,000,000 (chiefly Germans and Sclavonians) of the Augsburg confession; of the Helvetic confession, above 1,500,000 (nearly all Magyars, on which account they call their creed the *Magyaric religion*); of the Eastern church, 1,400,000; of the Jewish religion, 130,000. The Hungarian has a natural inclination to agriculture and the breeding of cattle. Both are, however, still in their infancy, but the inexhaustible fertility of nature supplies every deficiency of industry and skill. It must not be forgotten, that Hungary has comparatively but a small population, that the Hungarian peasant has no property in the soil, and that foreign commerce is checked. Many improvements are made by individual proprietors, and Hungary may justly boast of two institutions, founded by private individuals, for the promotion of agriculture, the *Georgicon* at Keszthely, and the agricultural institute in Hungarian Altenburg. Mining is carried on by Germans and Sclavonians. There is a mining academy at Schemnitz, to which foreigners frequently resort. The principal artisans are tanners, furriers, manufacturers of *tschism* (cordovan boots), lacemakers and barbers. There are few manufactures that flourish in Hungary. Iron and copper, linen, leather, alum and saltpetre, are some of the articles of industry. The potteries (the large establishment at Debreczin produces annually 11,000,000 pipe heads), the cloth manufactories at Gatsch, and the sugar refineries at Fiume, deserve to be mentioned. Trade is almost exclusively in the hands of the Germans, Greeks and Jews. Internal commerce is promoted by the Temesch and Francis canals (the former 75, the latter 60½ miles long), the fairs (which amount to 2000), and the complete absence of tolls: the clearing of the navigable rivers, and the building of regular roads, under the direction of the superintendents of the highways, are carefully attended to. The foreign commerce is limited to the natural productions, and is besides checked by the Austrian system of duties, together with the tobacco and salt monopoly of the government. The Hungarian constitution is in force in Croatia, Sclavonia, and the Littorale, but not in Transylvania and the military frontiers, which are governed by their own laws. The inhabitants are divided into nobles and people. To the nobility belong the clergy, the magnates (barons of the empire, the chiefs of counties, dukes, counts, &c.), those individuals, with their descendants, to whom the king has granted patents of nobility, or on whom he has conferred estates, the royal free cities and some privileged districts, as bodies corporate. The nobility, styled, in official Latin, the *populus Hungaricus*, are exempt from taxes (except on their estates within the territories of a city, and also excepting the land tax, which they pay as vassals of other nobles). They pay no imposts (unless engaged in commerce) nor tithes, and are not liable to have soldiers quartered on them; they cannot be imprisoned until after conviction of a crime, except in case of high treason, or unless taken in the act. The violation of their person or property (*major potentia*) is punished with the loss of the property of the offending party. The nobles only can hold landed estate, and they exercise the *regalia* on them, and certain offices can be enjoyed only by them. The estates belonging to the nobles, according to the terms of grant, descend either in the male line alone, or to the female line also; on the extinction of the family, they revert to the crown, which, however, is bound to grant them immediately to some deserving individual. In return for their privileges, the nobility are liable to a sudden levy for military service, in case of emergency. This is called *insurrectio*, and they must serve in person, and at their own expense. The citizens of the royal free cities, and the inhabitants of the privileged districts, also enjoy many exemptions. The whole burthen therefore falls on the peasants, or the *misera plebs contribuens*, as they are styled; for, besides contributions in money and in kind, and the labor which they are bound to perform for the lord of the manor, they also pay tithes of all their produce to the clergy, maintain the county magistracies and the army, and labor on the public works without pay. The bounty of nature, and the frugality of the Hungarian peasant, can alone explain how, under all these impositions, he can still maintain himself, and, if favored by circumstances, can sometimes even accumulate a little property. The peasant is not attached to the soil, but the state provides that the place of an emigrant shall be immediately filled, in order that the amount of the contribution may not be lessened. A second distinction consists in the difference of religion. Though all sects are, in general, equal, yet the exceptions expressly

named, the indistinctness of the expression in the particular cases, and the proselyting activity of the Catholic clergy, render the Catholic religion predominant. Children, whose parents are of different religions, if the father is a Catholic, must be educated in the Catholic religion; but if he is a Protestant, only the sons can adopt his religion. This is the cause of most of the oppressions, which the people suffer from the clergy, who are very careful to prevent the Protestant religion from getting the ascendency. The legislative power is vested in the diet, that is, the king and the estates. The estates consist of the higher clergy (bishops, popes and abbots), the magnates, the two courts of appeal, and two representatives from each chapter, county, city and privileged district. They are divided into two chambers (*tabulæ*), under the presidency of the palatine and the *personal* (president of the royal chambers of justice). The diet has also the privilege of crowning the king (who swears to maintain the liberties and rights of the kingdom, and to recover all the lost provinces, and annex them to the kingdom), of electing the palatine (the first officer of the state), and of granting supplies and subsidies in money, in kind, and in troops. The king has, 1. the right of patronage, or the investiture of all ecclesiastical benefices; 2. the right of conferring nobility (yet certain prelates have the power, by granting particular estates, of placing persons, not belonging to the nobility, in a condition nearly equivalent to that of the nobility); 3. the appointment to all offices and honors, excepting that of palatine; 4. the coining of money; 5. the regulation of the post; 6. the right of declaring war and making peace; 7. the command of the army; 8. the right of assembling and dissolving the diet. The inferior administration of the country is differently organized in relation to the various classes of inhabitants. The whole country is divided into 53 counties, of which there is one in the Littorale, three in Croatia, and three in Sclavonia. The county magistrates have the immediate government over both the nobility and the peasants of the county; but they are elected by the nobility, every three years, from their own members, besides which they advise with the nobility on subjects of general interest, in public meetings. The citizens of the free cities have also their own magistrates, consisting of the inner council (senators elected for life), and the outer (the electors who choose the senate and fill their own vacancies). The privileged districts also choose their own magistrates. The royal regency (in Buda), at the head of which is the palatine, is over all the offices above named. It has the supreme administration of the country, and is the regular organ of communication between the king and country; it watches over the observance of the constitution, and submits to the king any proposals for the public good. The king exercises his authority through the Hungarian chancery (in Vienna). Besides their political powers, the inferior authorities exercise the administration of justice in the first instance. But the peasant is subject to the seigneurial jurisdiction of the lord of the manor, which sometimes extends even to criminal cases, if the lord is invested with the *jus gladii* (as it is called). There are three county courts in civil cases, according to the importance of the subject in question; consisting either of a judge with a jury, or of the vice-officer of the county with a judge and jury, or of the supreme tribunal of the county (*sedes judiciaria, Sedria*), which also revises the decisions of the two other courts and of the seigneurial courts, and has the sole jurisdiction in all criminal cases in the counties. In certain civil processes, designated by law, four district tables (*tabulæ*) in Hungary, and one in Croatia, exercise original jurisdiction. The courts of appellate jurisdiction are the royal table (which, however, in several cases, has original jurisdiction) and the table of the seven (both in Pesth). They are both comprised under the name of *curia regia*, the sentences of which have the force of law, in case there is no positive law. The Catholic clergy in Hungary are powerful, by reason of their large landed property, and the influence which they possess over all offices. 10,000 clergymen, with 3 archbishops and 20 diocesan bishops (among whom are 4 Greek Catholics), watch over the Catholic flock. The Protestants have a primitive form of government. Laymen and clergymen united (*presbyteri*) manage the affairs of the different congregations, under the direction of superintendents. The adherents of the Augsburg confession have also a general superintendent. There are seven bishops and one metropolitan of the non-united Greeks. The education and instruction of the Catholic youth are mostly in the hands of the clergy. There are five academies for higher studies; a lyceum at Erlau, and a university at Pesth with a library of 70,000 volumes, an observatory, &c. Protestants are admitted into these establishments, and the instruction is gratuitous.

The Protestants have many *gymnasia*; the non-united Greeks have two. The Hungarian contingent to the Austrian army consists of twelve regiments of infantry and ten of cavalry; in all, 64,000 men; to which, in cases of emergency, is added the *Insurrection*, which, in 1808, amounted to 40,000 men. The annual revenue from the domains, the *regalia* and taxes, amounts to from 30 to 40,000,000 guilders. The expenditure is small. The peasants pay the county officers; they also supply the provisions for the army, at a price fixed in 1751, which is much below the market value. In the free cities and privileged districts, the officers are also paid by the communes. Most of the public institutions have considerable funds; and the Protestants are obliged to defray the expenses of their worship. There is no public debt. —See doctor J. A. Fessler's *History of Hungary*, in German, 10 vols. (Leipsic, 1815 et seq.), and *History of the Magyars*, by count Mailath, 3 vols. (Vienna, 1828); Beudant's *Mineralogical and Geognostical Travels in Hungary, in the Year* 1818, 4 vols. (1822); Bright's *Travels in Hungary* (1814).

Hungarian Literature has received but little attention from foreign scholars, but has been treated by Hungarian writers, in the Hungarian language, by Spangár (1738), Bod (1766), Sándor, Budai, Pápai, Tóth, Jankowich, and others; in Latin, by Czwittinger (1711), Rotarides (1745), Bel, Schier, Haner, Schmeitzel, Weszprémi, Pray, Wallaszky, Simonchich, Belnai, Tibold, &c.; in German, by Windisch, Seivert, Kovachich, Engel, Fessler, Miller, Schwartner, Schedius, Lübeck, Rösler, &c. The character of this singular people, their peculiar views of life and the world, are strikingly displayed in their literature, which also bears traces of the constant struggle which they have had to carry on ever since their first entrance into Europe. Nor is it deficient in qualities which render it important in a scientific light. The language suggests many unexpected views in regard to the philosophy of language in general; the poetry, particularly the lyric, excels in beauty, and works are not wanting in the department of natural history, Roman and Grecian antiquity, philology, history in general, the laws of nations, and other subjects. The Hungarians, impelled partly by the spirit of adventure which characterized the middle ages, and partly by the demands of assistance from foreign princes, emigrated from Asia, and spread over the disconnected provinces of Eastern Europe, until they reached a country with a settled constitution and a consolidated government (Germany, under Henry I and Otho I), which set bounds to their warlike incursions (in 955). From this period, the attention of the people, previously occupied with external subjects, began to be turned inward upon itself. The civilization of the Magyars commenced, and advanced so rapidly that, in less than fifty years, the domestic and foreign security of the kingdom was established, industry awakened, milder manners introduced, and the nation prepared for the reception of Christianity; but, instead of being contented with this gradual progress, and awaiting the natural developement of the national character, Stephen I and most of his successors imprudently endeavored to hasten the progress. The discontents caused by this policy were increased by the frequent admission of foreigners into the clerical and noble orders, by the exaltation of the clergy to the highest rank in the kingdom, by the preference given to the Latin over the national language, not only in the church, but in judicial proceedings, legal documents and forms. These circumstances gave rise to an opposition, which, though checked, in some degree, by the prudent measures of the princes of the house of Anjou, in the 14th century, was afterwards continually renewed. The Latin language predominated in this country, as it did at that time in every country which had reached any degree of civilization; but in Hungary it has, from obvious causes, continued prevalent to the present day, while in other nations it is employed only as an instrument of learning. The use of a dead language in common life, as well as on all scientific subjects, could neither be advantageous to the language itself, to the general improvement of the people, nor to the national literature. Notwithstanding these disadvantages, some buds of literature from time to time unfolded themselves, and native genius, though chained, would sometimes attain distinction; yet how much greater would have been the results, if the spirit of the nation had been permitted a free developement of its peculiarities, under the influence of national manners! As early as the 11th century, several monastic and episcopal schools were founded, and the students were numerous. In the 12th century, many young men, particularly those destined for the church, were sent to Paris, where the university had just been erected. In the beginning of the 13th century, the first *studium generale* was estab-

lished at Wessprim, a university modelled after that of Paris: it was much frequented. This *studium generale* was afterwards revived, and at a later period one was established at Buda. In 1473, the printing press was brought into Hungary. In the 16th century, the number of schools was much increased, particularly among the Protestants; and the situation of the country would have been very different, had not the Protestants been persecuted by the Catholics, and had not Hungary fallen under the sway of the Hapsburgs, and thus become merely a part of a great empire, to whose true interests little attention was paid. We cannot refrain from expressing a wish, that one consequence of the present commotions in Europe may be the establishment of an independent government in Hungary, whose natural advantages are at present paralyzed by a government unable to provide for the general welfare of the heterogeneous mass under its rule. Hungary can boast of many distinguished writers in the Latin language, at this early period; but this exotic literature had so little influence on the nation at large, that, though it had attained a high degree of excellence in the time of Matthias Corvinus, yet many of the higher officers of the kingdom could neither write nor read, in the reign of his successor, Ladislaus II (1491). In the 11th century, with the introduction of Christianity in Hungary, the Latin language acquired the ascendency in the church, in schools and public affairs; yet the Hungarian was used in commerce, in the camp, and even the resolutions of the diet were first drawn up in Hungarian. When the missionaries addressed the people in Latin, an interpreter was usually present; and there are several relics of poetry, sacred eloquence and state papers, extant in Hungarian. A new impulse was given to this language, on the accession of the house of Anjou to the throne of Hungary. The Latin was indeed still the language of church and state; but the Hungarian became the language of the court. Documents were drawn up in Hungarian, and the *Hungarian oath*, in the *corpus juris Hung.*, dates from this time. The holy Scriptures were translated into Hungarian; in the imperial library of Vienna, there is a MS. translation, of 1382; and, in spite of the violent opposition of the *inquisitores hereticæ pravitatis*, several translations were published. In 1465, Janus Pannonius wrote a Hungarian grammar, which is lost. The 16th century was favorable to Hungarian literature, through the religious disputes in the country, the sacred, martial and popular songs, as well as by the histories written and published for the people, and the multiplied translations of the Bible. It then reached a degree of perfection which it retained until the latter part of the 18th century. A large number of grammars and dictionaries were printed from the 16th century to the 18th. But the hopes of the further developement of Hungarian literature were not realized; a Latin period again succeeded, from 1700 to 1780, during which time numerous and finished works were composed in Latin by Hungarian writers. In 1721, a Latin newspaper was established, and the state calendar, which commenced in 1726, was, and continues to be, in Latin. In 1781, the first Hungarian newspaper was printed in Presburg. At present there are two, one in Vienna, the other in Pesth. When Joseph II died, many violent yet bloodless changes were made in the Hungarian constitution, and several laws were passed in favor of the Hungarian language. It was required to be used in all public proceedings. Courses of lectures were delivered in Hungarian in some of the schools, and it was taught in all of them. Several periodicals were established, Hungarian theatres erected in Buda and Pesth, many works were written on the grammar of the language, &c.; but these measures were gradually pursued with less zeal. (See Bowring's *Specimens of the Poetry of the Magyars.*)

Hungarian Language. The language of the Magyars, as spoken and written at present in Hungary, is a phenomenon in philology well worthy of study, and the knowledge of it unlocks rich stores for the philosophical historian and philologist. As the Magyars belonged to the great tribe, which was spread from the south-western part of Asia on the Caspian sea, to the north-eastern extremity of Europe, to Finland, of whose branches transplanted to Europe (as the Uzi, Polovtzes, Avars, Chazars, Petschenegues, &c.), only one has taken deep root; so the Magyarian language is derived from the language which is common to that great tribe, and which comprises the Semitic and Finnish tongues. This view, as Niclas Révai has shown, settles the long dispute among the learned, whether the Hungarian language is allied to the Lapland and Finland language, as some maintain (Rudbeck, Eccard, Ihre, Hell, Sajnovits, Gatterer, Schlœzer, Büsching, Hagen, and particularly Gyarmathi), or to the Oriental languages, as others assert (Otroktósi, Œrtel, Kalmár, Versegi, and chiefly Beregszásgi).

Differing from all European languages except the Finnish, in internal structure and external form, the Hungarian nevertheless was obliged to express with the Roman alphabet, adopted with Christianity, all the Asiatic shades of sounds. The Hungarian distinguishes, like the inhabitant of the East, the simple vowels from the prolonged: the former, *a*, *e*, *i*, *o*, *ö*, *u*, *ü*, are pronounced sharp, whether they are long or short: the latter have always a fuller, more protracted pronunciation; they are designated by an accent, *á*, *é*, *í*, *ó*, *ő*, *ú*, *ű*, and are very different from the former; for instance, *kar* (the arm), *kár* (the injury); *kerek* (round), *kerék* (the wheel), *kérek* (I beg). The Hungarian is destitute of diphthongs, like the Oriental languages, and marks the finest distinctions of sounds, particularly of consonants, with great accuracy. Sounds peculiar to it are those of *gy*, *ny*, *ly*, *ty*, where the *y* is the consonant *j*, but closely and intimately connected with the preceding consonant. At the beginning of a syllable, the Hungarian never allows more than one consonant; foreign words which begin with two consonants, are, in the mouth of a Hungarian, separated by a vowel put before them (e. g., of *schola* they make *iskola*), or put a vowel between (as from *král* they make *király*). The Hungarian has a fixed law for the order of the vowels, like the Finnish (according to Rask and Sjœgren). It has, like that language, no distinction of sex whatever, but a rich declension, with numerous inflexions of cases, which seem to prove, very evidently, what James Grimm, in his German Grammar, ventured to hint, that the inflexions of cases originated from additions of particles to the root. The difference of absolute and relative forms in languages, which is founded in the laws of our mind, and traces of which are found in many languages (in the Semitic languages, as *status constructus* and *absolutus*; in the Gothic, Anglo-Saxon and other Teutonic languages, according to James Grimm, as strong and weak forms; in the French and English, in the absolute and conjunctive pronouns, &c.), manifests itself in all the declensions and conjugations so distinctly and characteristically, as to present the greatest difficulty to foreigners, who meet with this distinction throughout in no other languages. The conjunctive possessive pronouns, as well as prepositions, are expressed as suffixes. Family names are considered as adjectives, from which they mostly originated, and hence are put before the baptismal name; for instance, Bátori Gábor, as if it were the Batorish Gabor, the Gabor of the Batori family. The beautiful proportion between vowels and consonants, the accurate shadowing and full articulation which every syllable requires (the Hungarian suffers no mute vowels, so called—no *e muet*), and the fixed succession of vowels, give to the Hungarian language a character of magnificent and masculine harmony, in which it will bear a comparison with every other. The richness and expressiveness of its various forms give it great energy; the regularity of its inflexions and compositions, in which it is to be compared with the Sanscrit, makes it clear and distinct, and its infinite power of composition gives it the means of increasing its stores beyond almost any Western language. If it is actually not so much developed, this is easily accounted for from two circumstances;—that Sclavonic, Servian, German, modern Greek, Walachian, Italian, &c., are spoken in the country at the same time; and that it was, for a long time, excluded from public transactions, from the church, and even from conversation, where German and French took its place. Yet it found some opportunities to develope itself, partly at the courts of the Hungarian kings and magnates, particularly those of the princes of Transylvania; partly in the county diets; partly in the diets of the realm, where the native language could not be entirely suppressed; partly in the polemic writings at the time of the reformation, and finally in the reäction produced by the law of Joseph II, to use only the German language in public business, which, aided by the then existing liberty of the press, produced many excellent Hungarian works. Among the great number of Hungarian grammars, the first which appeared in print was that by John Sylvester (or Erdœsi), in 1539. Another in the Hungarian language was published at Vienna, in 1795, by a society of learned men. That of Gyarmathi (Klausenburg, 1795) is, in many respects, excellent. Verseghi published a Grammar in German, in 1805, at Pesth, and, in 1816, in Latin. The most useful for a beginner is that first written by John Farkas, and remodelled by Francis Pethe, of which many editions have been published. Jos. Márton published a Grammar (the latest edition, Vienna, 1820). The most complete and most critical, probably, is that begun by Niclas Révai (2 vols., Pesth,

1809); death prevented the author from completing it. Among the later dictionaries are those by Jos. Márton and Benj. Mokry, in Latin and Hungarian.

Hungarian Wines. Hungary produces a greater quantity of wine than any country except France. The annual product of Hungary Proper and the territories belonging to it may be calculated at from 20,000,000 to 30,000,000 eimers (of about 15 gallons each). In general, the Hungarian wine contains much alcohol and little aqueous matter. The finest is the Tokay, which is produced in the Hegyallya (the country around the Tokay hills), in the county of Femplin, lat. 48° N. The dried grapes are carefully separated from the others, and three sorts of wine are obtained. The best is the *Essence;* this is the oily juice, which runs of itself from the fruit, without any pressure. When this ceases to run, the grapes are moistened with common Tokay-must, and trod out; this gives the *Ausbruch.* A second infusion of common Tokay-must, on the remaining grapes, pressed by the hands, gives the *Mászlás* (Masklass). In the same way, the Ausbruch and Masklass are prepared in the mountains of Menesch (county of Arad), and Ausbruch in Rust (county of Œdenburg) and St. George (county of Presburg). Hungary also produces excellent table wines, of which the best are those of Buda, Erlau, Selksard, Wessmély.

Hunger; the feeling of a want of food. When the stomach has digested and disposed of the food and drink which it contained, its peculiar nervous power is destroyed, and some time is necessary before it collects it again. This time is shorter in proportion as the individual is healthy, young, strong and active. As soon as this nervous power is restored, the activity of the organ is again awakened, and produces a longing to eat, which we call, in its first degree, *appetite.* If this is not gratified, it gains strength, and becomes hunger, which, if not appeased, turns to voracity. Appetite is not a disagreeable feeling, but hunger is an ever-increasing pain, on account of the ever-increasing sensibility of the nerves of the stomach. To some men, whose stomachs are morbidly sensitive, the first desire for food is unpleasant, and if this desire is not immediately gratified, they are seized with griping pains in the parts about the stomach, which, if not appeased, are followed by sudden weakness, and even fainting. If hunger is not allayed, a dreadful state of the body ensues, and finally death. After long-continued hunger, the blood becomes weak, acrid and thin, on account of the want of materials to compensate for the nutritious matter expended in the support of the body; hence the whole body becomes lean and weak, bloody fluxes take place from all parts, as well as violent irritation of the nervous system, caused by the excessive sensibility of the nerves of the stomach, which at length extends to the whole region of the abdomen, is carried to a still greater height, and produces pain over the whole body, sleeplessness, convulsions, raving madness, until at length death puts an end to the scene.

Hunger Cure; a mode of curing diseases by the greatest possible abstinence from food; so much only being allowed as is requisite to keep the patient alive. The food is diminished by degrees, and, in the period of convalescence, is increased in the same way, with much precaution, as many patients, unable to resist their appetite, have died in consequence of a slight indulgence. This mode of cure has been found of great use in the case of deep-rooted complaints, which baffled the powers of medicine. It is used, particularly in connexion with frequent unctions of mercury, in obstinate cases of syphilis, when even the bones have become affected; and the cases in which this severe remedy has produced brilliant successes are numerous. It is considered, in Germany, as indispensable to the cure of inveterate syphilis. The patient is kept in a well closed room, receiving only a little bread and water, and soon loses his appetite, owing to his debilitated state produced by the mercurial unctions. His bed-linen is never changed, nor the room aired; indeed, a very trifling draught of air has proved fatal. The salivation is very great, and it is surprising that man can live at all in such a state as these patients are often in. The cure generally requires about three weeks.

Huningen, or Huningue; a place in Alsace, department of the Haut-Rhin, half a league from Basle. Louis XIV caused it to be fortified by Vauban, in 1679. In 1814, it was besieged by the allies, and, by the peace of Paris, in 1816, it was stipulated that the fortifications should be destroyed, at the urgent solicitations, as is said, of Basle. It now contains but 1000 inhabitants, and is of no importance.

Hunniades, John Corvinus, waywode of Transylvania, and general of the armies of Ladislaus, king of Hungary, was one of the greatest commanders of his time.

He fought against the Turks heroically, and, in 1442 and 1443, gained important advantages over the generals of sultan Amurath, and obliged that prince to retire from Belgrade, after besieging it seven months. In 1456, he obliged Mohammed II also to relinquish a siege of the same place, but died September 10, in the same year. He was, at this time, regarded as the hero of Christendom, and not less esteemed by his enemies than regretted by his friends. He left two sons, the younger of whom, Matthias, was afterwards king of Hungary.

Huns; a nation of Northern Asia, which probably belongs to the Finnish race, and formerly led a nomadic life on the frontiers of China. The history of the Huns can be traced no farther back than the reign of Me-te, a son of Teu-man, on account of whose inroads the Chinese built their great wall, B. C. 209. (See De Guigne's *Histoire des Huns.*) This powerful people, not entirely destitute of civilization, were masters of Mongolia and the greatest part of the north of Asia, as far as the Caspian sea and the borders of Thibet, and were long dangerous neighbors to the Chinese. But, internal dissensions having weakened the power of the Huns, the Chinese gained a dominion over them, although doubtful and interrupted, and put an end to their northern kingdom, A. D. 93, and to their southern in the 5th century. After the destruction of the old kingdom of the Huns in the north, a part of this people retired to Youen-Pan, near the sources of the Ural, not far from the residence of the Bashkirs. The country was afterwards called Tan-jou or Great Hungary. According to the accounts of the Roman geographers, however, the Huns, in the time of Augustus, were settled near the Caspian sea. These new comers had the Alans on the south-west, and occupied the frontiers of the Roman empire. While they were spreading to the north and south, they carried on wars in the east with the Chinese. But when the To-pa or To-ten, who dwelt on the river Amour, spread themselves on the west of China, and drove the Sienpi from their possessions, at the beginning of the 4th century, the Huns again pressed towards the west, to the Caspian sea and the Pontus Euxinus. After a bloody struggle with the Alans, they united with them, to pass the Pontus Euxinus, and attack the Goths (376), and thus produced the general irruption of the barbarians. They were accompanied by many tribes whom they had overcome, and they reduced all the nations on the north of the Danube. They sometimes made war on the Romans, and sometimes served in troops under their standards. Rouas compelled the Romans to pay tribute. His nephews, Bleda and Attila, sons of Mandras (Mundzuk), succeeded him in 443, and turned their arms against the Germans and Sarmatians. After the death of Bleda, Attila continued his conquests, and founded one of the most extensive kingdoms known in history. (See *Attila.*) Soon after his death (453), the empire fell to pieces; but the hordes of Huns long lived on the north of the Danube and the Palus Mœotis, until at length the people and the name became extinct.

Hunter, William; a celebrated anatomist and medical practitioner, born May 23, 1718, at Kilbride, in the county of Lanark, in Scotland. At the age of 14, he was sent to the university of Glasgow, and engaged himself as the pupil, and afterwards as the partner, of Cullen, at Hamilton. The result of this connexion has been already partially related. (See *Cullen, William.*) Mr. Hunter went to reside at Hamilton in 1737; and, after having passed the winter of 1740 at Edinburgh, he went to London in 1741. He soon evinced his ability by a paper On the Structure and Diseases of Articulating Cartilages, which he communicated to the royal society in 1743, and which was inserted in the Philosophical Transactions. He determined to establish himself in London as a teacher of anatomy, and commenced lecturing on that subject in 1746, having previously been engaged to assist Mr. Samuel Sharpe as a lecturer on surgery. In 1747, he was admitted a member of the corporation of surgeons; and in the spring of the following year, soon after the close of his lectures for the season, he went to Leyden and Paris. On his return home, he devoted himself to the practice of midwifery, and was chosen surgeon-accoucheur, first to the Middlesex hospital, and then to the British lying-in hospital. In 1750, he entirely relinquished mere surgical practice, though much consulted as a physican in cases requiring peculiar anatomical skill for their investigation. In 1755, he became physician to the British lying-in hospital, and was soon after elected a member of the medical society. In the first volume of Observations and Inquiries, published by that association in 1757, appeared doctor Hunter's History of an Aneurism of the Aorta; and he was an important contributor to the subsequent publications of the society, of

which he was chosen president on the death of doctor Fothergill. In 1762, he published a work, entitled Medical Commentaries (4to.), to which was subsequently added a Supplement, the object of which was to vindicate his claim to some anatomical discoveries, in opposition to professor Monro, of Edinburgh, and others. In 1764, he was appointed physician-extraordinary to the queen. Doctor Hunter was elected a fellow of the royal society in 1767; and, in 1768, on the establishment of the royal academy of arts, he was appointed professor of anatomy. He was made a foreign associate of the royal medical society at Paris in 1780, and of the royal academy of sciences in 1782. The most elaborate and splendid of his publications, the Anatomy of the human Gravid Uterus (folio, illustrated by 34 large plates), appeared in 1775. In 1777, he joined Mr. Watson in presenting to the royal society a Short Account of the late Doctor Maty's Illness, and of the Appearances on Dissection; and, in 1778, he published Reflections on the Section of the Symphysis Pubis, designed to show the impropriety and inutility of that surgical operation, which had become fashionable among accoucheurs on the continent, and especially in France. Two Introductory Lectures to his Anatomical Course, which he had prepared for the press, were published after his death. About 1765, he presented a memorial to Mr. Grenville, then minister, requesting a grant from government of the site of the king's mews, whereon he offered to erect an edifice at the expense of £7000, and endow a professorship in perpetuity. But his proposal was treated with neglect, in consequence of which he purchased a spot of ground in Great Windmill street, Haymarket, where he built a house, anatomical theatre, and museum, for his own professional purposes, and thither he removed in 1770. Here, besides objects connected with the medical sciences, he ultimately collected a library of Greek and Roman classics, and a valuable cabinet of medals. The latter furnished the materials for a publication, entitled *Nummorum veterum Populorum et Urbium qui in Museo Gulielmi Hunter asservantur Descriptio, Figuris illustrata, Op. et Stud. Caroli Combe, SR. et SA. Sec.* (1783, 4to.). In 1781, the museum was augmented by the addition of shells and other natural curiosities, which had been collected by doctor Fothergill, who had given testamentary directions that his cabinet of natural history should be offered to doctor Hunter for £500 less than the appraised value; and he accordingly purchased it for £1200. He continued to attend to his avocations till within a very short time of his death, which took place March 30, 1783. He bequeathed his museum to his nephew for the term of 30 years, after which it was removed to the university of Glasgow, where it is now deposited.

Hunter, John; younger brother of the preceding, highly celebrated as a practitioner and writer on surgery, anatomy and physiology. He was born July 14, 1728. His education was neglected, and he was, at first, apprenticed to a cabinet-maker; but, hearing of the success of his elder brother in London, he offered his services to him as an anatomical assistant, and was invited by him to London, where he arrived in September, 1748. He improved so speedily, that, in the winter of 1749, he was able to undertake the instruction of dissecting pupils. In 1755, he was admitted to a partnership in the lectures delivered by his brother, in which situation he most assiduously devoted himself to the study of practical anatomy, not only of the human body, but also of brute animals, for which he procured from the Tower, and from the keepers of other menageries, subjects for dissection. He also kept several foreign and uncommon animals in his house for the purpose of studying their habits and organization. In the beginning of 1767, he was elected a fellow of the royal society. His first publication, a treatise On the Natural History of the Teeth (4to.), appeared in 1771. In the winter of 1773, he commenced a course of lectures on the theory and principles of surgery, in which he developed some of those peculiar doctrines which he afterwards explained more fully in his published works. His perfect acquaintance with anatomy rendered him a bold and skilful operator, and enabled him to make improvements in the modes of treating certain surgical cases. But his fame chiefly rests on his researches concerning comparative anatomy. In 1776, he obtained the appointment of surgeon-extraordinary to the army. In 1781, he was chosen a member of the royal society of Göttingen, and, in 1783, of the royal society of medicine and academy of surgery at Paris. In 1786, he published his celebrated work On the Venereal Disease. About the same time appeared a quarto volume, entitled Observations on Various Parts of the Animal Œconomy, consisting of physiological essays, most of which had been inserted in the Philosophical Trans-

actions. His Treatise on the Blood, Inflammation, and Gun-shot Wounds, was one of the last of his literary labors. On the death of Mr. Adair, he was appointed inspector-general of hospitals and surgeon-general to the army. He died Oct. 16, 1793. His Treatise on the Blood, &c., was published in 1794, with an account of his life, by sir Everard Home. Government purchased the museum of Hunter for £15,000, and transferred it to the royal college of surgeons, for the use of the public.

Hunting, in a general sense, includes the pursuit both of hairy and feathered game; but, in a narrower sense, is applied only to beasts of venery (of the forest, as the hart, hind, hare, boar, wolf) and of chase (of the field, as the buck, doe, fox, marten, roe). In a rude state of society, it is one of the most important employments of mankind; and, in its more advanced state, becomes an agreeable amusement, men pursuing for pleasure, in the latter case, what they once followed from necessity. Hunting is practised in a great variety of ways, according to the object of the persons engaged in it, the nature of the country, and the description of the game. The object may be to obtain a supply of food, to destroy noxious animals, to get possession of useful ones, or of some useful animal product (as furs, &c.), or merely amusement. The pursuit may be conducted by means of other animals, as by dogs, falcons (see *Falconry*), &c.; or the prey may be caught by stratagem (as by nets, traps, pitfalls), or destroyed by firearms or other weapons, &c. A full account of the methods of hunting among the ancients may be found in the treatises of Xenophon (Κυνηγετικος) and Arrian (under the same title), and in the poem of Oppian—*Cynegetics*, or On Hunting. The breeds of hounds, their training and management, the hunting of the hare, the stag, the wild boar, lion, bear, &c.; the instruments, dress, &c., of the hunters, are minutely described with evident keenness and great precision. Xenophon commences with Apollo and Diana, through whose aid the Centaur Chiron, on account of his love of justice, was rewarded with instructions in the science of the chase. Chiron, in turn, taught many eminent pupils. The treatise concludes with a general eulogy of hunting, which, we are informed, not only affords pleasure, but increases health, strengthens the sight and hearing, and protracts the approach of old age. It is also the best preparation for military service. The author then goes on to prove that activity is the duty of every good citizen, and that the interests of his country, not less than the will of the gods, demand from each man all the exertion of which he is capable. To the passion for hunting which animated the feudal kings and nobles of Europe, the huge tracts of land which were afforested bear fearful testimony; and the writers of the time give a strong picture of the sufferings of the oppressed commonalty, under the tyrannical privileges of sport which were claimed by their masters. (See *Game Laws*.) It is unnecessary here to go into a minute description of the technical terms of hunting, or of the manner in which it is carried on. In England, the fox, the stag and the hare are the principal objects of the chase; on the continent of Europe, the wild boar and the wolf are added to the list. (See Daniel's *Rural Sports*.) The lion is hunted by horsemen on plains, and large dogs are used to dislodge him from his haunts. At the first sight of the huntsmen, he always endeavors to escape by speed, but if they and the dogs get near, he either slackens his pace, or quietly awaits their approach. The dogs immediately rush on, and, after one or two are destroyed, overpower him: 12 or 16 are a sufficient match for him. The huntsmen keep together in pairs; if they have not a sufficient number of dogs, one of them, when within reach of the lion, dismounts and aims at the animal's heart; he instantly remounts, and his companion follows up the blow. In some parts of Africa, when a lion is discovered, the whole surrounding district is raised, a circle of three or four miles is formed, and the party proceeds, always narrowing the circle until the lion appears. He then springs on one of the party, who generally succeeds in killing him with a musket ball. One of the noblest sports in the East is hunting the tiger, which is done in various ways, but chiefly by a numerous company of sportsmen, with elephants trained for the purpose, horses becoming ungovernable. When the retreat of the tiger is discovered, every attempt is made to dislodge him; the search is conducted with the largest and best trained elephant, which discloses the presence of the tiger by a peculiar kind of snorting and great agitation. The huntsmen, who are mounted on elephants, discharge their pieces, and, if the shot is not fatal, the tiger springs upon his assailants, who are often in great danger. Tigers are sometimes taken in traps, pits or nets. The other animals of the feline

species—the panther, leopard, &c.—are generally roused by dogs, and killed with fire-arms or arrows. The animals of the canine species, though less furious, are more cunning than those above mentioned. The wolf has always been an object of human vengeance: in the East, it is hunted by eagles trained for the purpose; in Europe, the strongest greyhounds and other dogs are employed, and the chase is prosecuted either on foot or on horseback. It is, however, very difficult to run down a wolf, for it is stronger than a dog, and will easily run 20 miles, which, added to its stratagems, often renders the pursuit abortive. Wolves are also taken in traps and nets, though their vigilance and caution make it difficult to deceive them. The most formidable animals of North America are the white bear and the grisly bear. They are ferocious, fearless, and extremely vivacious, and are hunted with arrows or fire-arms. The bison is destroyed by the North American Indians sometimes by riding in among a herd, and singling out one, which they wound with their arrows, until a mortal blow is given; or they drive a whole herd over a precipice. When flying before the pursuers, the herd rushes on with great rapidity, and it is impossible for the leaders to stop, as the main body pushes forward to escape the pursuit. The Indians nearly surround them, and rush forward with loud yells. The alarmed animals hasten forward in the only direction not occupied by their enemies, and are hurled over the precipice and dashed to pieces.

Huntingdon, Selina, countess of, the second daughter of Washington, earl Ferrers, was born in 1707, and married June 3, 1728, to Theophilus, earl of Huntingdon. Becoming a widow, she acquired a taste for the principles of the Calvinistic Methodists, and patronised the famous George Whitefield, whom she constituted her chaplain. Her rank and fortune giving her great influence, she was long considered as the head of a sect of religionists; and, after the death of Whitefield, his followers were designated as the people of lady Huntingdon. She founded schools and colleges for preachers, supported them with her purse, and expended annually large sums in private charity. She died June 17, 1791.

Huntingdon, William; a religious enthusiast, who attained some notoriety towards the end of the 18th century. He was the son of a farmer's laborer in Kent, and the early part of his life was passed in menial service, and other humble occupations. After indulging in vice and dissipation for several years, according to his own account, he was converted, and became a preacher among the Calvinistic Methodists. He soon engaged in religious controversies, published a vast number of tracts, and was regarded as the head of a peculiar sect. He died in August, 1813, at the age of 69. He was a man of some talent, though little cultivated by education. His publications are very numerous, and some of them contain curious details relative to his personal history and religious experience. The titles of two may be mentioned as specimens: the Arminian Skeleton, or the Arminians dissected and anatomized (8vo.); and the Bank of Faith (8vo.). After having lost his first wife by death, he married the wealthy relict of sir James Saunderson, a London alderman, and passed the latter part of his life in affluence.

Huntingdon, Henry of, an ancient English historian, was born towards the end of the 11th or the beginning of the 12th century. He was educated by Albinus of Anjou, a learned canon of the church of Lincoln. He composed a general history of England, from the earliest accounts to the death of king Stephen, in 1154, in eight books, which have been published by sir Henry Savile. Towards the conclusion, the author honestly acknowledges that it is only an abridgment, and allows that to compose a complete history of England, many books were necessary which he could not procure. Mr. Wharton has published a letter of his on the contempt of the world, which details many curious anecdotes of the great men of his time.

Huntington, Samuel, one of the signers of the declaration of independence, was born in Windham, Connecticut, in 1732. His father was a farmer, whose situation did not allow him to give his son any other than the limited education which the common schools of the province afforded. Young Huntington, however, made up for this deficiency, by his own industry, and employed all the time which he could spare from the occupations of the farm, in improving his mind. At the age of 22, he resolved upon studying the law, and, having borrowed the necessary books, soon acquired knowledge sufficient to be admitted to the bar and commence the practice of his profession, which he did in his native town. He shortly afterwards removed to Norwich. Here he had not long resided, before his business became very extensive, and, in 1764, he was

elected a representative of the town in the general assembly, and the following year appointed king's attorney, an office which he filled until 1774, when he was raised to the bench of the superior court. In 1775, he was chosen a member of the council of Connecticut, and in the same year, having always shown himself a decided opponent of all encroachments on the rights of the people, was sent as a delegate to the general congress of the colonies. He took his seat in that assembly on the 16th of January, 1776, and, in the ensuing month of July, signed the declaration of independence. September 28, 1779, he was chosen to succeed John Jay, as president of the congress. He was reëlected to the same dignity in 1780, and occupied it until the following year, when his health obliged him to retire from the house. On his return to Connecticut, he resumed his judicial functions and his seat in the council of that state. In 1783, he again went to congress, and was soon afterwards appointed chief-justice of the supreme court of Connecticut. In 1786, he was chosen the successor of Mr. Griswold in the chief magistracy of the state, and was annually reelected to the same station until his death, which took place Jan. 5, 1796, in the 64th year of his age.

Hupazoli, Francis; one of the few individuals who have lived in three centuries. He was born in 1587, at Casal, in Sardinia, and died in 1702. At first, he was a clergyman, and afterwards became a merchant at Scio; and, in his 82d year, he was appointed Venetian consul at Smyrna. He had five wives, who bore him 24 children, besides which, he is known to have had 25 illegitimate children. By his fifth wife, whom he married at the age of 98 years, he had four children. His drink was water; he never smoked, and eat little (principally game and fruit). He drank a good deal of the juice of the *scorzonera* root, eat but very little at night, went to bed and rose early, then heard mass, walked and labored the whole day to the last. He wrote down every thing remarkable which he had witnessed, in 22 vols. He never had a fever, was never bled, and never took any medicine. At the age of 100, his gray hair again became black. When 109 years old, he lost his teeth, and lived on soup. Four years later, he had two large new teeth, and began again to eat meat. During the latter part of his life, he had, for almost 30 years, monthly evacuations of blood. After these ceased, he was afflicted with the stone, and frequent colds, which continued until his death. He was of a mild temper. His principal fault was his passion for the other sex. Hupazoli was rich, and had but few wants.

Hurd, Richard; an eminent English prelate and philological writer of the last century. He was born Jan. 13, 1720, at Congreve, in Staffordshire, went to Emanuel college, Cambridge, in which he obtained a fellowship in 1742, and, in 1749, published *Horatii Ars Poetica, Epistola ad Pisones*, with an English commentary and notes. In 1750, he published a Commentary on the Epistle of Horace to Augustus. A satirical attack on doctor Jortin, in defence of Warburton, in an Essay on the Delicacy of Friendship, he afterwards endeavored to suppress. In 1757, he published Remarks on David Hume's Essay on the Natural History of Religion (8vo.). His Dialogues, moral and political, with Letters on Chivalry and Romance, appeared at different times, from 1758 to 1764, and were republished collectively, in 1765 (3 vols. 8vo.). None of his works attracted so much notice as the dialogues, which were translated into German by Hölty. In 1767, he was made arch-deacon of Gloucester, and, in 1768, commenced a series of sermons on the prophecies, preached at the lecture founded by his friend Warburton, at Lincoln's Inn. These discourses were published under the title of an Introduction to the Study of the Prophecies concerning the Christian Church, in twelve Lectures (1772). In 1775, doctor Hurd was raised to the bishopric of Litchfield and Coventry; and, not long after, was made preceptor to the late king, and his brother the duke of York. He was translated to the see of Worcester, in 1781, and, at the same time, was bestowed on him the confidential situation of clerk of the closet. The king afterwards desired to elevate doctor Hurd to the primacy, but he modestly declined the offer. In 1788, he published an edition of the works of bishop Warburton, in which he omitted some of the productions of his deceased friend. Doctor Parr supplied the editorial deficiencies of bishop Hurd's collection, by Tracts by Warburton and a Warburtonian. In 1795, the right reverend editor himself published a kind of supplement to the works of Warburton, in the form of a biographical preface, and he subsequently also published the correspondence of Warburton, which was his last literary undertaking. He died in May, 1808.

Hurl Gate (see *East River*). We will

only add here, that a project is on foot for improving the navigation of this dangerous pass, and that a survey has been made for this purpose, from which it appears, that a ship canal, of 2439 running feet in length, can be opened between Pot cove and Hallet cove, sufficient to admit the largest vessel of war.

Huron; a lake of North America, 218 miles long, from east to west, and 180 broad, of very irregular form; about 1100 miles in circumference, containing many islands and bays; lon. 80° 10′ to 84° 30′ W.; lat. 43° 20′ to 46° 10′ N. It abounds in fish, which are similar to those in lake Superior. Some of the land on its banks is very fertile, and suitable for cultivation; but in other places, barren and sandy. The promontory which divides the lake from lake Michigan, is composed of a vast plain, upwards of 100 miles in length, but varying in its breadth. At the north-east corner, the lake communicates with lake Michigan, by the straits of Michilimackinac. On its banks are found amazing quantities of sand cherries, and in the adjacent countries, nearly the same fruits as about the other lakes.—*Huron River*, or *St. Clair River*, connects lake Huron with lake St. Clair. It is 40 miles long, and about one mile wide.

Hurons; a tribe of North American Indians, which was formerly numerous, and dwelt on the east of lake Huron; but, in 1650, they were driven out by the Iroquois, and retired to the south-west of lake Erie. The Six Nations (the Mohawk tribes or Iroquois) call the Hurons *father*, without doubt because they are descended from the Hurons, who are now reduced to 700 warriors. They are among the most civilized of the N. American Indians, live in good houses, have horses, cows and swine, and raise grain for sale. Their proper name is *Wyandots*. (See *North American Review*, vol. 24, pp. 419, 428.) The Iroquois are sometimes included under the name of Hurons, but they are a separate people.

Hurricane (in Spanish, *hurracan*; in French, *ouragan*; in German, *orkan*); a word, according to the most probable supposition, picked up by voyagers among the natives of the West Indies; properly a violent tempest of wind, attended with thunder and lightning, and rain or hail. Hurricanes appear to have an electric origin: at the moment that the electric spark produces a combination of oxygen and hydrogen, a sudden fall of rain or hail is thus occasioned, and a vacuum formed, into which the circumambient air rushes with great rapidity from all directions. The West Indies, the Isle of France, and the kingdoms of Siam and China, are the countries most subject to their ravages. What are called hurricanes, in the more northern latitudes, are nothing more than whirlwinds, occasioned by the meeting of opposite currents. But in the real hurricane, all the elements seem to have armed themselves for the destruction of human labors and of nature herself. The velocity of the wind exceeds that of a cannon ball; corn, vines, sugar canes, forests, houses, every thing is swept away. The hurricane of the temperate zone moves with a velocity of about 60 feet a second; those of the torrid zone, from 150 to 300 feet in the same time. They begin in various ways; sometimes a little black cloud rolls down the mountains, and suddenly unfolds itself and covers the whole horizon; at others, the storm comes on in the shape of a fiery cloud, which suddenly appears in a calm and serene sky.

Husband and Wife. Of all private contracts, that of marriage is most intimately blended with the social condition of a community, and gives rise to the most numerous and important relations, rights and duties. It was for this reason, in part, though still more, perhaps, from the desire of domination and jurisdiction on the part of the clergy in former times, that this contract was invested with a peculiar religious character, and made one of the *seven sacraments* of the Catholic church. Marriage, accordingly, is often celebrated in places of public religious worship, in both Catholic and Protestant countries; and the ministers of religion, even in countries where the church has no judicial jurisdiction whatever over the rights arising from this contract, still officiate, for the most part, at its solemnization. (As to the forms of solemnizing marriage, and as to its dissolution, the reader is referred to the respective articles *Marriage* and *Divorce*.) The first and one of the most important rights resulting from this contract, is the control, in a greater or less degree, according to the laws of different countries, which it gives to the husband of the person of the wife. The terms in which this right is expressed, in the laws of England and the U. States, are stronger than those of the civil law, or the modern codes derived from it. But this right is still recognised in those codes, of which that of France may be referred to as an example. The old writers in the English law express themselves more directly upon this subject than is

grateful to modern ears, putting the authority of the husband upon a footing similar to that of a parent over a child, or a master over a servant; and, in this case, as in those, they very composedly lay down the rules and limits of the exercise of this authority, describing the degree of coercion permitted by the law to be used, and the degree of correction which it allows to be administered by the husband. In modern times, these doctrines are expressed in more cautious and qualified terms, and some writers are careful to reserve to the wife some corresponding rights. However the mutual rights of the parties in this respect are to be construed and reconciled, it is certain that the English and American law distinctly recognises the husband's right to the personal services of his wife; and, in the action by the husband against another on account of criminal conversation with the wife, direct allusion is made to this marital right, while the wife has no corresponding action against a woman who does her a similar injury. In respect to the children—as a divided authority, where the voices would be equal, would lead to embarrassment—the law assigns the guardianship and authority over them to the father, to which the mother succeeds, in a great degree, on his decease, but not wholly, for the children may, at a certain age in their minority, choose guardians for themselves, in case of the father's decease. As the law assigns a certain ascendency to the husband, so it provides some compensation, by imposing upon him stronger and more extensive obligations; and both the authority and the obligations of the husband are more extensive where the common law of England has sway than where the Roman law is the fountain of civil jurisprudence. As this common law, according to its original spirit and usual operation, leaves the wife destitute of the means of supporting herself, it imposes upon the husband the obligation of supporting her, in the most direct and absolute terms. His duty to provide for the support of the children is no less imperatively enjoined by the law, to which duty the wife succeeds, in its full force, in case of the decease of the husband. In either case, the duty extends to the utmost ability and means of the party. In respect to the distinct possession of property, and distinct civil abilities of the two parties, in regard to the acquisition and management of property, the common law of England and the codes springing from the Roman law are widely different, and give rise to the most striking diversities in the civil relations of families under the jurisdiction of these respective systems. By the theory, as well as the practical administration of the common law of England, which has not, either there or in the U. States, been very deeply trenched upon by statutes or judicial modifications, the civil rights and abilities of the wife are mostly merged by the marriage. The husband and wife are considered, in law, to be one person, and that one person recognised by the law is the husband. By the very act of the marriage, the chattels of the wife become the property of the husband. He has a right, also, to collect all the debts due to her; but then he also, at the same time, incurs a corresponding obligation, for he at once becomes liable to pay all her debts. Though, in bringing suits, after the marriage, for the debts due to the wife before marriage, the names of both the husband and wife are used as plaintiffs and creditors, yet, when the debts are collected, the proceeds are at the absolute disposal of the husband. So the rents and income of the wife's real estate, during the continuance of the conjugal connexion, belong to the husband as absolutely as if the estate itself were his own; but he cannot sell the estate without the concurrence of the wife, and, in England, such a sale can be made only under judicial cognizance, by a proceeding in which the wife must appear personally in court, and express her assent to the sale. In the U. States, this precaution is not taken, though, in some of the states, the wife must be examined separately from her husband, by some magistrate authorized to take the acknowledgment of deeds; and, on her acknowledging that she, freely, and without constraint by the husband, assents to the sale, the conveyance will be good; while, in other states, no such separate examination is required, but she may execute the deed either in the presence or absence of her husband, as the law may provide in this respect. If the wife has already commenced a suit, at the time of the marriage, the husband's control of the claim for the demand in suit is considered to be so direct and absolute, that the defendant is no longer liable to answer to the wife, and the suit will be defeated on the defendant's objecting to its being further prosecuted in her name; for the common law does not allow the husband, in such case, to come in and join in the prosecution, though there seems to be no very good reason why it should not. In such case,

the proceedings must be commenced anew, in the names of both. By the laws of some of the U. States, however, the suit does not abate, but the husband comes in and joins in prosecuting it. If a suit is pending against the wife at the time of the marriage, it does not abate, for the law will not permit the rights of third parties to be injured by the voluntary act of the defendant, but such suit proceeds as if no marriage had taken place, or the husband is cited in and made a co-defendant in the suit. The same principles extend to all the civil relations of the wife. If she was acting as executrix on an estate, the husband, on the marriage, becomes executor with her. So if she is appointed executrix during the marriage, the husband is executor with her; and so where imprisonment for debt is permitted, the law does not allow the wife to be imprisoned on execution for her own debt, separately from her husband, but he must be imprisoned with her; and if he escapes from prison, and is not retaken, after a reasonable time allowed for this purpose, the wife will be discharged. On the dissolution of the marriage by the death of the husband, or by a divorce from the bonds of matrimony, the civil abilities of the wife revive, and she will then also be entitled, in her own right, to the rents and income of her real estate accruing subsequently, and she will also be entitled, in her own right, to all the debts due to her before the marriage, and which the husband has not appropriated to himself. But, as all the earnings of the wife, during the marriage, belong exclusively to the husband, whether gained by her labor, by trade, or in any other way, he alone can sue for any claim thence arising; and, in case of his decease, his executors succeed to his right, and not the wife in her individual capacity. The law, at the same time, shows a scrupulous respect for a union so intimate, and permits the parties mutually to defend each other against the attacks of other persons; and also exempts them, except in a few extreme cases, from being witnesses against each other, upon the same principle on which it exempts a party from being a witness against himself; and even farther, for it will not permit either to be a witness against the other. It is a general rule, that this contract of marriage so completely absorbs all others, that the parties cannot afterwards contract with each other, since, in the view of the law, it would be equivalent to a contract of a party with himself. In the time of lord Mansfield, some decisions were made by the court of king's bench, in England, tending to the introduction of an exception to this doctrine, in case of an agreement between husband and wife to live separately, upon formal articles made by them, providing for a separate maintenance of the wife. But the same court retraced its steps, in the time of the succeeding chief-justice, lord Kenyon, and reëstablished the old doctrine, that all such agreements were absolutely void. The only way, accordingly, of protecting and maintaining the pecuniary contracts of the wife, and preventing them from being merged by the marriage, is through the intervention of trustees. The law does not prevent the putting property into the hands of trustees, to be managed either according to the discretion of the trustees, or under the direction of the wife, for her separate benefit, as if she were a single woman; and this may be done either before or after the marriage, provided that the interest of creditors, having subsisting claims at the time, shall not be affected. So that, after all, this civil identity of the husband and wife, as to the possession, use, control and application of the wife's property, or its income, is merely nominal, since the law permits to be done in the name of another what it does not permit in her own. And, where there are courts established with sufficient powers to give suitable remedies in regard to such contracts (as there ought, undoubtedly, to be every where), any provisions and conditions may be agreed upon between the parties, as to any property already existing. Such contracts are, however, collateral to that of marriage; for the law will by no means allow of any conditions or modifications to the contract itself. In countries where the civil institutions are borrowed from the Roman law, as has already been said, the conjugal bond, of its own force, and according to the general laws, independently of any express stipulations of the parties between themselves, or of the intervention of any third parties, gives rise to a very different set of relations and rights. To take the French code, for an example, without going into an inquiry how far the laws of other countries, derived from the same source, coincide with that code in minor details and provisions, there are two descriptions of marriage contract, as far as the property of the parties is concerned, both of which, however, contemplate the rights of property of the parties as distinct. By one form of the marriage contract, the husband and wife become partners; by the other, their rights

of property continue distinct, notwithstanding the marriage. In case of no stipulation, a community of goods will, by the operation of law, result from the marriage; so that a special agreement is requisite, in order to maintain a separate property in each party; and this is called a *dotal* marriage, or one in which the wife's *dot*, or *portion*, is regarded as a distinct property. If the marriage is intended to be a dotal one, it must be so expressed, in a formal instrument, drawn up before a notary-public; and thus the same object is effected, which, under the jurisdiction of the common law of England, can be secured only by the interposition of a third party, and a set of minute and elaborate provisions, creating a trust. The French code does not, however, any more than the English common law, permit any conditions or modifications to be introduced into the marriage contract itself, which makes the personal rights of the parties the same throughout the kingdom; and, in respect to the rights to property, and its possession and use, it does not, like the English common law, affect at all to consider the parties as identified. This community of goods extends to all the movable property of the parties, possessed at the time of the marriage, and to all that is acquired by them during the continuance of the conjugal relation, as well what accrues from their industry, and the use of their property, as that which comes by descent or donation, unless the donation is upon other conditions prescribed on the part of the donor; but, on the dissolution of the partnership, or community of goods and interests, whether by the death of one of the parties, or otherwise, a division is made between them, or between the survivor and the heirs of the deceased partner, as in the case of an ordinary partnership; but, if the marriage is dotal, the wife's portion, or its value, will continue to be her separate property; but still, unless it be otherwise agreed, the management and income of it will belong to the husband, who is not obliged to give any sureties for his proper management of the trust, unless it shall be so stipulated by the parties. If this separate property consists of lands, neither the husband alone, nor both parties concurring, can dispose of it during the marriage. In general, this separate property, or its value, must eventually, on the dissolution of the marriage, like the wife's share in the partnership funds in the case of community of property, go to the wife, or her representatives. There are, however, certain cases in which a part or the whole of the capital, of which the portion consists, may be alienated during the marriage; as, for instance, to obtain the release of the husband from prison, to supply the means of support to the family, and in a few other specified cases; but in general, it is to remain the separate property of the wife, and, as such, whether it consists of personal or real estate, descends to her heirs.

Huskisson, William, the right honorable, was born 1769, and sent to Paris, while quite young, to study anatomy and medicine. On the breaking out of the French revolution, he was warmly disposed to the liberal side of the question, and was an active member of the London corresponding society, though not, as has been said, of the Jacobin club at Paris. He was soon after, however, introduced to the notice and favor of Mr. Pitt, and, in 1796, was placed in the office of Mr. Dundas (lord Melville), then secretary of the home department. In 1801, he was appointed receiver-general of the duchy of Lancaster, and a commissioner of trade and plantations. He soon after entered parliament as member for Morpeth. Here Mr. Huskisson did not speak much, but was very useful to the ministry in financial matters, both in parliament and in preparing papers. When Mr. Canning's difference with lord Castlereagh induced him to leave the ministry (1809), Mr. Huskisson retired with him, and in subsequent debates it soon appeared that a third party existed in the house, agreeing with the ministry on questions of general policy, but joining the opposition in demanding retrenchment in the public expenditure. On the appointment of Mr. Canning to the foreign secretaryship, Mr. Huskisson entered the cabinet with him as president of the board of trade. In the Goderich ministry, he became secretary for the colonies, and retained that post in the Wellington ministry, composed of the warm enemies of his late friend, Mr. Canning; but it was soon apparent that no cordial coöperation could take place between men of such opposite principles, and Mr. Huskisson and his friends were soon obliged to withdraw. His death took place Sept. 15, 1830. Being present at the celebration on the opening of the Liverpool and Manchester railway, he came inadvertently in the course of one of the steam-carriages, moving at a rapid rate, which passed over him, and crushed one of his legs. He died very soon after.

Huss, Hussites. John Huss was born

in 1373, at Hussinez, near Prachatiz, in Bohemia, whence he acquired the name of *Huss*, or *John of Hussinez*. In 1389, he was sent, by his feudal lord and some other patrons, to the university of Prague, where he was distinguished for his talents and industry. Having become the servitor of a professor, to whose library he thereby had access, he had an opportunity of acquiring a degree of theological information, which, for that age, was remarkable. In 1396, he took the degree of master of arts, and, in 1398, delivered public theological and philosophical lectures. In 1402, the office of Bohemian preacher in the Bethlehem chapel at Prague, which was established by a private foundation, was conferred on him. Here he began to acquire influence over the people, with whom, as well as with the students, his sermons were very popular; and, being soon after made confessor to the queen Sophia, he thus gained access to the court. At this time, he became acquainted with the writings of Wickliffe. His knowledge of the Scriptures soon made him feel the justice of that bold reformer's attacks on the abuses of the church, and he now became himself the boldest advocate of a reform which should restore to the corrupt church the simplicity and purity of scriptural Christianity. His boldness did not long remain unobserved; and as, in the frequent disputes of the Germans with the Bohemian academicians, he took part with the latter, he had soon to contend with powerful enemies. This made a national division of that which hitherto had been only a contest between the philosophical schools of the Realists, to which Huss belonged, and of the Nominalists, to which most of the Germans had attached themselves. About 5000 foreign professors and students left Prague, and either created or gave a new impulse to the universities of Leipsic, Erfurth, Ingolstadt, Rostock and Cracow, a loss which Prague and Huss himself, who was now a rector, sensibly felt. Yet he could not be attacked in Bohemia; the great schism had exposed the weakness of the priesthood; Bohemia did not recognise Benedict XIII, nor Gregory XII, after 1409; the nobility and people were excited against the arbitrary decrees of the pope, by some bold spirits, who served as the precursors of Huss's doctrines, and thus became accustomed to judge freely; the government of Wenceslaus favored the anti-papal spirit of many among the people, from political grounds, and from an inclination favorable to Huss, who was generally esteemed. He ventured, therefore, to censure publicly the corrupt morals of the priests and the laity, and to preach against the sale of papal indulgences in Bohemia; he said nothing new, when he declared masses for the dead, image-worship, monastic life, auricular confession, fasts, &c., to be inventions of spiritual despotism and superstition, and the withholding of the cup at the Lord's supper unscriptural. The new pope, Alexander V, finally summoned him to Rome, and, as he did not appear, the archbishop of Prague, Sbynko, commenced the immediate persecution of this preacher of truth. About 200 volumes of copies of Wickliffe's writings were burnt in 1410, in the archbishop's palace, and the Bohemian preaching at the Bethlehem chapel prohibited. But Huss did not obey either this prohibition or the new summons of John XXIII, but appealed, as his envoys at Rome were imprisoned, to a general council. When the pope caused a crusade against Ladislaus of Naples to be preached in Bohemia, Huss opposed it in the warmest manner, and his friend Jerome expressed himself on the subject in violent language, which the pope ascribed to Huss, who was, in consequence, excommunicated, and Prague laid under an interdict as long as Huss should remain in it. Huss, therefore, distrustful of the protection of the weak king of Bohemia, went to the feudal lord of his birthplace, Hussinez, whose name was Nicholas. Here, and in many places in the circle of Bechin, he preached with much success; here he also wrote his memorable books On the Six Errors, and On the Church, in which he attacks transubstantiation, the belief in the pope and the saints, the efficacy of the absolution of a vicious priest, unconditional obedience to earthly rulers, and simony, which was then extremely prevalent, and makes the holy Scriptures the only rule of matters of religion. The approbation with which these doctrines were received, both among the nobility and common people, increased the party of Huss in a great degree; and, as nothing was nearer to his heart than the diffusion of truth, he readily complied with the summons of the council of Constance to defend his opinions before the clergy of all nations. Wenceslaus gave him the count Chlum and two other Bohemians of rank for his escort. The emperor Sigismund, by letters of safe conduct, became responsible for his personal safety, and John XXIII, after his arrival at Constance, November 4, made promises to the same effect. Notwithstanding this,

he was thrown into prison, November 28, after a private examination before some of the cardinals, and, in spite of the reiterated remonstrances of the Bohemian and Moravian nobles, was kept in confinement, and, though sick, was not permitted an advocate. At a public examination, June 5, 1415, the fathers of the council interrupted him in his defence by loud and vehement vociferation. In a trial on the 7th and 8th of June, he defended himself at length, in the presence of the emperor; but his grounds of defence were not regarded, and an unconditional recantation of heresies which he had not taught, as well as those which he had, was demanded of him. Huss, however, remained firm in his belief, and the last examination (July 6) eventuated in a sentence of death, which had long since been determined on. Huss on this occasion reminded the emperor of his promise of safe conduct, at which Sigismund could not refrain from showing his shame by a blush; yet the hatred against a man who had ventured to speak the truth was too great to allow any hopes of safety. He was, without being convicted of any error, that same day burnt alive, and his ashes were thrown into the Rhine. On his way to the pile, he was observed to smile at a place where some of his writings had been burnt, and afterwards expired in the midst of joyful prayers. Even his enemies speak with admiration of his unblemished virtue and his firmness in the hour of death.—*Hussites.* The gentle and pious mind of Huss would not have approved of the terrible revenge, which his Bohemian adherents took upon the emperor, the empire and the clergy, for his death, in one of the most bloody and terrible wars ever known. The decrees and excommunications of the council were despised in Bohemia. Instead of destroying the new doctrines, the *auto-da-fé* of Constance was the watchword of union for multitudes of all classes, who, from their teacher, were called *Hussites.* Wenceslaus was compelled, in 1417, to grant them many churches for the celebration of the sacrament in both forms, and as their number increased every day, there were soon many among them who wished for something more than mere religious freedom. The wavering and temporizing conduct of this king (who died August 13, 1419), and the inquisitorial violence of the cardinal legate, John Dominico, kindled the fire of insurrection. The people could not, however, set aside the claims of the hated emperor Sigismund to the vacant throne. Always bent upon the extirpation of heretics, faithless in treaties, and unequal to contend with the activity of the Hussites, and the genius of their generals, he was obliged to see the kingdom which he had inherited in a state of anarchy for fifteen years. The Hussites commenced their rebellion by a bloody vengeance on the Catholics; their convents, many of which, in Bohemia, were more splendid than elsewhere, and their churches, were plundered and burnt, and the priests and monks murdered. John Ziska of Trocznow, a Bohemian knight, formed of the large bodies of people which were constantly flocking to him, a well mounted and disciplined army, which, in its barricado of wagons, repelled all attacks, and built the fortified city of Tabor, for a place of arms and a point of defence, upon a mountain consecrated by the field preachings of Huss, and strong by nature, in the circle of Bechin. The oldest friend of Huss, Nicholas of Hussinez, commanded under this general. Nicholas was well known for the courage with which he had, in 1417, placed himself at the head of the Hussites, and beaten and driven from Tabor the faithless Ulrich of Rosenberg, together with the imperial army, in 1420. He resisted, from patriotic motives, the plan of the inhabitants of Prague, to choose a foreign prince for a king, but died, too soon for the welfare of Bohemia, December 25, 1420, with the glory of having been rather a defender of the faith of Huss, than a persecutor of the Catholics. In this persecution, Ziska was the most zealous and most cruel—*Ziska of the cup*, as he was called, chief of the *Taborites*, as the Hussites under his banner designated themselves, from their city. The strength of his army, and his victories over the imperialists, gave him an influence in the Bohemian affairs, which was nearly allied to that of a protector. But when the murders and devastations of his army, and of the small bands which made the religious war a pretext for plunder, continually increased, the more moderate Hussites of the nobility, and the citizens of Prague, whose chief concern was the allowance of the cup to the laity at the sacrament (thence called *Calixtines* or *Praguers*), and the quiet of the kingdom, were induced to offer the Bohemian throne, first to Ladislaus, king of Poland, then to the grand prince Vitold, of Lithuania, and at last to his nephew Koributt. But Ziska, with the Taborites, dissented, and the difference of these parties, which had appeared in the diversity of

their demands for a church reform, now produced a real division. Nothing was more dangerous to the cause of the Hussites than the multitude of sects and parties in Bohemia; each, since 1421, acted by itself, and they only united against the common enemy, in order that, as soon as he was routed, they might again quarrel with each other. Ziska having become totally blind at the siege of Raby, and victorious over the imperialists, whom he defeated in the great battle of Deutschbrod, and continually successful in small contests against the nobility, who lost immensely by his ravages, without being able to place any limit to them, and against the inhabitants of Prague, who preserved their city from destruction only by a hard and short-lived peace, Sept. 14, 1424, died October 12, of the same year, of the plague. At his death, the fearful mass, which only his military talents and good fortune had held together, fell to pieces. The majority of the Taborites elected for their general Andrew Procopius, who had been recommended by Ziska, and who, having been at first destined to the church, is called the *Shorn* (Holy, *rasus*). Koribut, a mere shadow of a king, had been chosen by the inhabitants of Prague, in 1422, and, although he had routed Busso of Vitzthum with the strongest army which Saxony had ever produced, June 16, 1426, at Aussig, was not able to control the ferocity and plundering propensity of the parties among the Hussites, and was obliged to abdicate the throne, in 1427. Procopius showed himself worthy of his predecessor. The decisive victories which he gained in July, 1427, and August 14, 1431, at Miess and Tachau, over the army of the cross, composed of the people of the German empire, and far superior to the Hussites in number, made the arms of the latter not less formidable than the devastating expeditions, which the detached bodies of partisans carried on against the neighboring states almost every year from the beginning of the war until 1432. Austria, Franconia, but especially Saxony and those provinces of Bohemia which were yet obedient to the pope, Lusace and Silesia, were the theatre of the most horrid cruelties and robberies. All parties were now desirous of peace; and, as the German arms were unsuccessful against the Hussites, the council of Basle saw itself compelled by Sigismund, who had always retained a faction among the Bohemian nobility and the inhabitants of Prague, to come to terms with the heretics; and thus, Nov. 20, 1433, a compromise was made (the compact of Prague), which, however, was not received by all parties, and hostilities recommenced, but were ended by a complete victory of the Calixtines and Catholics under Meinhard of Neuhaus, at Bömischbrod, May 30, 1434. The Calixtines, who were now superior, in conjunction with the Catholic states, chose the emperor Sigismund for their king, who swore at Iglau, July 5, 1436, to adhere to the compacts, which had been rendered somewhat easier by the council, in compliance with the wishes of the Calixtines, but was again faithless to his promise, and died Dec. 9, 1437, without having restored perfect quiet to Bohemia. The Taborites, very much weakened, were able to maintain their dispute only in the deliberations of the diet, and in theological controversial writings, whereby their confession of faith acquired a purity and a completeness which made it similar, in many respects, to the confessions of the Protestants of the 16th century; but their religious freedom continually suffered more and more, until they merged in the fraternity of Bohemian and Moravian Brethren, which arose in 1457, and, under the most violent persecutions, exhibited an honorable steadfastness and purity. (See *Bohemian Brethren*, and *United Brethren*.)

Hussars; originally, the name of the Hungarian cavalry, raised in 1458, when Matthias I ordered the prelates and nobles to assemble, with their cavalry, in his camp. Every 20 houses were obliged to furnish a man; and thus, from the Hungarian words *husz* (twenty), and *ar* (pay), was formed the name *Huszar*, *Hussar*. The arms and dress of this light cavalry were afterwards imitated, and the name borrowed by other nations.

Hustings, Court of; the principal court in the city of London, of great antiquity, held before the lord mayor and aldermen in London, the sheriffs and recorder in Guildhall. The derivation is uncertain. In a popular sense, it is used in England for a place raised for the candidates at elections of members of parliament, perhaps from *hoistings*.

Hutcheson, Francis, LL. D., an ingenious philosophical writer, was born in the north of Ireland, Aug. 8, 1694, and, in 1710, was entered a student in the university of Glasgow. After spending six years at Glasgow, he returned to his native country, where he was licensed to preach among the Dissenters, but accepted the invitation of some gentlemen acquainted with his talents, to set up a private acade-

my in Dublin. In 1725, the first edition of his celebrated Inquiry into the Ideas of Beauty and Virtue appeared without his name; but its merit would not allow the author to be long concealed. In 1728, he published his Treatise on the Passions, which has often been reprinted, and is admired even by those who dispute the soundness of its philosophy. In 1729, he was called to the chair of philosophy at Glasgow. He died in 1747, in his 53d year. In 1755 was published, from his MSS., a System of Moral Philosophy (in three books, 2 vols., 4to.); to which is prefixed some account of the Life, Writings and Character of the Author, by Doctor Leechman, Professor of Divinity in the University of Glasgow. The system of morals of doctor Hutcheson is founded upon nearly the same principles as that of lord Shaftesbury. He deduces all our moral ideas from an implanted moral sense or instinct, like that of self-preservation, which, independently of argument, or the reasonableness of certain actions, leads us to perform them ourselves, and to approve them in others. His works and lectures contributed to diffuse a taste for analytical discussion in Scotland, which led to the production of some of the most valuable writings of the 18th century.

Hutchins, Thomas, geographer to the U. States, was born in New Jersey, about 1730. He entered the army in the French war, and served at fort Pitt and against the Indians in Florida. He was imprisoned in England, in 1779, on the charge of having corresponded with doctor Franklin, then American agent in France. On recovering his liberty, he joined the army of general Greene at Charleston. He was nominated geographer-general to the U. States; and died at Pittsburgh, in 1789. He published an Historical Sketch of the Expedition of Bouquet against the Indians of Ohio, in 1764; a Topographical Description of Virginia, Pennsylvania, Maryland and Carolina, with maps (London, 1778); a Historical Account and Topographical Description of Louisiana, West Florida, and Philadelphia (1784).

Hutchinson, Ann, a religious enthusiast, who occasioned dissensions in the churches of New England, came from Lincolnshire to Boston, in 1636. She instituted meetings for women, in which, pretending to enjoy immediate revelations, she taught many Antinomian and other sentiments, which soon occasioned great controversy in the colony, and, in 1637, drew together an ecclesiastical synod, which condemned her errors. Not long after, she was banished from the colony, and removed to a Dutch settlement in New York, where, in 1643, she, and her family, consisting of 15 persons, were captured by the Indians, and all except a daughter killed.

Hutchinson, Thomas, a governor of the colony of Massachusetts, was of a family distinguished in the annals of New England, and was born in Boston, in 1711. After graduating at Harvard college, in 1727, he became a merchant; but, not succeeding in trade, engaged in the study of law and politics, in order to qualify himself for public life. He was sent to London to transact some business for the town of Boston, which charge he executed satisfactorily, and, on his return, was elected a representative. He was, after a few years, chosen speaker of the house, and, in 1752, succeeded his uncle as judge of probate. He was placed in the council, and was appointed lieutenant-governor in 1758, and chief-justice in 1760—all of which offices he held simultaneously for several years. In 1771, he received his commission as governor of Massachusetts. It is affirmed that there was no single officer of the British government in America, who contributed more to produce the separation of the two countries than Hutchinson. His ambition and avarice were such as to render him completely subservient to the views of the British ministry, and to cause him to sacrifice his principles, in order to abet every arbitrary regulation, and to suggest the most odious means of enforcing them. He went so far even as to challenge the legislature to a discussion of colonial rights, which, he believed, he could convince them by argument that they did not understand, and ought to abandon. For some time, he enjoyed considerable popularity in the province, in consequence of his attention to business, and the circumstances of his being a native, and not a member of the English church. But the publication of several of his letters to the ministers, which had fallen into the hands of doctor Franklin in London, and by him had been transmitted to Boston, by which the people became aware of his hypocrisy, and of the odious counsels which he had given against their rights, combined with his obstinacy in preventing the obnoxious tea from being returned to the ships, so exasperated them, that his recall was rendered indispensable. In the year 1774, accordingly, he was removed from his office, and general Gage was put in his

place. He then repaired to England, where, for some time, he was fed with expectations of favor; but, after it was found by the British ministry to be a more difficult matter to conquer the Americans than he had led them to suppose, he fell into disgrace, and lived in the most retired way, near Brompton, until his death, June 3, 1780, in his 69th year. The following extract of a letter from president Adams to William Tudor will give an idea of governor Hutchinson's condition in London: "Fled, in his old age, from the detestation of a country where he had been beloved, esteemed, admired, and applauded with exaggeration; in short, where he had been every thing from his infancy, to a country where he was nothing; pinched by a pension, which, though ample in Boston, would barely keep a house in London; throwing round his baleful eyes on the exiled companions of his folly; hearing daily of the slaughter of his countrymen, and conflagration of their cities; abhorred by the greatest men and soundest part of the nation, and neglected, if not despised, by the rest—hardened as had been my heart against him, I assure you, I was melted at the accounts I heard of his condition. Lord Townsend told me that he put an end to his own life. Though I disbelieve this, I knew he was ridiculed by the courtiers. They laughed at his manners at the levee, at the perpetual quotations of his brother Foster (Foster Hutchinson, brother of governor Hutchinson, was a judge of the supreme court in Massachusetts), searching his pockets for letters to read to the king, and the king's turning away from him with his nose up, &c., &c." As a judge, he was irreproachable, and evinced great ability. He was a writer of considerable merit, more valuable for his facts than his style. His principal work was a History of Massachusetts Bay, in two volumes, with a volume of State Papers, which was brought down to the year 1750. He left a continuation of it in manuscript, which was published in London, in 1828, forming a third volume of the history. His other productions consist of occasional essays, and a pamphlet on Colonian Claims, in 1764. A large number of manuscripts of all kinds concerning the colonies, which he had collected, were unfortunately destroyed during the riot in Boston, when his house was nearly demolished.

Hutten, Ulrich von, was descended from an ancient family, which could boast of many knights and statesmen distinguished in the service of the German emperors. Hutten was born at the family castle of Steckelberg on the Maine, in 1488. In his 10th year, his father placed him at Fulda, in order to educate him for a monk. The monastic school there was one of the most famous in all Germany, and he received an excellent education; but the monastic life corresponded so little with his inclination, that he fled to Erfurt, in 1504, where he became intimately acquainted with several scholars and poets. A pestilence drove him, in the next year, to Cologne, the university in which place was then flourishing. But Rhagius, one of the most learned professors there, having been banished, retired to Frankfort on the Oder, whither Hutten accompanied him. His patron, Eitelwolf von Stein, assisted him in various ways, during the three years of his residence here. But quiet did not long accord with his restless disposition. He travelled in the north of Germany, although tormented with the loathsome disease, which, making its first appearance at that time, raged like a pestilence, but was not as yet attended with disgrace, and visited Greifswald and Rostock, where he was welcome as a poet and man of talents, and where he supported himself by his labors. In 1511, he went to Wittenberg, where he published a work on versification. From thence he proceeded to Pavia to study law, and, if possible, to conciliate his father. During the time of his residence there, Pavia was taken by the Swiss in the service of Maximilian I, and these troubles compelled him to remove to Bologna, after having been stripped of his property by the soldiers. He was finally compelled, by sheer want, to enter the imperial service, in 1513. The next year, he left the service, and became known throughout Germany. Ulric, duke of Würtemberg, had murdered a cousin of Hutten, partly from jealousy, partly from hatred, and Hutten gave free course to his indignation in poems, letters and addresses. He was no less distinguished in the Reuchlinian controversy with the Dominican Hogstraaten in Cologne. Hutten vigorously defended the learned, honest and persecuted Reuchlin, particularly in satires, and the *Epistolæ obscurorum Virorum*, in which he had the greatest share, contributed to display the monks in all their nakedness. To please his father, he went again to Italy, in 1515, to take the degree of doctor of laws in Bologna. He first visited Rome, and afterwards went to Bologna; but he could not remain any where long, and soon returned by way of Venice to his country, where he was

adorned with the poetic laurel in Augsburg, by the fairest of the German maidens—Constantia, the daughter of Peutinger—and was knighted by Maximilian. In Italy, Hutten had become acquainted with the monastic life in all its deformity, and was so much the enemy of the clergy, that, by his edition of Laurentius Valla, *De falso credita et ementita Donatione Constantini*, he declared war upon them, and opened the way for Luther. He dedicated the work to pope Leo X, but it is difficult to decide whether this was in ridicule, or from a sincere conviction that this pope was more honest in his opinions than the former popes. In 1518, he entered the service of Albert, archbishop of Mayence, and made several official journeys to Paris. He also accompanied the archbishop to the diet at Augsburg, where Luther held his well known discussion with Cajetan, and Hutten, in a Demosthenic oration, urged the German princes to a war against the Turks; but he was soon wearied with courts, and he took the field, with the Suabian league, in 1519, against his hereditary enemy, Ulric of Würtemberg, where he contracted an intimacy with the brave Francis of Sickingen. After the termination of the war, he returned to Mayence, where he received applause from all quarters for his various works against the hierarchy. In order to engage anew in this labor, he retired to the solitude of his paternal castle. Here one work followed another, exhibiting in a strong light the arrogance and corruption of Rome; but, as the objects of his attacks complained to his patron, Albert of Mayence, he lost, eventually, the favor of the latter, but formed publicly a connexion with Luther, and began to write altogether in German, instead of Latin, as he had formerly done. At length the Roman authorities demanded that he should be delivered up to them: attempts were made to assassinate him, and he was not safe, even in the head quarters of Charles V. But his faithful friend, Francis of Sickingen, allowed him an asylum in his castle, whence he issued new missives to princes and people. Meanwhile, Sickingen became involved in a bloody feud with Richard, archbishop of Treves, which terminated unhappily for the former, and Hutten had to seek another place of refuge. He hoped to find it in Switzerland, but Erasmus was opposed to him, so that he was obliged to change from one place to another, till finally, overpowered by a new attack of his disease, at the age of 36 years, he found, on the island of Ufnau, in the lake of Zurich, Aug. 31, 1523, that repose which had never been his lot on earth, in consequence, partly of his character, partly of his domestic relations, partly of his literary labors. Hutten was one of the boldest and most free-spirited men of his time; a forerunner and promoter of the reformation; an example, an assistant for Luther, with whom he was never personally acquainted, for, although he met him in Augsburg, in 1518, he had then too little respect for a mendicant friar to seek his acquaintance. But he was subsequently impressed with the greatest veneration for him, as he had formerly been for Reuchlin. His principal fault as a writer was a kind of frivolity, which caused him to disregard many circumstances, which, to use the words of Erasmus, should have been treated more tenderly. But his motto—*Jacta alea esto*—expressed his principles, which allowed him as little to pause as Luther, who was more favored by fortune. Injustice, falsehood, hypocrisy and tyranny filled him with indignation, and he unmasked them with all his power. While all his friends were trembling, his courageous spirit knew no fear. There are 45 works from his hand, exclusive of several which are not certainly known to be his. After several attempts, a collection of them has been made. It appeared in five volumes (Berlin and Leipsic, 1821—1825): the editor is E. J. H. Münch. The most complete and the latest biography of Hutten appeared in Nuremberg, 1823, from the pen of C. J. Wagenseil of Augsburg.

Hutton, Charles, LL. D., an eminent mathematician, was born at Newcastle-upon-Tyne, Aug. 14, 1737, and his father, who was a viewer of mines, intended to devote him to his own employment. He received a little instruction in the rudiments of the Latin language, and in the elements of the mathematics; but he owed nearly the whole of his subsequent acquirements to his own application. Having received an injury in one of his arms, he was found unfit for his intended occupation, on which the natural bent of his inclinations led him to prepare himself for becoming a mathematical teacher. The destruction of the old bridge at Newcastle having attracted his attention to the subject of the construction and properties of arches, he was led to the production of a small work on the principles of bridges, which laid the foundation of his future fame. He was soon after appointed professor of mathematics at Woolwich col-

lege, elected a fellow of the royal society, and, in 1779, received the degree of LL. D. from the university of Edinburgh. In 1785, he published his Mathematical Tables, preceded by an introduction, tracing the progress and improvement of logarithms from the date of their discovery. This work has gone through five editions. The next year, doctor Hutton published a quarto volume of Tracts, Mathematical and Philosophical, which was not long after followed by his Elements of Conic Sections, for the use of the academy at Woolwich. His Mathematical and Philosophical Dictionary (2 vols., 4to.), appeared in 1796, of which a new and greatly enlarged edition was published in 1815. In 1798, he gave the world the first edition of his Course of Mathematics, in 2 vols., 8vo., to which a third was added in 1811. From 1803 to 1809, he was employed, in conjunction with doctors Pearson and Shaw, in an abridgment of the Philosophical Transactions, published in 18 thick quarto volumes. In 1812, he published another collection of Tracts, on mathematical and philosophical subjects. He died January 27, 1823, in the 86th year of his age.

Hutton, James; a natural philosopher, distinguished as the author of a system of geology, which refers the structure of the solid parts of the earth to the action of fire, hence termed the *Plutonian theory*. He was born at Edinburgh, in 1726, and studied in the university under Maclaurin, the celebrated mathematician. He also applied himself to chemistry, and went to Leyden, where he graduated as M. D., in 1749. About 1768, he settled at Edinburgh, where he published numerous works relating to natural philosophy, among which are, Dissertations on different Subjects in Natural Philosophy (Edinburgh, 1792, 4to.), an Investigation of the Principles of Knowledge, and of the Progress of Reason from Sense to Science and Philosophy (Edinburgh, 1794, 3 vols., 4to.), Theory of the Earth, with Proofs and Illustrations, in four parts (Edinburgh, 1795, 2 vols., 8vo.). His death took place in 1797. The geological system, or theory of the earth, proposed by this philosopher, excited a warm controversy among men of science, and met with an advocate in the late professor Playfair, who, in 1802, published a work entitled Illustrations of the Huttonian Theory of the Earth.

Huus (*house, dwelling*); a Danish and Norwegian correlative of the German *haus*, and English *house*, appearing in many geographical names.

Huygens, Christian (or, as it was sometimes written, *Huyghens*), distinguished for his researches and discoveries in the departments of mathematics, physics and astronomy, son of Constantine Huygens, a poet, was born in 1629, at the Hague; accompanied Henry, count of Nassau, in 1649, to Holstein and Denmark. He afterwards travelled in France and England, and lived at Paris, from 1666 to 1681, with a pension from the king of France. To him is generally ascribed, on the European continent, the application of the pendulum to clocks (1656), by which he was led to the discovery of evolutes. The English attribute the invention of the pendulum clock to Hooke. Huygens treats of these subjects in his principal work, *Horologium oscillatorium*, etc. (Paris, 1673, fol.), which also contains a complete treatise on the properties of the cycloid, connected with his theory of pendulum clocks and evolutions. This, and other geometrical discoveries, he applied with great success to mechanics. He investigated the laws of the motion of heavy bodies in a given path. He discovered, in 1661, simultaneously with Wallis and Wren, the laws of the communication of motion, by impact, and proposed the theory of oscillatory motion, in which he solved the problem of the centre of oscillation, and the laws of the central forces. To him is, moreover, ascribed the discovery of the principles more fully developed by James Bernoulli, of the preservation of living forces. He was not less distinguished in optics, and he gave a physico-mathematical theory of the motion of light, by which he attempted to explain the strength and liveliness of light. He also acquired a high reputation in astronomy, by establishing many fundamental truths; he examined more minutely, with telescopes improved by himself, in 1655, the form and ring of Saturn, and discovered the four satellites of this planet, &c. His works have appeared in three collections—*Huygenii Opusc. Posthuma* (Leyden, 1707); *Opera varia ed. J. A. s'Gravesande*, with the Life of Huygens (Leyden, 1724, 4 parts); and, finally, *Opera reliqua*, etc. (Amsterdam, 1728, 2 vols. 4to.). Jurisprudence, which he studied at Leyden, he abandoned from a greater inclination for the mathematical and natural sciences, for the study of which he travelled much. He devoted his life to science, and resided partly in Paris, partly at the Hague. At the latter place he died, in 1695. (See his Life prefixed to the edition of his works, by

s'Gravesande, and in Montucla's *Hist. des Math.*, 2d vol., p. 415.)

Huysum, John van, the most distinguished flower and fruit painter of modern times, was born at Amsterdam, in 1682. He surpassed his predecessors in softness and freshness, in delicacy and vivacity of color, in fineness of pencilling, in the disposition of light, and in exquisite finish. His father, Justus Huysum, a picture dealer and a painter of moderate merit, at first employed him in all branches of painting; but young Huysum, at a maturer age, felt a decided inclination for the representation of the productions of the vegetable kingdom. He therefore separated from his father, and married about 1705. In landscape painting, he followed the manner of Nicholas Piemont, a much esteemed painter in Holland. But he reached the highest perfection in flower and fruit pieces. He knew how to penetrate the secrets of nature, to seize the transitory blossom in its most perfect state, and to represent it with enchanting truth and variety of colors. He was the first who had the idea of painting flowers on a white ground. He was so jealous of rivalry, that he permitted no one to see him at work, nor would he take any pupils, except his brother Michael and the daughter of a friend. His flowers have more truth and beauty than his fruits; the drops of dew and insects which he painted on them are like real life. Unhappy domestic circumstances, particularly the levity and prodigality of his wife, and the bad conduct of his son, rendered him melancholy; yet his works show no traces of this turn of mind. He died at Amsterdam, 1749, without leaving a fortune to his three sons, though his pictures sold for 1000 to 1400 florins. His brother Justus was a battle painter, and died at the age of 22 years. The third, James, copied his brother's flower and fruit pieces so perfectly, that they brought a very high price. He died in England, in 1740.

Hyacinth. The numerous and splendid varieties of the garden hyacinth (*hyacinthus Orientalis*) have always been general favorites, and, in some countries, the fondness for this plant amounts to a complete mania. In Holland, upwards of 2000 varieties have received distinct names, recognised by the different florists, and the price of 1000 florins has been paid for a single plant. (See *Flower-Trade*). The environs of some of the Dutch towns astonish the traveller, from the gorgeous appearance produced by the vast profusion of these flowers. The wild plant is a native of the Levant, and has a bulbous root, from which rise a few linear lanceolate leaves and a leafless stem, bearing six or eight bell-shaped flowers, of a blue or white color. The cultivated double varieties have very graceful forms and a remarkable diversity of color. The natural affinities of this plant place it in the same family with the squill and onion. All the species of hyacinth are natives of the eastern continent.

Hyacinth, in mineralogy. (See *Zircon*).

Hyacinthus; a son of Amyclas and Diomede, greatly beloved by Apollo and Zephyrus. He returned the former's love, and Zephyrus, incensed at his coldness and indifference, resolved to punish his rival. As Apollo, who was intrusted with the education of Hyacinthus, once played at quoits with his pupil, Zephyrus blew the quoit, as soon as it was thrown by Apollo, upon the head of Hyacinthus, and he was killed with the blow. Apollo was so disconsolate at the death of Hyacinthus, that he changed his blood into a flower which bore his name, and placed his body among the constellations. The Spartans established yearly festivals in honor of the nephew of their king.

Hyades. The Hyades, according to Ovid, were nymphs, daughters of Atlas and Æthra; according to others, daughters of Cadmus or Erectheus. Their number was given differently. They bewailed the death of their brother Hyas, who was torn in pieces by a lioness, with such unceasing anguish, that the gods, moved with compassion, transferred them to the heavens, where they still weep. They form the well known constellation in the head of Taurus. According to the most probable account, these stars derived their name from the Greek word ὑειν, to rain, because rain usually follows their rising and setting. On this account, they have received the names of *mournful* (*tristes*) and the *rain-bringing* (Latin, *suculæ*), which circumstances probably gave rise to the above-mentioned fable. Some poets have confounded them with the Pleiades. The chief of the Hyades in the left eye of Taurus, is the bright star called *Aldebaran*, by the Arabs.

Hyæna (*canis*, Lin., *hyæna*, Desm.). This well known and savage genus of quadrupeds is distinguished by having no tuberculous or small teeth behind the carnivorous. Its dental formula is, incisors $\frac{6}{6}$, canine $\frac{1}{1}$ $\frac{1}{1}$, molar $\frac{5}{4}$ $\frac{5}{4}$=34. These teeth are well adapted, from their great thickness and strength, to break bones. The head of the hyæna is of a middle

size, with an elevated forehead; the jaws are shorter, in proportion, than those of dogs, and longer than those of cats; the tongue is furnished with rough papillæ; the eyes are large, and have longitudinal pupils; the ears are long, pricked, very open, and directed forwards. Beneath the tail is a glandulous pouch. Naturalists have described three species of the hyæna. The common or striped hyæna (*H. vulgaris*), which is a native of Asiatic Turkey, Syria, Abyssinia, &c., is about the size of a large dog, of a brownish gray color, and marked with transverse bands of dark brown on the body, which become oblique on the flanks and legs. The hair upon the line of the back is much thicker and stronger than on any other part, forming a sort of mane, extending from the nape of the neck to the origin of the tail. This species was well known to the ancients, who entertained many absurd notions respecting it; believing that its neck consisted of but one bone; that it changed its sex every year; that it could imitate the human voice; that it had the power of charming the shepherds, and riveting them to the spot, as the serpent is said to fascinate a bird. Lucan furnishes the Thessalian sorceress with the neck of one of these animals, as a potent spell.* The hyæna generally inhabits caverns and rocky places, prowling about at night to feed on the remains of dead animals, or on whatever living prey it can seize. The common idea, that these animals tear newly buried bodies out of graves, is not inconsistent with their insatiate voracity and the peculiar strength of their claws. The courage of the hyæna is equal to his rapacity. Kämpfer says, that he saw one which had put two lions to flight. At Darfur, a kingdom in the interior of Africa, the hyænas come in herds of six, eight, and often more, to the villages at night, and carry off with them whatever they are able to master. They will kill dogs and asses, even within the enclosure of the houses, and fail not to assemble wherever a dead camel or other animal is thrown; nor are they much alarmed at the sight of men or the report of fire-arms. In these attacks, if one of them should be wounded, his companions instantly tear him in pieces and devour him. (*Brown.*) A remarkable peculiarity in this animal is, that when he is first obliged to run, he always appears lame for a considerable distance, and that, in some cases, to such a degree, as to induce a belief that one of his legs is broken; but after running for some time, this halting disappears, and he proceeds on his course very swiftly. (*Bruce.*) It was formerly supposed, that the hyæna was untamable, and this assertion has been copied by most writers on natural history without investigation. But that it can be completely tamed, there is not the shadow of a doubt. The hyæna has lately been domesticated in the Sneeuberg (South Africa), where it is considered as one of the best hunters after game, and as faithful and diligent as any of the common domestic dogs. (*Barrow.*) A Mr. Traill, in India, had one for many years, which followed him about like a dog. (*Heber.*) It is, in fact, exceedingly doubtful whether any animal is incapable of subjection to man. The spotted hyæna (*C. crocuta*, Lin., *H. capensis*, Desm.) has a considerable resemblance to the former species, but is larger, and is marked with numerous round blackish-brown spots instead of stripes, nor is the mane so large. This species inhabits many parts of Africa, but is peculiarly numerous around the cape of Good Hope, where it is much dreaded. One of them entered a negro hut, laid hold of a girl, flung her over its back, held her by one leg in its teeth, and was making off with her, when her screams fortunately brought assistance, and she was rescued. (*Bosman.*) Those animals act the part of scavengers in South Africa. At the cape, they formerly came down into the town, unmolested by the inhabitants, to devour the filth and offal. Among the savage tribes in this part of Africa, the dead are never buried after a battle, the birds and beasts of prey relieving the living of that trouble; even the bones, except a few of the less manageable parts, finding a sepulchre in the voracious maw of the hyænas. Thunberg informs us, that they are so excessively bold and ravenous, as sometimes to eat the saddle from under the traveller's head, and gnaw the shoes on his feet, while he is sleeping in the open air. In fact, every kind of animal substance is a prize to them, and this gluttony seems a kind provision of nature, to consume those dead and corrupting bodies, which, in warm climates, might otherwise cause disease and death among the inhabitants. The following curious incident is related by Sparmann: One night, at a feast near the cape, a trumpeter, who had become intoxicated, was carried out of doors, in order to cool and sober him. The scent of him attracted a hyæna, which threw him on his back, and dragged him along like a

* *Non diræ nodus hyænæ defuit.* Lib. vi. 672.

corpse up towards Table mountain. In the mean time, the drunken musician revived sufficiently to find the danger of his situation, and to sound the alarm with his trumpet, which fortunately he had not relinquished. The wild beast became alarmed in turn, and fled. There is another species mentioned by Cuvier (the *H. brunnea*, Thunberg; *H. villosa*, Smith), of which little is known. It differs from the preceding, by having stripes on the legs, the rest of the body being of a dark grayish-brown. It inhabits the south of Africa, and is known there under the name of *sea-shore wolf*. The bones of a species of this animal have, of late years, been found in a fossil state in various parts of Europe, but more particularly in England. The scientific world are indebted, in a great measure, to professor Buckland, of Oxford, for the information we have on the subject. This fossil or extinct species (*H. spelæa*), according to Cuvier, was about one third larger than the striped species, with the muzzle, in proportion, much shorter. The teeth resemble those of the spotted species, but are considerably larger.

Hyalite. (See *Opal.*)

Hybla; a mountain in Sicily, where thyme and odoriferous flowers of all sorts grew in abundance. It is famous for its honey. There is, at the foot of the mountain, a town of the same name. There is also another near mount Ætna, and a third near Catana (*Paus.*, v. c. 23; *Strab.*, vi. c. 2; *Mela.*, ii. c. 7; *Stat.*, xiv. v. 201). A city of Attica bears also the name of Hybla.

Hycsos or Hyk-shos (that is, *shepherd-kings*), a nomadic people from Arabia, which conquered the greater part of Egypt, and held it from about 1700 to 1500 B. C. Their invasions were begun long before their final conquest of Lower and Middle Egypt. They destroyed the temples and cities, carried away women and children into captivity, and, as the Egyptian historians assert, committed the most brutal cruelties. On the eastern frontier of the country, near Pelusium, they built the fortress of Avaris, and founded a kingdom, the capital of which was Memphis. Thebes, however, and some other states, remained distinct governments, but became tributary. The Hyk-shos are supposed to have entered Egypt during the residence of the Israelites in that country, on account of which, the two nations have been confounded with each other. The Pharaoh who was drowned in the Red sea, when pursuing the Israelites, is thought, by some, to have been a Hyk-sho. Manetho (q. v.) mentions a series of their kings, whom he reckons among the Egyptian dynasties. They were probably the builders of the pyramids, who are called, in the annals of the priests, *oppressors of the people and enemies of religion*. They were finally conquered by Tethmosis, king of Thebes. Avaris was besieged, and they were obliged to leave the country. On the magnificent ruins of Karnac (q. v.), the events of this war are represented. The Egyptians detested them as the enemies of every thing holy or noble. They are always represented in the bass-reliefs as captives, often lying bound on the ground, serving as foot-stools, and their images were often painted under the sandals of the Egyptians. If, as is very probable, on the block of black granite in the museum at Turin, which represents three different nations, the Israelites, Negroes and Hykshos are intended, the latter appear in a state of barbarism, wearing a rough skin over their shoulders, with their legs and arms tattooed. This stone is described in one of Champollion's letters to the duke of Blacas. (See Spineto's *Lectures on the Elements of Hieroglyphics*, London, 1829.)

Hydaspes; a river of Asia, flowing by Susa.—Another in India, the boundary of Alexander's conquests in the East. It falls into the Indus.

Hyde, Edward, earl of Clarendon. (See *Clarendon.*)

Hyde, Thomas, a celebrated Orientalist, was born in 1636, and went to King's college, Cambridge, at the age of 16. There he was recommended to Walton, as capable of assisting him in his great polyglot Bible. Such were his attainments at that time, as to enable him to make a Latin translation of the Persian Pentateuch for that work. In 1658, he went to Oxford, where he was admitted a student of Queen's college, and soon after appointed Hebrew reader to that society. In 1697, he was appointed regius professor of Hebrew, and canon of Christ church, Oxford. He died in 1703. His *Veterum Persarum et Medorum Historia* (3d edit., Oxford, 1760) is a valuable work. The *Syntagma Dissert.* (2 vols. 4to., 1767) was edited by doctor Sharpe.

Hyde de Neuville, Paul, count of, during the revolution and the imperial government, was distinguished for his secret machinations against the existing authorities in France. After the restoration, he sat on the extreme right in the cham-

ber of deputies. He was born at Charité sur Loire, where his father, who left him a considerable fortune, was a button-manufacturer, and, at the commencement of the revolution, he went to Paris, without, however, acquiring any political importance till 1797. He then joined the party known under the name of *Clichy*, the object of which was to overthrow the liberal institutions, and to restore the old government. This they endeavored to effect by keeping the nation in agitation, and exciting prejudices against the advocates of freedom, by confounding them with the monsters of the reign of terror, and reiterating in their public speeches that the character, cultivation and the manners of the nation were totally incompatible with free institutions. Through the weakness of the directory, the project was already so far successful, by the aid of a number of venal pens, that hopes were entertained of lighting again the torch of civil war, which had been hardly extinguished by rivers of blood in the western departments. When the whole was frustrated by the unexpected return of Napoleon from Egypt, Hyde de Neuville played his part so warily, that, for a long time, no suspicion fell on him, although he had undertaken several journeys to England, in the service of the royalist party. About the end of 1799, he formed connexions with the insurgents in the western departments, particularly with George Cadoudal, Dandigné and Bourmont, and likewise presented to the British ministry the plan of a counter revolution, when the project was overthrown by the 18th Brumaire. The scheme, nevertheless, was not entirely abandoned, and M. Hyde had the assurance to propose to the first consul the restoration of the Bourbons. As this attempt failed, with the aid of some congenial spirits in Paris, he formed a counter police, the object of which was to watch all the steps of the government, in order to take advantage of any opportunity that might present itself. This was soon discovered, and the arrest of M. Hyde was ordered; but he succeeded in escaping to England. His papers, which contained important disclosures, fell into the hands of the government, and were published in May, 1800, under the title of *Correspondance Anglaise*, in which he is designated under the name of Paul Berri. He was subsequently accused, in a report of Fouché, the minister of the police, of having been engaged in the plot of the infernal machine, but in a memorial published in 1801, he repelled this charge. He soon after repaired to Lyons, where he lived in great secrecy till 1805, when, through the intercession of his friends, the prayers of his wife, and especially through the influence of the empress Josephine, he received permission from Napoleon to arrange his affairs in France, and then remove to Spain. He remained in that country but a short time, but repaired with his family to the U. States, where he purchased an estate in New York, in the neighborhood of general Moreau. He is said to have had the principal agency in persuading the general to return to Europe, and take up arms against Napoleon. M. Hyde returned to France after the fall of Napoleon in 1814, followed Louis XVIII to Ghent, and, after the second restoration, was elected member of the chamber of deputies, where he took his place among the ultra royalists, and was distinguished for his violence in urging the severest measures, by which means he not unfrequently embarrassed the ministers themselves. His zeal was particularly manifested against retaining the imperial officers (whose places he wished should be supplied by pure royalists), against the laws of amnesty, against the tribunals of justice, not occupied with men of his views, &c. The Parisians, therefore, called him and his partisans, *Les Hideux*. After the dissolution of the chamber of 1815, he was made count by Louis XVIII, and sent as a minister plenipotentiary to the U. States of North America; also received the grand cross of the legion of honor. In 1822, he returned from the U. States, was chosen a member of the chamber of deputies for the department of the Nièvre, in 1823, and soon after sent as ambassador to Lisbon. On occasion of the disturbances raised by prince Miguel in that country, he supported the cause of the legitimate monarch; in return for which, king John VI appointed him count of Bemposta. But the British influence being predominant there, he left Lisbon in 1824, returned to Paris, and resumed his seat in the chamber, where he incurred the displeasure of the government, and lost his diplomatic prospects, by his opposition to Villèle and his close connexion with Chateaubriand. In March, 1828, he received the portfolio of the marine in the Martignac ministry, Chabrol having resigned that charge. He was succeeded, Aug. 9, 1829, on the formation of the Polignac ministry, by d'Haussez. Since the late revolution, he has continued to sit in the chamber of deputies.

Hyde Park is situated at the west

extremity of London. This park derived its name from having been the manor of the Hyde, belonging to the abbey of Westminster. It contains nearly 400 acres, and abounds with fine trees and pleasing scenery. At the south-east corner of Hyde park, near the entrance from Piccadilly, is a colossal statue of Achilles, executed by Mr. Westmacott, and dedicated to the duke of Wellington and his companions in arms. This statue was cast from cannon taken in the battles of Salamanca, Vittoria, Toulouse and Waterloo, is about 18 feet high, and stands on a basement of granite, making the whole 36 feet above the level of the ground. It was cast from 12 twenty-four pounders, and weighs upwards of 30 tons. The sheet of water called the *Serpentine river*, although in the form of a parallelogram, was made between 1730 and 1733, by order of queen Caroline. It is much frequented in summer for bathing, and during frosts for skating. At the eastern end of it is an artificial waterfall, constructed in 1817. On the south side are the barracks of the life-guards. The park is much frequented as a promenade.

Hyderabad, as a province (*subah*) of the Mogul empire containing 42 districts (*circars*), and upwards of 400 townships (*perganahs*), comprehending nearly the whole territory between the Godavery and the Krishna, has been much reduced by the diminution of the Mussulman power in India, but still comprehends the territories of the most powerful Mohammedan prince, the nizam of the Deccan. It is now divided into 16 districts. Nearly the whole country is parcelled out into feudal lordships, the possessors of which are bound to maintain an armed force. The soil is fertile, but agriculture and commerce are equally discouraged by the badness of the government. A small quantity of muslins, salt and opium are almost the only articles of commerce. On the death of Aureng-Zebe, this country, which had formed a province of his empire, was taken possession of (1717) by his viceroy, who still preserved the title of *nizam* or minister. His successors, alarmed by the growing power of the Mahrattas, who had already seized a valuable part of their territory, formed treaties with the British (1798 and 1800), by which it was agreed that a British force should be stationed in the country, and that all the foreign affairs of the nizam should be managed by the English government. *Hyderabad* the capital, is in 17° 15′ N. lat.; 78° 35′ E. lon. It is about four miles long and three broad, and is surrounded by a stone wall. Its streets are narrow, crooked, ill-paved, formed by rows of houses of one story. The palace and some of the mosques are the only remarkable buildings, but the tank is worthy of notice; it is nearly 17 miles in circumference, and covers about 10,000 acres. It is filled by a canal from the river, and is formed by an embankment, consisting chiefly of granite, 3350 feet long and 50 feet high, which closes the open end of a valley, surrounded on the other three sides by mountains. It was finished in 1812. The population is 200,000.

Hyder Ally Khan; an Asiatic prince, who rose by his talents to sovereign power, and was a formidable enemy to the English in Hindoostan, in the latter part of the last century. He was born at Dinavelli, in the Mysore, and after some military service under his father, a petty chief of the country, he joined his brother in an alliance with France, and introduced European discipline among his troops. He became general-in-chief of the forces of Cinoas, who then reigned at Seringapatam as a vassal of the Great Mogul; and having quarrelled with the grand vizier of his master, he marched against the capital, and obliged Cinoas not only to deliver the vizier into his power, but also to appoint him regent. He subsequently assumed the sovereignty himself; and having deposed the royal family, he founded the Mohammedan kingdom of Mysore, in 1760. He so greatly extended his dominions, that, in 1766, they contained 70,000 square miles, and afforded an immense revenue. His reign was passed in wars with the English and with the Mahrattas, the former of which powers excited his peculiar jealousy. A treaty which he made with the East India company, in 1769, was violated in 1780, and he was opposed with success in the field by the English general, sir Eyre Coote. The Mahrattas joining in a league against him, he carried on a disadvantageous war, during the continuance of which he died, in 1782. (For an account of the subsequent fate of his empire, see *Tippoo Saib*.)

Hydra; a celebrated monster, which infested the neighborhood of the lake Lerna in the Peloponnesus. It was the fruit of Echidna's union with Typhon. It had a hundred heads according to Diodorus, 50 according to Simonides, and 9 according to Apollodorus, Hyginus, &c. The central head was immortal. As soon as one of those heads was cut off, two immediately grew up, if the wound was

not stopped by fire. It was one of the labors of Hercules to destroy this dreadful monster, and this he easily effected with the assistance of Iolaus, who applied a burning iron to the wounds as soon as one head was cut off. The central head the conqueror buried in the earth, and covered with a piece of rock. While Hercules was destroying the hydra, Juno, jealous of his glory, sent a sea-crab to bite his foot. This new enemy was soon despatched, and Juno, unable to succeed in her attempts to lessen the fame of Hercules, placed the crab among the constellations, where it is now called the *Cancer*. The conqueror dipped his arrows in the gall of the hydra. From that circumstance all the wounds which he gave proved incurable and mortal. Some writers consider this fable as a symbolical representation of the clearing and draining of the Peloponnesus by the first authors of civilization.

Hydra, the centre of the Greek maritime trade, and the palladium of Greek independence, with the neighboring Spezzia, is situated south-east of the Peloponnesus, between two and three leagues from the coast, and is guarded by steep rocks and batteries from the attacks of an enemy; so that vessels in the port are in no danger but from fire-ships. Spezzia, on the contrary, is unprotected, and its inhabitants, at the approach of an enemy, flee for shelter to Hydra. The two islands together contain about 85 square miles and 40,000 inhabitants, although without springs, herds or agriculture. They subsist by navigation and trade. The city of Hydra, containing 30,000 inhabitants, rises like an amphitheatre over the harbor. The houses are very beautiful, and adorned with modern works of art in marble. In the interior, they are very neat and tasteful. A natural grace shows itself even in the dress of the sailors. The ladies live very retired, in the bosom of their families. The first inhabitants of Hydra and Spezzia were of Albanian descent. They differ in their Arnaout dialect, as well as in their character, dress and manners, from the Romaics or modern Greeks. When the Russians, in the war of 1774, evacuated the Morea, many of the Peloponnesians fled with their property from the vengeance of the Turks, to the rocks of Hydra. They now built greater vessels, and undertook more distant voyages, especially since France, in consequence of the war of 1792, was obliged to give up its trade to the Levant. These modern Argonauts were seen in every harbor of Italy, France, Spain, the Baltic, and even America. In Marseilles, they exchanged the Greek corn for the cloths and silks of Lyons. As bold as they were dexterous, they escaped the British cruisers, and safely entered blockaded harbors, and gained large profits in this way; so that they were enabled, by the extension of their trade, to establish mercantile houses in the first cities of Europe, before 1810. They equipped their vessels with cannon, to secure them against the Algerine corsairs. Accustomed from youth to great activity, to moderation, and the dangers of a sea life, the Hydriots and the other islanders of the Archipelago are the boldest and the most active sailors in the Mediterranean. Commerce has not merely filled their purses; it has also enlightened their minds. Besides the common schools, Hydra has erected, within 30 years, an institution for the cultivation of classical literature, and the Italian and French languages. The rich Hydriots, the Sciots and others, encouraged the translation and publication of books in foreign languages. They sent their sons to the best schools in Germany, France and Italy. Thus they became acquainted with the sciences, and acquired a taste for the arts; their manners were refined, and they were enabled to establish, on their return, good seminaries of learning. The late war exhausted their wealth, and caused a total stagnation of their trade. Scarcely were the magistrates able to defray the expenses of the sailors and vessels. On this account, they have, in times of danger, contemplated leaving their country, taking with them their families and property. The restoration of peace, we trust, will restore their ancient prosperity.

Hydrangea; a genus of plants, including three or four shrubs, having somewhat of the general appearance of the gelder-rose or viburnum, but differing in the structure of the flowers. All the species are, in their wild state, exclusively confined to the U. States, but they are frequently cultivated in the European gardens, for ornament. The *H. vulgaris* grows on the Alleghanies, and in other parts of the Union, but not north of Philadelphia, in the Atlantic states. The *H. nivea*, a more ornamental shrub than the preceding, and differing by the white inferior surface of the leaves, and the large size of the marginal flowers, seems to be more exclusively confined to the region about the southern portion of the Alleghanies, extending, however, as far north as Pennsylvania. The *H. quercifolia*, dis-

tinguished by its lobate leaves, inhabits the country bordering on the gulf of Mexico, and is not unfrequently cultivated in our own gardens. The *hortensia* or Japan rose, a plant closely allied to the preceding genus, and even united with it by some authors, is more frequent with us, and has very commonly usurped the name of *hydrangea*. This plant is a general favorite in China and Japan, the countries from which it was originally brought; and, indeed, the fine corymbs of large rose-colored flowers, which retain their freshness for a long time, and succeed each other throughout the whole season, added to the ease of cultivation, afford well founded claims for distinction. The fruit is yet unknown, the large flowers, so much resembling those of the snow-ball tree, being constantly barren.

Hydraulicon (*water-organ*), in music; an instrument acted upon by water, the invention of which is said to be of higher antiquity than that of the wind organ.

Hydraulics (from ὑδωρ, water, and αὐλος, a pipe, referring to the movement of water in certain musical instruments used by the Greeks); that branch of hydrodynamics which has for its object the investigation of the motions of liquids, the means by which they are produced, the laws by which they are regulated, and the force or effect which they exert against themselves or against solid bodies. This subject naturally divides itself into three heads: 1. the effects which take place in the natural flowing of fluids through the various ducts or channels which convey them; 2. the artificial means of producing motion in fluids, and destroying their natural equilibrium by means of pumps and various hydraulic engines and machines; and, 3. the force and power which may be derived from fluids in motion, whether that motion be produced naturally or artificially. The particles of fluids are found to flow over or amongst each other with less friction than over solid substances; and as each particle is under the influence of gravitation, it follows that no quantity of homogeneous fluid can be in a state of rest, unless every part of its surface is on a level, that is, not a level plane, but so far convex as that every part of the surface may be equally distant from the centre of the earth. As the particles of all liquids gravitate, any vessel containing a liquid will be drawn towards the earth with a power equivalent to the weight it contains, and if the quantity of the fluid be doubled, tripled, &c., the gravitating influence will be doubled, tripled, &c. The pressure of fluids is, therefore, simply as their heights,—a circumstance of great importance in the construction of pumps and engines for raising water. As liquids gravitate independently, if a hole be made in the bottom of the vessel, the liquid will flow out, those particles directly over the hole being discharged first. Their motion causes a momentary vacuum, into which the particles tend to flow from all directions, and thus the whole mass of the water, and not merely the perpendicular column above the orifice, is set in motion. If the liquid falls perpendicularly, its descent will be accelerated in the same manner as that of falling solid bodies. (See *Mechanics*.) When water flows in a current, as in rivers, it is in consequence of the inclination of the channel, and its motion is referrible to that of solids descending an inclined plane; but, from want of cohesion among its particles, the motions are more irregular than those of solids, and involve some difficult questions. The friction between a solid and the surface on which it moves can be accurately ascertained; but this is not the case with liquids, one part of which may be moving rapidly and another slowly, while another is stationary. This is observable in rivers and pipes, where the water in the centre moves with greater rapidity than at the sides, so that a pipe does not discharge as much water in a given time, in proportion to its magnitude, as theoretical calculation would lead us to suppose. As water, in descending, follows the same laws as other falling bodies, its motion will be accelerated; in rivers, therefore, the velocity and quantity discharged at different depths would be as the square roots of those depths, did not the friction against the bottom check the rapidity of the flow. The same law applies to the spouting of water through jets or adjutages. Thus, if a hole be made in the side of a vessel of water, the water at this orifice, which before was only pressed by the simple weight of the perpendicular column above it, will be pressed by the same force as if the water were a solid body descending from the surface to the orifice; that is, as the square root of the distance of those two points; and, in the same way, water issuing from any other orifices, will run in quantities and velocities proportionate to the square root of their depths below the surface. Now, the quantity of water spouting from any hole in a given time, must be as the velocity with which it flows: if, therefore, a hole A be four times as deep below the

surface as a hole B, it follows that A will discharge twice as much water in a given time as B, because two is the square root of four. A hole in the centre of such a column of water, will project the water to the greatest horizontal distance (or range), which will be equal to twice the length of the column of which the orifice is the centre. In like manner, two jets of water, spouting from holes at equal distances above and below the central orifice, will be thrown equal horizontal distances. The path of the spouting liquid will always be a parabola, because it is impelled by two forces, the one horizontal, and the other (gravitation) perpendicular.—The second division of the subject, mentioned in the beginning of this article, is of the greatest practical utility, as embracing an account of the various pumps and machines which have been employed to raise water; and numerous as these may appear, it will be found that they may all be comprehended under four general heads: 1. those machines in which water is lifted in vessels by the application of some mechanical force to them. The earlier hydraulic machines were constructed on this principle, which is the simplest; such are the Persian wheel, consisting of upright buckets attached to the rim of a wheel, moving in a reservoir of water; the buckets are filled at bottom, as they pass through the water, and emptied at top, so that the water is raised a height equal to the diameter of the wheel. The wheel may be turned by living power, or, if in running water, by fastening float-boards to the circumference. The Archimedian screw, the bucket-engine or chain-pump, and the rope-pump of Vera, are modifications of the same principle. 2. The next class of machines are those in which the water is raised by the pressure of the atmosphere, and comprises all those machines to which the name of *pump* is more particularly applied. (See *Pump.*) These act entirely by removing the pressure of the atmosphere from the surface of the water, which may thus be raised to the height of about 32 feet. (See *Atmosphere, Air.*) Whenever it becomes necessary to raise water to greater heights, 3. the third class of machines, or those which act by compression on the water, either immediately or by the intervention of condensed air, are employed. All pumps of this description are called *forcing-pumps.* (See *Pump.*) Although atmospheric pressure is not necessary in the construction of forcing-pumps, it is, in most cases, resorted to for raising the water, in the first place, into the body of the pump, where the forcing action takes place. In machines of this kind, the water may be raised to any height. 4. The fourth class of hydraulic machines for raising water, consists of such engines as act either by the weight of a portion of the water which they have to raise, or of any other water that can be used for such purpose, or by its centrifugal force, momentum, or other natural powers; and this class, therefore, includes some very beautiful and truly philosophical contrivances, too numerous for us to describe. The Hungarian machine, the centrifugal pump, and the water-ram, are among the number.—The third general division of the subject relates to the means by which motion and power may be obtained from liquids, and includes the general consideration of water-wheels and other contrivances for moving machinery. Motion is generally obtained from water, either by exposing obstacles to the action of its current, as in water-wheels, or by arresting its progress in movable buckets, or receptacles which retain it during a part of its descent. Water-wheels have three denominations, depending on their particular construction, on the manner in which they are set or used, and on the manner in which the water is made to act upon them; but all water-wheels consist, in common, of a hollow cylinder or drum, revolving on a central axle or spindle, from which the power to be used is communicated, while their exterior surface is covered with vanes, float-boards, or cavities, upon which the water is to act. The undershot wheel is the oldest construction of this kind: it is merely a wheel, furnished with a series of plane surfaces or floats projecting from its circumference, for the purpose of receiving the impulse of the water which is delivered under the wheel. As it acts chiefly by the momentum of the water, the positive weight of which is scarcely called into action, it is only proper to be used where there is a great supply of water always in motion. It is the cheapest of all water-wheels, and is more applicable to rivers in their natural state than any other form of the wheel; it is also useful in tide-currents, where the water sets in opposite directions at different times, because it receives the impulse equally well on either side of its floats. In the overshot wheel, the circumference is furnished with a series of cavities or buckets, into which the water is delivered from above. The buckets on one side, being erect, will be loaded with water, and the wheel will

be thus set in motion; the mouths of the loaded buckets, being thus turned downwards by the revolution of the wheel, will be emptied, while the empty buckets are successively brought under the stream by the same motion, and filled. The breast-wheel differs from this in receiving the water a little below the level of the axle, and has floats instead of buckets. In these two wheels, the weight and motion of the water are used, as well as its momentum, and a much greater power is, therefore, produced with a less supply of water than is necessary for the undershot wheel. In order to permit these wheels to work with freedom, and to the greatest advantage, it is necessary that the *back* or *tail* water, as it is called, or that which is discharged from the bottom of the wheel, should have an uninterrupted passage off; for otherwise it accumulates, and forms a resistance to the float-boards. One of the simplest methods of removing it consists of forming two drains through the masonry, each side of the water-wheel, so as to permit a portion of the upper water to flow down into the tail, in front of the wheel. The water, thus brought down with great impetuosity, drives the tail-water before it, and forms a hollow place, in which the wheel works freely, even if the state of the water be such that it would otherwise form a tailing of from 12 to 18 inches. The drains may be closed whenever the water is scarce. Numerous other contrivances are in use, which our limits will not permit us to describe. In Barker's centrifugal mill, the water does not act, as in the contrivances above noticed, by its weight or momentum, but by its centrifugal force and the reaction that is produced by the flowing of the water on the point immediately behind the orifice of discharge. It consists of a revolving vertical tube, which receives the water at top, and at the bottom of which is a horizontal tube, extending on each side of it, and having apertures opening in opposite sides, near the ends. The water spouting from these apertures keeps up, by its reaction, a constant rotary motion. The motive power of water is much more extensively used in the U. States than steam, wind, or animal force, for the carrying of machinery in different manufacturing processes.

Hydriads. The Hydriads, in mythology, were a kind of water-nymphs, who danced with the Hamadryads, to the sound of the pipe of Pan.

Hydro; two syllables which occur in a number of scientific words; derived from the Greek ὑδωρ, water. (*See the following articles.*)

Hydrocephalus. (See *Dropsy.*)

Hydrodynamics treats of the state and forces of fluids, at rest or in motion, whether liquids or gases. The name is derived from ὑδωρ, water, and δυναμις, force. It is divided into hydrostatics, hydraulics, pneumatics, and acoustics. (*See the separate articles.*)

Hydrogen; a simple non-metallic body, forming acids by its union with chlorine, iodine and bromine, and hence termed an *acidifiable* body, and producing water by its combination with oxygen, in allusion to which the name *hydrogen* (from ὑδωρ, water) has been applied. The most simple state in which we can procure it is in that of a gas, i. e., in union with caloric, and possibly with electricity and light. To effect this, water is always employed; and one of the following arrangements is adopted: water in the state of vapor is passed over metallic iron heated to redness, by adjusting a retort, half filled with this fluid, to one extremity of an iron tube containing clean iron wire, and laid across a heated furnace, the other extremity having a bent tube connected with it and dipping under the shelf of a pneumatic cistern; the water in the retort is made to boil briskly, and the steam to come in contact with the heated iron; upon which hydrogen gas is copiously disengaged, and collected in the pneumatic apparatus. Or, slips of sheet zinc, iron filings or turnings, or small iron nails, are introduced into a small gas-bottle with a bent tube, or into a common retort, upon which sulphuric acid, diluted with five or six times its weight of water, is poured; effervescence ensues, and the escaping gas may be collected in the usual manner. One troy ounce (480 grains) of zinc gives 356 oz. measures = about 676 cubic inches; and 1 ounce of iron, 412 oz. measures = 782 cubic inches, of hydrogen gas. The hydrogen obtained in these processes is not absolutely pure. The gas evolved during the solution of iron is contaminated by a compound formed from hydrogen and the carbon contained in the iron. This compound, which is a volatile oil, is removed by transmitting the gas through alcohol. The gas obtained by means of zinc is more free from impurities; though the small proportion of sulphur and carbon still remaining in the zinc of commerce, gives rise to the same compound as in the former case, and also to a little sulphureted hydrogen. The impurities in this instance are removed by passing the gas

through a solution of caustic potash. Thus purified, hydrogen gas has neither taste nor odor; it is colorless, and the lightest of all ponderable matter known, its specific gravity being 0.068, that of the atmospheric air being 1.000, or about 14½ times lighter than common air. This remarkable levity allows it to ascend with the greatest readiness through all liquids and gases, and is the cause of its being employed to fill balloons; which, notwithstanding the weight of the materials of which they are constructed, are sufficiently light, compared with the atmosphere, to rise to very great elevations, or until they meet with a medium whose density is such as to render them stationary. (See *Aëronautics.*) Hydrogen gas is a powerful refractor of light, and has hitherto resisted all attempts to compress it into a liquid. It is sparingly absorbed by water, 100 cubic inches of that liquid dissolving about 1½ of the gas. It is incapable of supporting respiration; nor is it a supporter of combustion; for when a lighted taper is passed up into an inverted glass full of hydrogen gas, it is immediately extinguished. But its most characteristic property is that of its inflammability, though, like other combustibles, it requires the aid of a supporter for enabling its combustion to take place. This is exemplified by bringing a lighted candle or taper to the mouth of a narrow jar, or wide-mouthed bottle, filled with the gas; it is immediately kindled, but only burns where it is in contact with the air, the combustion going on quietly in successive strata from the orifice to the bottom of the vessel. Mingled with oxygen gas, no action takes place so long as the compound remains cold; but, on the approach of a flame, the whole is kindled at the same instant; a flash of light passes through the mixture, followed by a violent explosion. The report is the loudest when the proportions observed in the mixture are two volumes of hydrogen and one of oxygen. The same phenomena take place, though less strikingly, when atmospheric air is substituted for oxygen gas: in the latter case, however, the proportions are two measures of hydrogen to five or six of air. And not only is hydrogen gas inflamed when in contact with air or oxygen gas by the contact of a burning taper, but by a solid body heated to redness, and by the electric spark. If a jet of hydrogen be delivered upon recently prepared spongy platinum (see *Platinum*), this metal very quickly becomes red-hot, and then sets fire to the gas. The electric spark ceases to cause detonation when the explosive mixture, formed of two measures of hydrogen to one of oxygen, is diluted with 12 times its volume of air, 14 of oxygen, or 9 of hydrogen, or when it is expanded to 16 times its bulk by diminished pressure. Sudden and violent compression, likewise, causes an explosion of the explosive mixture; apparently from the heat emitted during the operation; for an equal degree of condensation, slowly produced, has not the same effect. When the action of heat, the electric spark and spongy platinum no longer cause an explosion, a silent and gradual combination between the gases may still be occasioned by them. Oxygen and hydrogen gases unite slowly with one another when exposed to a temperature above the boiling point of mercury, and below that at which glass begins to appear luminous in the dark. An explosive mixture, diluted with air to too great a degree to explode by electricity, is made to unite silently by a succession of electric sparks. Spongy platinum causes them to unite slowly, though mixed with 100 times their bulk of oxygen gas. A very high temperature is excited by the combustion of hydrogen gas, especially when it is burned in oxygen gas, as in the compound blow-pipe of doctor Hare. (See *Compound Blow-pipe.*) Water is the sole product of the combustion of hydrogen—a fact first demonstrated by Cavendish, who burned oxygen and hydrogen gases in a dry glass vessel, and obtained a quantity of pure water exactly equal to that of the gases which had disappeared during the experiment. The synthetic proof of the composition of water is obtained also by detonating two measures of hydrogen, mixed with one of oxygen, in a tube, over the mercurial cistern; the whole is condensed into water. Lavoisier first exhibited the composition of water analytically, by passing a known quantity of watery vapor over metallic iron heated to redness in a glass tube. Hydrogen gas was disengaged; the metal in the tube was oxydized; and the weight of the hydrogen, added to the increase which the iron had experienced from combining with oxygen, exactly corresponded to the quantity of water which had been decomposed. Its composition by volume is very clearly shown by galvanism. On resolving water into its elements by this agent, and collecting them in separate vessels, two measures of hydrogen to one of oxygen are obtained; and, on the other hand, these gases, when inflamed by the elec-

tric spark, unite in the exact ratio of one to two, whatever may be their relative quantity in the mixture. Hence the composition of water, by weight and measure, is,

	By weight.	By volume.
Oxygen,	8	1
Hydrogen,	1	2

(*For a further account of the properties of water, see that article.*) The processes for procuring a supply of hydrogen, described at the commencement of the present article, will now be intelligible. The first is founded on the fact that iron, at a red heat, decomposes water, the oxygen of which unites with the metal, while the hydrogen gas is set free. That the hydrogen which is evolved when zinc or iron is put into dilute sulphuric acid, is derived from the water, is obvious from the consideration, that of the three substances, iron or zinc, sulphuric acid, and water, the last is the only one which contains hydrogen. The product of the operation, besides hydrogen, is the sulphate of the protoxide of iron, if iron is used, or of the oxide of zinc, when zinc is employed. Hydrogen, therefore, is one of the most abundant substances in nature. It forms, as has been stated, eight ninths of water; besides, with carbon and oxygen, it enters into the composition of all vegetable substances; and, with oxygen, carbon and nitrogen, it forms a part of all animal substances. Large quantities of it, often united with more or less of carbon, are continually evolved into the atmosphere from the decomposition of vegetable and animal matters.

Hydrography; that part of geography which treats of waters.—*Hydrographic maps;* such as make the rivers and other collections of water their chief subject.

Hydrometer (*Greek*), measurer of density (for fluids), is an instrument, which, being immersed in fluids, as in water, brine, beer, brandy, determines the proportion of their densities or their specific gravities, and thence their qualities. The use of the hydrometer depends on the following propositions—1. The hydrometer will sink in different fluids in an inverse proportion to the density of the fluids; 2. the weight required to sink a hydrometer equally far in different fluids, will be directly as the densities of the fluids. Each of these two propositions gives rise to a particular kind of hydrometer; the first with the graduated scale, the second with weights. The latter deserves the preference. (See *Traité d'Aréométrie de* M. Francœur, and *Le Cours de Physique de* M. Biot.)—There are various instruments used as hydrometers; one is a glass or copper ball, with a stem, on which is marked a scale of equal parts or degrees. The point to which the stem sinks in any liquid being ascertained and marked on this scale, we can tell how many degrees any other liquid is heavier or lighter, by observing the point to which the stem sinks in it. Another kind is formed by preparing a number of hollow glass beads, of different weights, and finding which bead will remain stationary in any liquid, wherever it is placed. An instrument of great delicacy, which will even detect any impurity in water too slight to be detected by any ordinary test, or by the taste, consists of a ball of glass three inches in diameter, with another joining it, and opening into it one inch in diameter. A wire, about 10 inches long and 1-40th of an inch in diameter, divided into inches and tenths, is screwed into the larger ball. A tenth of a grain, placed on the top of the wire, will sink it a tenth of an inch. Now it will stand in one kind of water a tenth of an inch lower than in another, which shows that a bulk of one kind of water, equal to the bulk of the instrument (which weighs 4000 grs.), weighs one tenth of a grain less than an equal bulk of the other kind of water; so that a difference in specific gravity of one part in 40,000 is detected. The areometer is more simple and accurate. A glass phial, about two inches in diameter, and seven or eight long, is corked tight; into the cork is fixed a straight wire one twelfth of an inch in diameter and thirty inches long. The phial is loaded with shot so as to sink in the heaviest liquid, leaving the wire just below the surface. The liquor is then placed in a glass cylinder three or four feet long, with a scale of equal parts on the side, by which the point to which the top of the wire sinks is marked. This instrument is so delicate, that the sun's rays, falling upon it, will cause the wire to sink several inches; and it will rise again when carried into the shade.

Hydrophane. (See *Opal.*)

Hydrophobia (from ὕδωρ, water, and φόβος, fear); a specific disease arising from the bite of a rabid animal. The animals most liable to be afflicted with madness are dogs; but cats, wolves, foxes, &c., are also subject to it. The following description of the way in which rabies affects dogs, is from a communication in the Sporting Magazine, September, 1825:—The symptoms of rabies in the dog are the following, and are given nearly in the

order in which they usually appear:—An earnest licking, or scratching, or rubbing, of some particular part; sullenness, and a disposition to hide from observation; considerable costiveness and occasional vomiting; an eager search for indigestible substances—as bits of thread, hair, straw and dung; an occasional inclination to eat its own dung, and a general propensity to lap its own urine. The two last are perfectly characteristic. The dog becomes irritable; quarrels with his companions; eagerly hunts and worries the cat; mumbles the hand or foot of his master, or perhaps suddenly bites it, and then crouches and asks pardon. As the disease proceeds, the eyes become red; they have a peculiar bright and fierce expression; some degree of strabismus, or squinting, very early appears—not the protrusion of the *membrana nictitans*, or haw, over the eye, which, in distemper, often gives the appearance of squinting, but an actual distortion of the eyes; the lid of one eye is evidently more contracted than that of the other; twitchings occur round that eye; they gradually spread over that cheek, and finally over the whole face. In the latter stage of the disease, that eye frequently assumes a dull green color, and at length becomes a mass of ulceration. After the second day, the dog usually begins to lose a perfect control over the voluntary muscles. He catches at his food with an eager snap, as if uncertain whether he could seize it; and he often fails in the attempt. He either bolts his meat almost unchewed, or, in the attempt to chew it, suffers it to drop from his mouth. This want of power over the muscles of the jaw, tongue and throat increases, until the lower jaw becomes dependent, the tongue protrudes from the mouth, and is of a dark and almost black color. The animal is able, however, by a sudden convulsive effort, to close his jaws, and to inflict a severe bite. The dog is in incessant action; he scrapes his bed together, disposes it under him in various forms, shifts his posture every instant, starts up, and eagerly gazes at some real or imaginary object; a peculiar kind of delirium comes on; he traces the fancied path of some imaginary object floating around him; he fixes his gaze intently on some spot in the wall or partition, and suddenly plunges and snaps at it; his eyes then close, and his head droops, but the next moment he starts again to renewed activity: he is in an instant recalled from this delirium by the voice of his master, and listens attentively to his commands; but as soon as his master ceases to address him, he relapses into his former mental wandering. His thirst is excessive (there is no hydrophobia, or fear of water, in the dog), and, the power over the muscles concerned in deglutition being impaired, he plunges his face into the water up to the very eyes, and assiduously, but ineffectually, attempts to lap. (In Johnson's Shooter's Companion, the author observes, "In those instances of hydrophobia which have fallen under my notice, the animal has always been capable of lapping; however, in the disease called *dumb madness*, I have noticed symptoms similar to the above.") His desire to do mischief depends much on his previous disposition and habits. I have known it not to proceed beyond an occasional snap, and then only when the animal was purposely irritated; but with the fighting dog, the scene is often terrific. He springs to the end of his chain; he darts with ferocity at some object which he conceives to be within his reach; he diligently tears to pieces every thing about him; the carpet or rug is shaken with savage violence; the door or partition is gnawed asunder; and so eager is he in this work of demolition, and so regardless of bodily pain, that he not unfrequently breaks one or all of his tushes. If he effects his escape, he wanders about, sometimes merely attacking those dogs which fall in his way; and at other times he diligently and perseveringly hunts out his prey: he overcomes every obstacle to effect his purpose; and, unless he has been stopped in his march of death, he returns in about four and twenty hours, completely exhausted, to the habitation of his master. He frequently utters a short and peculiar howl, which, if once heard, can rarely be forgotten; or if he barks, it is with a short, hoarse, inward sound, altogether dissimilar from his usual tone. In the latter stages of the disease, a viscid saliva flows from his mouth, with which the surface of the water that may be placed before him, is covered in a few minutes; and his breathing is attended with a harsh, grating sound, as if impeded by the accumulation of phlegm in the respiratory passages. The loss of power over the voluntary muscles extends, after the third day, throughout his whole frame, and is particularly evident in the loins: he staggers in his gait; there is an uncertainty in all his motions; and he frequently falls, not only when he attempts to walk, but when he stands, balancing himself as well as he can. On the fourth or fifth day of the disease, he dies, sometimes in convulsions, but more frequently without

a struggle. After death, there will invariably be found more or less inflammation of the mucous coat of the stomach; sometimes confined to the rugæ, at other times in patches, generally with spots of extravasated blood, and occasionally intense, and occupying the whole of that viscus. The stomach will likewise contain some portion of indigestible matter (hair, straw, dung), and, occasionally, it will be completely filled and distended by an incongruous mass. The lungs will usually present appearances of inflammation, more intense in one, and generally the left lung, than in the other. Some particular points and patches will be of a deep color, while the neighboring portions are unaffected. The sublingual and parotid glands will be invariably enlarged, and there will also be a certain portion of inflammation, sometimes intense, and at other times assuming only a faint blush, on the edge of the epiglottis, or on the rima glottidis, or in the angle of the larynx at the back of it. The hydrophobia seems to be spontaneous, and capable of being communicated only in certain animals—the dog, the wolf, the fox and the cat. All animals which have become rabid by a bite, do not appear to be able to transmit it to others; as the hog, cow, sheep. In regard to man, it is not certain, whether the disease is communicable from the human subject. The hydrophobia is not commonly manifested in the time of greatest cold or greatest heat, but usually in March and April in wolves, and in May and September in dogs. It is rare in very warm or very cold climates. No particular cause of the rabies is known; it is a mistake to attribute it to a total privation of food, as a great number of experiments prove that this is not the effect of such a treatment. All observations seem to prove the existence of a rabid virus, which is more violent when it proceeds from wolves than from dogs; as, out of a given number of persons bitten by a rabid wolf, a greater number will die than out of the same number bitten by a dog. The communication of the virulent hydrophobia by inoculation cannot be denied, and is the best proof of the existence of the virus. The virus appears to be contained solely in the saliva, and does not produce any effect on the healthy skin. But if the skin is deprived of the epidermis, or if the virus is applied to a wound, the inoculation will take effect. The developement of the rabid symptoms is rarely immediate; it seldom takes place before the 40th or after the 60th day. It begins with a slight pain in the scar of the bite, sometimes attended with a chill; the pain extends and reaches the base of the breast, if the bite was on the lower limbs, or the throat, if on the upper extremities. The patient becomes silent; frightful dreams disturb his sleep; the eyes become brilliant; pains in the neck and throat ensue. These symptoms precede the rabid symptoms two or three days. They are followed by a general shuddering at the approach of any liquid or smooth body, attended with a sensation of oppression, deep sighs and convulsive starts, in which the muscular strength is much increased. After the rabid fit, the patient is able to drink. The disposition to bite does not appear to belong to any animals except those whose teeth are weapons of offence; thus rabid sheep butt furiously. A foamy, viscid slaver is discharged from the mouth; the deglutition of solid matters is difficult; the respiration hard; the skin warm, burning, and afterwards covered with sweat; the pulse strong; the fit is often followed by a syncope; the fits return at first every few hours, then at shorter intervals, and death takes place generally on the second or third day. A great number of applications have been recommended, but without success. The treatment of the disease is of two sorts; the one consists in preventing its developement; the other in checking its progress. The former consists in cauterizing the wound with iron heated to a white heat, the pain of the cautery being less, as the temperature is greater. The cautery is preferable to the use of lotions, liniments, &c., but it should be employed within twelve hours after the bite. It has been said that, in patients who were about to become rabid, several little pustules filled with a serous matter appeared under the tongue, the opening of which would prevent the disease; but this is not well established. Various remedies have been prescribed for the cure of a declared hydrophobia. Bleeding, even to syncope, appears to have produced the greatest effect, but without complete success. Preparations of opium administered internally or by injection, mercurial frictions, belladonna, emetics, sudorifics, purgatives, &c., have been tried ineffectually. Yet the physician should not despair, as a remedy which has failed in one case may succeed in another. Above all, the patient should be treated gently, and his sufferings alleviated by consulting his comfort as much as possible; and the attendants should not forget, that there is no instance of the rabies having been communicated from one man to another.

HYDROSTATICS (from ὑδωρ, water, and στατικη, the science of bodies at rest) is the science which treats of the weight, pressure and equilibrium of liquid fluids. The particles in liquids are freely movable among each other, so as to yield to the least disturbing force; but though it was formerly believed that the liquid fluids are incompressible, recent experiments have shown that they may be indefinitely condensed by pressure. The fundamental truth, on which the whole science of hydrostatics rests, is equality of pressure. All the particles of fluids are so connected together, that they press equally in every direction, and are continually pressed upon; each particle presses equally on all the particles that surround it, and is equally pressed upon by them; it equally presses upon the solid bodies which it touches, and is equally pressed by those bodies. From this, and from their gravity, it follows, that when a fluid is at rest, and left to itself, all its parts rise or fall so as to settle at the same level, no part standing above or sinking below the rest. Hence, if we pour water or any other liquid into a tube bent like a U, it will stand at the same height in both limbs, whether they are of the same diameter or not, and thus a portion of the liquid, however small, will resist the pressure of a portion however large, and balance it. In a common tea-kettle, for instance, water poured into the body of the vessel will rise to the same level in the nose as in the vessel; and if poured into the nose, the same will also be true, and the small column of water in the nose balances the whole column in the body of the vessel, and will continue to do so, however large the one, and however small the other may be. From this fact two important conclusions follow, derived both from reasoning and from daily experience. The one is, that water, though, when unconfined, it can never rise above its level at any point, and can never move upwards, will, on being confined in close channels, rise to the height from which it came, that is, as high as its source; and upon this principle depend all the useful contrivances for conveying water by pipes, in a way far more easy, cheap and effectual than by those vast buildings, called *aqueducts*, by which the ancients carried their supplies of water in artificial rivers over arches for many miles. In this case, the stream must have been running down all the way, and consequently a fountain fed from it at its termination, could not furnish the water at the same height as its source. The other conclusion is not less true, but far more extraordinary, and, indeed, startling to belief, if we did not consider the reasoning upon which it is founded; it is that the pressure of the water upon any object against which it comes, is not in proportion to the body or bulk of the water, but only to the size of the surface, on or against which it presses, and its own height above that surface. Thus, in a tunnel-shaped vessel, the pressure on the bottom is not proportioned to the whole body of water in the vessel, but only to a column of the fluid equal in diameter to the bottom. The general rule for estimating the pressure of any fluid, is to multiply the height of the fluid by the extent of the surface on which it stands. If any portion of the fluid is supported by a tube above the remainder, the pressure on the bottom of the vessel will be the same as if the water was throughout at the same height as that in the tube, so that the height of the tube is properly multiplied by the extent of the bottom of the vessel, to determine the whole pressure. This principle of equal pressure has been called the *hydrostatic paradox*, though there is nothing in reality more paradoxical in it than that one pound at the long end of a lever should balance ten pounds at the short end; it is, indeed, but another means, like the contrivances called *mechanical powers*, of balancing different intensities of force by applying them to parts of an apparatus which move with different velocities. This law of pressure is rendered very striking in the experiment of bursting a strong cask by the action of a few ounces of water. Suppose a cask already filled with water, and let a long tube be screwed tightly into its top, which tube will contain only a few ounces of water; by filling this tube the cask will be burst. The explanation of the experiment is this: if the tube have an area of a fortieth of an inch, and contain half a pound of water, this will produce a pressure of half a pound upon every fortieth of an inch over all the interior of the cask. The same effect is produced in what is called the *hydrostatic bellows*. The tube is made to communicate with an apparatus constructed like a common bellows, but without a valve. If the tube holds an ounce of water, and has an area equal only to one thousandth of that of the top board of the bellows, an ounce of water in the tube will balance weights of a thousand ounces resting on the bellows. The hydrostatic or hydraulic press of Mr. Bramah is constructed on this principle; a prodigious force is thus ob-

tained with great ease, and in a small compass, so that, with a machine the size of a common teapot, a bar of iron may be as easily cut as a slip of pasteboard. A small forcing pump takes the place of the tube in the instrument above described, and a pump barrel and piston is substituted for the bellows; water is then driven from the small pump into the large barrel under the piston, and the piston is thus pressed against the object to be operated upon. If the small pump have one thousandth of the area of the large barrel, and the force of 500 pounds be applied to its piston by its lever handle, the great piston will rise with a force equal to one thousand times 500 pounds, or more than two hundred tons. The uses to which this power may be applied, are of great variety and extent, but this branch of art seems to be yet in its infancy. Upon the tendency of all the parts of fluids to dispose themselves in a plain or level surface, depends the making of *levelling* instruments, or instruments for ascertaining whether any surface is level, or any line horizontal; for finding what point is on the same level with any given point, and how much any point is above or below the level of any other point. We have thus far spoken of the pressure of liquids upon a horizontal or level surface, in which case it is only necessary to multiply the height of the fluid by the extent of the surface, and the weight of the bulk is equal to the pressure upon the surface. But if the surface is not horizontal, a different rule must be applied; for then the pressure is equal to the weight of the bulk, found by multiplying the extent of the surface into the depth of the centre of gravity of the surface. In this manner we can find the pressure upon a dam; we must take half the depth of the water, and multiply it by the superficial extent of the dam; this gives the bulk of water whose weight is the pressure on the dam. The pressure against the upright sides of a cylinder filled with water, may be found by multiplying the curve surface under water by the depth of its centre of gravity, which is half the depth of the water. The increase of pressure in proportion to the depth of the fluid, shows the necessity of making the sides of pipes or masonry, in which fluids are to be contained, stronger in proportion to their depth. It is therefore needless to make them equally thick and strong from the top downwards. If they are thick enough for the great pressure below, they will be thicker than is required for the smaller pressure above. The same is true in regard to flood-gates, dams and banks. When a solid body is plunged in any liquid, it must displace a quantity of that liquid exactly equal to its own bulk. Hence, by measuring the bulk of the liquid so displaced, we can ascertain precisely the bulk of the body; for the liquid can be put into any shape, as that of cubic feet or inches, by being poured into a vessel of that shape divided into equal parts. This is the easiest way of measuring the solid contents of irregular bodies. When a body is plunged into a liquid, if it be of the same weight as the liquid, it will remain in whatever part of the fluid it is placed; if it be heavier, it will sink to the bottom; if lighter, it will rise to the top. If any body, therefore, be weighed in the air, and then weighed in a liquid, it will lose as much in weight as an equal bulk of the liquid weighs. In this manner we determine the relative weights of all bodies, or the proportion which they bear to each other in weight, which is called their *specific gravity*. (q. v.) Suppose a mass of gold, for instance, to have a certain weight in the air; it would lose, on being weighed in water, about a 19th of its weight; that is, the gold would be 19 times heavier than water. The instrument used for this purpose is called the *hydrostatic balance*, and affords the easiest and most accurate method of comparing all substances, whether solid or fluid. This operation may be performed with substances lighter than water, by attaching them to a stiff pin, fastened to the bottom of the scale, or by suspending some heavy substance of a known weight. The same principle also enables us to ascertain the specific gravities of different fluids; for, if the same substance be weighed in two fluids, the weight which it loses in each is as the specific gravity of that fluid. (See *Hydrometer*.) If a drop of water, or any liquid of a like degree of fluidity, be pressed upon a solid surface, it will wet that surface and adhere to it, instead of keeping together and running off. This shows that parts of the liquid are more attracted by the parts of the solids than by one another. In the same manner, round the glass in which a liquid is contained, its surface will be seen to be higher than in the centre. If the vessel be less than the 20th part of an inch in diameter, the liquid will rise in it the higher in proportion to the smallness of the diameter. This is called *capillary attraction*, and tubes of this kind are called *capillary tubes*. (See *Capillary Tubes*; see also *Pumps, Siphons, Springs*.)

Hyeres. (See *Hieres.*)

Hygieia, the sweet, smiling goddess of health, was the daughter of Asclepias, or Esculapius. Hesiod, Homer, and Pindar, who were unacquainted with any such divinity as Esculapius, of course knew nothing of such a goddess. This fable, probably, had its origin at the time in which the worship of Esculapius began. When the healing art was practised in his temple, the god of medicine and the goddess of health were always in close connexion. Her temple was placed near his, and her statues were even erected in it. She is represented as a maid of slender form, with a long, flowing robe. Her distinguishing characteristic is a feminine softness. She has a bowl in her hand, from which a serpent is eating—an emblem of the art of medicine.

Hygrometer, Hygroscope. It is of the greatest importance for meteorology to ascertain at any time the quantity of water contained in the air. The instruments used for this purpose are called *hygrometers* (measurers of moisture). Daily experience shows, that some bodies possess a great capability of absorbing the humidity suspended in the atmosphere, and, according to their respective construction, becoming longer or shorter, in the direction of the fibres of their length or breadth. Thus, for example, cordage and catgut are shortened and untwisted by moisture. And this observation is the foundation of the hygrometer of Lambert, which, however, on account of the irregularity of the motion produced in the catgut by the humidity, does not altogether answer its purpose, but properly deserves the name of a *hygroscope* (shower of moisture). Saussure and De Luc, therefore, sought for other substances, which are regularly lengthened or shortened by the absorption or loss of humidity. Saussure believed this property might be found in a human hair, freed from all unctuosity by boiling in ley; De Luc, in a very thin piece of whalebone, cut in a direction transverse to the fibre. Saussure stretches the hair, properly prepared, and fastened at one end, over a delicate and easily movable wheel, by a small weight, while De Luc makes use of a small wire of gold to stretch the whalebone. Whenever the hair in Saussure's hygrometer is lengthened or shortened by the action of the moisture or dryness, the wheel, and an index attached to it, must be turned, and thus mark the increase or diminution of the water suspended in the atmosphere. But to find the absolute quantity, it is necessary to fix the points of extreme moisture and dryness. Saussure fixes the point of extreme moisture in his hygrometer by placing it in a glass receiver, which is enclosed in water and moistened with water within; De Luc, on the other hand, by simply immersing his hygrometer in water. The point of extreme dryness Saussure determines by placing his hygrometer under a receiver, which stands on a tin plate, heated to a red heat, and covered with red hot potash; De Luc by suspending the hygrometer in a close vessel, partly filled with hot quick-lime.

Hylas; a beautiful boy, of whose parents different accounts have been given. Hercules, who loved him, took him with him on the Argonautic expedition. But Hylas having landed in the region of Troy to draw water, the nymphs saw him, and were so enraptured with his beauty, that they drew him down into the crystal water. Hercules called him in vain on the shore, and, on this account, delayed his return to the ship Argo, which continued her voyage to Colchis without him.

Hymen, Hymenæus; the god of marriage among the later Greeks, by whom the marriage itself and the bridal song were also called *Hymenæus.* But it is probable that the god of marriage derived his name from the nuptial song, since we find it mentioned earlier than the divinity. According to the commonly received opinion, Hymen was so beautiful a youth, that he might easily have been mistaken for a maiden. But he was poor; and therefore his love, though not unrequited, was unfortunate. In order to be near his mistress, he dressed himself like a woman on the festival of the Eleusinian Ceres, and mingled in the ceremony. During the celebration, a band of pirates broke in, and carried him off with the crowd of females. The pirates having landed on a desolate island, and fallen asleep through weariness, he destroyed them all, and hastened back to Athens, where he promised to bring back all the damsels that had been carried off, on condition of being united to his mistress. A joyful consent was given, and, because his marriage was so fortunate, he was commemorated in the nuptial songs, till he was deified. Other traditions also are handed down respecting him, and nothing certain is known about his descent. Sometimes he is called the son of the musician Magnes; sometimes of Bacchus and Venus; and sometimes of Apollo and a muse, but whether of Terpsichore, Urania, Clio or Calliope, is uncertain. Claudian says that

Venus gave the son of the muse authority over marriages; so that, without invoking him, no one dared to solemnize them, or to light the nuptial torch. He was in the train of Venus, and among the companions of Cupid. No marriage took place without his being invoked to sanction it. He is described as having around his brows the flower of marjoram, in his left hand the flame-colored nuptial veil, in his right the nuptial torch, and on his feet golden sandals. Song and dance accompany him. At the death of Adonis, Bion describes him as extinguishing his torch, and tearing the nuptial wreath. If we may believe the beautiful hymn of Catullus to this god, Hymen has his seat on Helicon, among the muses.

Hymettus; a mountain in Attica, now called *Trelovouno*, distinguished for the quantity and excellence of its honey, which the bees here collect. This honey is always fluid. Jupiter, who was worshipped on this mountain, received therefrom the name of *Hymettius*.

Hymn; a song of praise, which was sung in honor of gods or heroes, on festivals, with the accompaniments of music and dancing. The hymns varied in name and character, according to the gods in whose honor they were sung. They were called *dithyrambics*, *pæans*, &c. Afterwards, every song of praise, or ode, wherein any thing elevated or sublime was sung, went by this name. In this respect, many of the Hebrew psalms are to be called *hymns*. In consequence of their Oriental character, and the nature of their religion, these breathe a more fervid spirit of devotion than those of the Greeks. These last were anciently almost entirely epic, like those of Homer. They recounted legends of the gods, as well as the deeds of men. Those of later times, of Callimachus and Pindar, for instance, are almost entirely lyric. The early Christian hymns are, in a great measure, lyric, and express the feelings of one who longs earnestly for invisible things. The English hymns, commonly sung in the churches, are, generally, far from having the original character of a hymn, and devoid of the fervent lyric strain, the glowing feeling, which characterize it. In the Greek and Latin church, certain songs are called *hymns* (in the latter 96 in number), which, at certain periods, are sung in the churches standing, the psalms being sung sitting. The first of these hymns are said to have been composed in the Greek church by bishop Hierotheus, in the Latin church by St. Hilarius, bishop of Poitiers, and, after him, by St. Ambrosius, bishop of Milan. Some of them must be ranked among the first productions of sacred poetry. The popes Gelasius and Gregory also composed hymns, as did also Synasius, Cosmus of Jerusalem, Johannes Damascenus, Theophanes, Prudentius, Beda, Sedulius, Paulinus, Venantius, Fortunatus, Paulus Diaconus, Thomas Aquinas. The fervent hymn, by which the Franciscans greet the first rays of the sun, is celebrated. These old hymns are written in iambics, trochees, &c., often in irregular metre, also in rhymes. In 1629, pope Urban VIII improved them. The use of hymns was sanctioned by the fourth council, at Toledo, in 633. They are sung in the canonical hours. (q. v.) Several of these hymns have particular names, as *Hymni Epistolici*, sung in the mass before the reading of the epistles; *Hymni Evangelici*, sung before the reading of the gospel; *Hymnus Ambrosianus*, or *Te Deum laudamus*; *Hymnus Angelicus*, the same with *Gloria in Excelsis Deo* (see *Doxology*); *Gloria Patri* (see *Doxology*); *Hymnus Marianus*, the same with the *Magnificate*, &c.

Hypatia; a female philosopher of the eclectic sect, the daughter of Theon, a celebrated mathematician, who governed the Platonic school in Alexandria, towards the close of the 4th century, at which period she was born. As she early exhibited proof of extraordinary genius and judgment, her father, besides educating her in all the accomplishments of her own sex, made her mistress not only of the different branches of polite learning, but of geometry and astronomy, as then understood. She finally studied philosophy; and such was her reputation, that she became a preceptress in the school in which Ammonius, Hierocles, and other celebrated philosophers, had presided, and the votaries of philosophy crowded to Alexandria. Her ready elocution and graceful address, united with deep erudition and sound judgment, procured her the admiration of all her hearers. She discovered none of the vanity or pride of learning, and, although eminently beautiful, was equally virtuous. Her house became the resort of all the persons of learning and distinction in Alexandria, and, among others, of Orestes the governor. At this time, the patriarch of Alexandria was Cyril, a prelate in the highest degree intolerant and haughty, who was guilty of encouraging the populace to plunder the Jews. Orestes laid the affair before the emperor, who declin-

ing to interfere, Alexandria became a frequent scene of tumult between the partisans of the governor and of the bishop. The intimacy of the governor with Hypatia aroused the anger and jealousy of Cyril; and in consequence she was much calumniated by his monkish partisans and the Christian populace. Their blind resentment at length led them to a conspiracy against her life, and a furious band of assassins seized upon her, as she was returning home from the schools, dragged her through the streets of Alexandria, stripped her naked, and finally tore her limb from limb, with circumstances of the greatest barbarity, and committed her mangled members to the flames. This infamous transaction took place in 415, under the reign of Theodosius II.

Hyperboreans (those who dwelt beyond the domain of Boreas or the north wind); the name given by the ancients to the unknown inhabitants of the North and West, who were reported always to enjoy a delightful climate. In earlier times, the dwelling of Night and the realm of Shades, and the Cimmerians, who lived in perpetual darkness, were placed in the west. Instead of these, the ancients found there a contented and somewhat civilized people, who inhabited a soil rich in gold, and free from the cold north winds of Greece, against which the Alps and Pyrennees appeared to screen them. Hence originated the report of a people enjoying perpetual health and long life; and who, being the especial favorites of Apollo, worshipped him, with music and sacrifices, on plains rich in fruit, and protected from the north wind, and who, for thousands of years, lived in a perpetual succession of pleasures. As the West gradually became better known, the name of *Hyperboreans* was applied exclusively to the North.

Hyperion. (See *Titans.*)

Hypermnestra; one of the 50 daughters of Danaus, who married Lynceus, son of Ægyptus. She disobeyed her father's bloody commands, who had ordered her to murder her husband the first night of her nuptials, and suffered Lynceus to escape unhurt from the bridal bed. Her father summoned her to appear and answer for her disobedience, but the people acquitted her, and Danaus was reconciled to her and her husband, to whom he left his kingdom at his death. Some say that Lynceus returned to Argos with an army, and that he conquered and put to death his father-in-law, and usurped his crown.

Hypersthene; a mineral principally found, in rolled masses, upon the coast of Labrador, and hence sometimes called *Labrador hornblende*. It has a lamellar structure, parallel with the diagonals and sides of a rhombic prism of 87° and 93°. The cleavage takes place most readily parallel to the short diagonal of the prism, and the planes, produced by this division, present an eminently metallic lustre, usually of a copper-red color. Color, grayish or greenish black; opaque; hardness equal to that of quartz; specific gravity, 3.389. It consists of silex 54.25, magnesia 14.00, alumine 2.25, lime 1.50, oxide of iron 24.50, and water 1.00.

Hypo, the Greek ὑπο, a preposition which occurs in many compound words used in English, and mostly signifies *under*.

Hypochondriasis (from the Greek ὑπο, under, and χονδρος, the cartilage; hence *hypochondrium*, the region of the abdomen, which lies under the short ribs); one of the most troublesome of diseases. Its seat is in the abdomen, particularly under the short ribs; but when it has increased to a certain degree, it manifests itself, in the most various ways, in the whole body, as there are few diseases of which the hypochondriac does not at some time or other complain. He feels a pressure on the right side, and thinks it is owing to a complaint of the liver; he has pains in the breast, and immediately apprehends inflammation of the lungs; his head feels heavy, and nothing is more certain than an approaching apoplexy; he sees specks before his eyes, and a cataract is unavoidable; if the heart beats stronger than usual, a polypus in that organ is probable; and an unimportant pimple becomes the indication of inveterate ulcers; and so on. All these effects of the disease are explicable from its nature, seat and causes. Hypochondria is a disturbance of the functions of the nervous system of the abdomen. Hence the sensibility of the nervous system is morbidly heightened, but its power of action lessened. At the same time, the separation between the nervous system of the abdomen and that of the brain is rendered less complete, so that certain feelings reach the brain, and thus affect the thoughts much more than in a state of health. The disturbance in the function of the abdominal nervous system produces next a weakness and disturbance in the digestion, which generally produce the first and most numerous attacks of hypochondria, from which all the others originate, in proportion as the morbid sympathy extends over the whole body. Hence, first, is produced spasmodic contractions under the short ribs, some-

times on one side, sometimes on the other, sometimes in the pit of the stomach; torpidity of the bowels, flatulency, inflation of the abdomen, want of appetite, increased pressure, and, generally, disagreeable feelings after eating. In the progress of the disease, a slow and somewhat difficult inspiration comes on, indescribable anxiety, and pain and giddiness in the head. Also, when the stomach is empty, this organ sometimes suffers pain and sickness, and vomiting takes place. For moments, particularly after digestion is finished, the hypochondriac feels easy, well and serene; but, all at once, the old complaints seize again upon their victim. The disturbance of the nervous system also has, as well may be conceived, a great influence upon the mind and humor of the patient. Sometimes he is melancholy, sometimes gay to an excess. Uninterruptedly occupied with the state of his body, he takes notice of every feeling, and wishes to have every trifling pain explained, considering every one as a symptom of a serious disease. For every thing he wants physic. In the hours of anxiety, hypochondriacs are constantly in dread of death. Sometimes anxiety attacks them so suddenly, that they must jump up, and cannot find quiet any where. Sometimes memory leaves them, so that they cannot think of their name. In the midst of the most serious conversation, nay, even of prayers, the most ludicrous ideas or images strike them. Others, all at once, feel a desire to perform the strangest actions, from which they can restrain themselves only with great difficulty. This deplorable disease may be occasioned by any circumstances which disturb the functions of the abdominal nervous system, heighten its sensitiveness, debilitate digestion, and lessen the separation of the reproductive nervous system from the sensitive. Among the chief causes are great exertions of the mind in studying, a sedentary or dissipated life, excess in exciting liquors, particularly coffee; also want of exercise of the physical and mental powers, producing *ennui*. Hypochondria is physically considered not a dangerous disease. It is true, the genuine hypochondriac believes, at least for six days of every week, that his hour is come. He passes a wretched existence, and is a real torment to his family and physician. Hypochondria can be cured but slowly. A hypochondriac must abstain from much physic, but the difficulty is to persuade him to do so. He would often rather take ten medicines than one. He ought to avoid sensual indulgences, but his irritated nerves refuse obedience to duty; he ought to master his feelings, but the body has become the governing power; he ought to take much exercise, but his indolence finds continual excuses for omitting it; he ought to observe a strict diet for years, and confidingly follow the directions of his physician, but he is impatient to be cured immediately, and his most solemn promises are forgotten in a week; he would have ten physicians at once, not to follow their advice, but to quarrel with all, and to tell them that they know nothing of his case. Thus it happens, that a hypochondriac is seldom entirely cured, but, after having suffered for years, he dies of some additional disease; or, in very advanced age, when the irritability of the nerves is lessened, the disease disappears.

Hypogastric (from ὑπὸ, under, and γαστηρ, the abdomen); seated in the lower part of the belly.

Hypothecation. (See *Bottomry*.)

Hypsipyle; daughter of Thoas, king of Lemnos. When the Lemnian women murdered their husbands, in their sleep, because they had taken Thracian slaves for concubines, she alone preserved her father, and concealed him in the island of Chios. Hypsipyle received the Argonauts, who had landed on Lemnos, with great kindness, and bore Jason two sons, Thoas and Euneus. When the Lemnian women discovered that Hypsipyle had preserved her father, they attempted to murder her, and would have accomplished their purpose, had she not saved herself by a timely flight; but she was seized shortly after by pirates, who sold her to king Lycus (or Lycurgus of Nemæa), who intrusted her with the education of his son, Opheltes. When the army of the seven princes passed through the territories of Lycurgus, on their way to Thebes, they found Hypsipyle alone in a wood, with the boy at her breast. To procure them refreshment, she put down the boy; but, while she was gone, a serpent killed him. In remembrance of him, the Greeks instituted the Nemæan games. Hypsipyle was thrown into confinement, and would have atoned for her misfortune with her life, had not her sons rescued her.

Hyrcania; a province of ancient Persia, encompassed with mountains, and fertile in wine and fruit. It now contains the northern half of Khorasan and the southern portion of Mazanderan, along the Caspian sea. The inhabitants of Hyrcania were probably descended from

the northern Scythians. As early as the first century, Hyrcania possessed independent sovereigns, who were often formidable to the Parthian monarchy.

Hyson Tea. (See *Tea.*)

Hysterics are with women nearly the same as hypochondria with men, the difference which really exists arising from the peculiar character and constitution of women. It arises from a morbid excitement of the nervous system, and manifests itself by great uneasiness, unusual susceptibility, occasioning great trouble, often from imaginary causes, and affecting the sufferer even to tears. To these is added the sensation of a ball mounting from the abdomen, and particularly from the pit of the stomach, where the most important nerves concentre, and occasioning a feeling of strangulation. From the greater susceptibility in the system of women, these affections are more universal, and appear quicker in other parts of the body, particularly in the muscles, than in men. Hence spasms of various kinds, contractions of the neck, pains in the head, fainting fits, palpitation of the heart, appear very frequently, and are sometimes so severe, that persons afflicted with them seem to be dying. These complaints were once ascribed to vapors arising from the stomach, and were called by that name. They were once very fashionable among the ladies. Women of a delicate habit, and whose nervous system is extremely sensible, are the most subject to hysterical affections; and the habit which predisposes to these attacks is acquired by inactivity and a sedentary life, grief, anxiety, and various physical disorders. They are readily excited, in those who are subject to them, by strong emotions, especially if sudden. Hysterical complaints are best prevented by a judicious care of the moral and physical education of girls. Men of uncommon nervous sensibility are sometimes subject to disorders not essentially different.

Hysteron Proteron; two Greek words, meaning *the last first;* hence it is used for an anachronism, but chiefly to designate, in grammar, the figure in which that word which should follow is used first; for instance, *Valet atque vivet* (he is well and lives). It is often used to produce a comic effect; for instance, *All the world and Boston talked of it.*

I.

I; the ninth letter in the English alphabet, and the third vowel. The English language is the only one known to us, which denotes, by this same character, the two totally different sounds of ī (as in *pine*) and ĭ (as in *pin*). In all other languages of Western Europe, it has the sound of *i* in *pin* and *ee* in *beef*, which is the same vowel, only in the former case short, in the latter, long. Those languages which have the sound *i* in *pine* express it by a diphthong; for instance, the German by *ei* and *ai;* and it is, in fact, a real diphthong. The continental *i*, corresponding to the English *ee*, is produced by breathing out, whilst the lips are slightly parted, the mouth drawn back a little at the corners, and the tongue curved upwards, yet not so as to touch the roof of the mouth. If the tongue touches the roof of the mouth, the lips remaining in the same position, the sound of *j* is produced, which change takes place, particularly if *i* precedes another vowel. This circumstance, and the near affinity of the two sounds, are the reason that, in some languages, particularly in Latin, they have the same character; hence it was said, *i* is a vowel in some cases, and a consonant in others. In all Latin words of Latin origin, *i* preceding a vowel (unless it follows another vowel), is a consonant, as *Ianus* (*Janus*), *coniicio* (*conjicio*); but in words of Greek origin, it is a vowel, as *iambus*, *iaspis*. In words of Hebrew origin, it varies: in *Iacobus* (*Claudian*, epigr. 27), it is a vowel; in *Iudæus*, a consonant. With the propagation of Christianity, Latin became, in many respects, the model of other languages, and this peculiarity of *i* was also adopted by most of them; so that, even after two different signs (the *i* and *j*) had been adopted for the vowel and the consonant sound of *i*, they nevertheless were, and still are, mixed together in dictionaries; but the fact that they are distinct in nature (though nearly akin), and have distinct characters, sufficiently authorizes us to separate them.

As the position of the mouth required for pronouncing the *i* of the European continent (*ee*) is such, that it can easily be assumed from the position necessary for the pronunciation of other vowels, we find *i*, in many languages, the final vowel of several diphthongs; as, in German, *ei*, *ai*; in French, *ai*, *oi*, *ui*, &c.; and these sounds at last actually became one. In the Greek, the *i* (*iota*) was always a vowel. As a numeral, it signified *ten*; with a little line under it (I), *ten thousand*. The Romans used I to signify *one*, and they continued to count with it up to four (I, II, III, IIII). The Roman I, put before a V, takes away the value of one; hence IV is equal to four; and, placed after V, it adds one; hence VI is equal to six. The dot over the *i* originated in the 14th century. I, on Roman coins, was the mark of the *as*, in value and weight. As an initial letter, it stands for *idæa*, *imperator*, *imperii*, *indulgentia*, *invictus*, &c. It is a French proverb of a person occupied with trifles—*Il met les points sur les i* (he is dotting his i's).

Iambus, in prosody; a foot of two syllables, a short and a long one. In Latin, the iambic verse consists of four, six, or (in the comic writers) even of eight feet. The odd feet, i. e., the first, third and fifth, may be iambuses, spondees, anapæsts, dactyles or tribrachs (but never trochees). The even feet, however, or the second, fourth and sixth, must be iambuses. The more iambuses there are in the verse, the more beautiful it is considered. An iambic verse of four feet is called a *quaternarius*; one of six, a *senarius*; one of eight, an *octonarius*. The German language, having a prosody, has, of course, the iambus, and makes great use of it in poetry. The iambic metre is also the fundamental rhythm of many English verses.

Iar; a Russian word, signifying *bank*, and appearing in many geographical names; as, *Iaroslaf*, bank of the Sclavonics.

Iarbas. (See *Dido*.)

Ibarra, Joachim, printer to the king of Spain, was born at Saragossa, and died Nov. 23, 1785, 59 years old. He raised the art of typography to an excellence before unequalled in Spain. From his press were issued magnificent editions of the Bible, the Mozarabic Missal, Mariana's History of Spain, Don Quixote, and the Spanish translation of Sallust. The latter, which appeared in one folio volume, in 1772, was made by the Infant don Gabriel, and is very rare, as the prince distributed the whole edition among his friends. Ibarra invented an ink, which, without doing injury to its blackness, he could make thicker or thinner at any moment. He also introduced into Spain the art of smoothing the paper after it was printed. As he never left his country, he invented almost all the improvements which he introduced.

Iberia, in ancient geography;—1. a very fertile district in Asia, which consisted of a large plain, surrounded on all sides with mountains, a part of the present Russian Georgia. In ancient times, this country probably belonged to the Persian monarchy; at least, this seems to be intimated by the name of the river Cyrus. Alexander and his successors did not penetrate into Iberia. The Iberians, probably, therefore, remained independent till Pompey and Trajan reduced them to the Roman dominion, under which they remained till after the time of the emperor Julian. They were afterwards subject, sometimes to the Turks, sometimes to the Persians, or had their own princes. 2. Spain was anciently called *Iberia*, and the principal river, *Iberus* (Ebro). The Iberi or Iberians, probably the most ancient European nation, driven towards the West, formed the basis of the population of Italy, Gaul, Spain and Lusitania. Their language still lives in the Basque. The Celts, who entered the country later, were intermingled with them, and have been considered as the original inhabitants of Spain. (See *Celts*.)

Iberus. (See *Ebro*.)

Ibex (*capra ibex*). This animal is distinguished by large knotted horns, reclining backwards; a small head; large eyes; a thick, short, strong body; strong legs; very short hoofs; and a short tail. Its body is of a deep brown color, with a mixture of hoary hairs; its belly is of a tawny white; its legs partly black, partly white; the space under the tail, in some individuals, is tawny, in others white. The hair is harsh, and the male is furnished with a beard. These animals are seldom found, except in the most precipitous and inaccessible heights of lofty mountains, where they assemble in flocks, sometimes consisting of 10 or 15 individuals. During the night, they feed in the highest woods, but, at sunrise, they again ascend the mountains, till they have reached the most perilous heights. They are remarkably swift, and display amazing agility and dexterity in leaping. They are objects of the chase, but, from the inaccessible nature of the places to which they generally resort, their dexterity in leaping, and the danger attendant on a pursuit of

them, the ibex hunter must have a head that can bear to look down from the most tremendous precipices without terror, address and sure-footedness in the most difficult passes, and also much strength, vigor and activity. Another danger attendant on this chase is, that the ibex, when close pressed, will sometimes turn on his pursuer, and tumble him down the precipices, unless he has time to lie down, and permit the animal to pass over him. The ibex will mount an almost perpendicular rock of 15 feet, at three successive bounds, appearing merely to touch it, to be repelled, like an elastic substance striking against a hard body. The fore legs being considerably shorter than the hinder, enables these animals to ascend with more facility than to descend, and hence, when pursued, they always attempt to gain the summits of the mountains. They inhabit the chain of mountains extending from mount Taurus, between Eastern Tartary and Siberia. In Europe, they are found on the Carpathian and Pyrenean chains, and in the Grisons and other parts of the Alps. The season for hunting them is during August and September, when they are usually in good condition. The old males haunt more elevated spots than the females and younger animals. Their voice is a sharp, short whistle, not unlike that of the chamois, but of shorter duration: sometimes, and especially when irritated, they make a snorting noise. The female seldom has more than one young one at a time: to this she pays great attention, defending it with courage and obstinacy. As to the stories of their throwing themselves down the steepest precipices, and contriving to fall on their horns, when closely pursued, or hanging by these appendages over gulfs by a projecting tree till the danger be passed, we must confess that they appear to us very problematical.

Ibidem (*Latin*); *in the same place* (generally contracted, as *ibid.*); used for references.

Ibis; a genus of birds found in all parts of the world, except Australia, but more particularly in warm climates. Generic characters:—beak arched, long, slender, thick at the base, and quadrangular, rounded at the tip, which is obtuse; nostrils linear, extending from the root to the tip of the beak, and dividing it into three portions, of which the upper is the broadest, and flattened; head and throat bare; legs longish and four-toed, the front webbed at their base as far as the first joint, the hind toe very long, all provided with claws; that of the middle toe, in some, smooth, in others, serrated on its inner edge. The ibes perform a powerful and elevated flight, extending their neck and legs, and uttering a hoarse croak. The *I. falcinellus* (Tem.) is nearly two feet in length, and varies much in its plumage at different ages. This species builds in Asia, and is found on the streams and lakes, in flocks of 30 or 40. They migrate periodically to Egypt, and, arriving there later than the white ibis, stay also later. In their passage, they are numerous in Poland, Hungary, Turkey and the Greek Archipelago. They occasionally visit the banks of the Danube, Switzerland and Italy, and, more rarely, England and Holland. The white ibis (*I. religiosa*, Cuv.) arrives in Egypt about the time that the inundation of the Nile commences, its numbers increasing or diminishing with the increase or diminution of the waters; and it migrates about the end of June, at which time it is first noticed in Ethiopia. This species does not collect in large flights: Savigny has observed not more than 8 or 10 together. They are about the size of a fowl; the head and neck bare; the body white; the primaries of the wings tipped with shining, ashy black, among which the white forms oblique notches; the secondaries bright black, glossed with green and violet; the quill-feathers of the tail white. These two species are the birds which were adored by the ancient Egyptians, and of which numerous mummies are found. It is remarkable that, with the excellent description of the white ibis, given by Herodotus, before their eyes, naturalists so long gave the name of that bird to individuals which are totally different. The bird described by Perrault as the *ibis blanc*, by Brisson as the *ibis candida*, and by Linnæus as the *tantalus ibis*, and considered by these naturalists to be the present species, differs from it in size, and in having the ridge of the beak rounded, its tip slightly grooved on each side, and the nostrils at the root. Consequently it is not an ibis; for, in this bird, the beak is not grooved, and the nostrils extend nearly from the base to the tip of the beak. The ibis feeds upon insects, worms, testaceous animals, and sometimes on small fish, and not, as has been said, on snakes. The scarlet ibis (*I. rubra*) is found in the hottest parts of America in large flocks, and frequently the old are separated from the young birds. They fly rapidly, but rarely, except at morning and evening, in search of food. The plumage is scarlet; beak naked; part of the cheeks, legs and feet, pale red. Be-

fore the scarlet ibis reaches its full age, its plumage varies remarkably. It is a very splendid bird. It sometimes appears in the Southern States of the Union. Other species are found in India, Madagascar, cape of Good Hope and Mexico. The Greek and Roman writers contain many fabulous stories relating to the ibis, which it would be superfluous to repeat. Savigny, in his learned work—*Histoire Naturelle et Mythologique de l'Ibis*—examines all the questions connected with this subject. His chief hypothesis is, that the ibis did not, in point of fact, destroy snakes, but that the reverence attached to it by the Egyptians arose from its return into their country with the Etesian winds, at the commencement of the season of abundance. The ibis mummies have been found in great numbers in the excavations in Egypt.

Ibrahim; the Turkish for *Abraham*, and the name of many sultans and grand viziers distinguished in Ottoman history. Among them was Soliman's grand vizier, born in Genoa, of the family of the Giustiniani, and carried by pirates to Constantinople. He was strangled in 1536, at the instigation of Roxelana. (See *Soliman.*) Ibrahim Pacha, the eldest son of the present pacha of Egypt, was born about 1795, commanded an expedition to Sennaar and Dongola, and, in 1825, led the Egyptian forces against Candia and the Morea. He desolated the Morea, until the battle of Navarino, in 1828, put a stop to his devastations. (See *Greece.*)

Ibycus; a Greek lyric poet, contemporary with Anacreon, in the middle of the sixth century before the Christian era, and, according to the general account, a native of Rhegium in Italy. He went to Samos during the reign of Polycrates over that island, and passed the rest of his life there. It is related, that, while on a journey, he was surprised and murdered by robbers. Finding escape impossible, he declared that the cranes, which happened to be flying over their heads, would revenge his death. The robbers afterwards, in Corinth, seeing a flock of cranes, one of them said ironically, "See the avengers of Ibycus." These words were heard by a bystander, who reported them to the magistrates. The robbers were in consequence seized, and, after confessing their crime, were executed. Ibycus is said to have left seven books of lyric poetry, in the Doric dialect, and to have invented the musical instrument called the *sambuca*, with a kind of poetry in which he sung his own life, and which was called, after him, *Ibycan*. Only a few fragments of his works have come down to us. The death of Ibycus is the subject of Schiller's beautiful ballad *Die Kraniche des Ibykus* (the Cranes of Ibycus).

Icarus. (See *Dædalus.*)

Ice; every frozen liquid: in a more limited sense, frozen water. As soon as the temperature is raised, the solid state again gives way to the liquid. We see, then, that ice is nothing but water deprived of its caloric. (q. v.) The freezing of water is a phenomenon so remarkable, that the greatest naturalists have thought it worthy of a careful investigation. Expose a glass, filled with water, to a degree of cold producing ice; an extremely thin film of ice is observed first on the surface of the water in contact with the cold air. Slender threads of ice are soon seen to shoot out from the sides of the vessel, generally forming with it obtuse or acute, seldom right angles; from these rays, new ones continually shoot out, till the whole surface is covered with a single coating; while this process is going on, a great number of air-bubbles arise, as in boiling, which pass out of the water when the congelation is slow; but when it is sudden, they are frozen in, and by their expansion cause rents in the ice. Although cold generally produces contraction, ice occupies a larger space than water; it is hence specifically lighter, and floats upon it. Those persons are in an error, who suppose that *ground-ice*, as it is called, rises from the bottom of the water after freezing. A kind, however, called *anchor-ice*, appears to be formed at the bottom, or, at least, under the surface, of rapid rivers, perhaps owing to the comparatively slow motion of the water at the bottom of a stream. It is well known, that stagnant water freezes sooner than flowing water: perfect rest, however, seems to be unfavorable to freezing, for we know by experience, that water perfectly still is not frozen when its temperature is reduced much below the freezing-point; but a little agitation is sufficient to change it into ice. Sea-water, and in general all salt water, freeze with greater difficulty, because the salt and other ingredients retain the caloric longer. Salt is, moreover, separated in the process of freezing, and precipitated to the bottom, so that ice from sea-water sometimes affords potable water. Salts, however, produce a degree of cold beyond the freezing temperature, and, by means of them, we can cool water much below the freezing point, while it still remains fluid. Most salts have this property; especially nitre, muriate of am-

monia, and common salt. A degree of cold sufficient for the freezing of water may be produced by them in summer, or even over a fire. Artificial ice is formed, also, by exposing pure water, in proper vessels, to such freezing mixtures. The more severe the cold, the greater the hardness and firmness of the ice; and the ice of the polar regions can hardly be broken with a hammer. In the severe winter of 1740, a house was built at Petersburg, from the ice of the Neva, 52½ feet long, 16½ wide, and 20 high; and notwithstanding the enormous weight of the roof, which was likewise of ice, the lower parts of the building did not receive the smallest injury. The pieces of ice were hewn to the form and shape required, adorned and arranged according to the rules of architecture. Before the palace stood six cannons of ice, which were turned on a lathe, with the carriages and wheels of ice, and two mortars formed like cast pieces. The cannons were six-pounders, which are commonly loaded with three pounds of powder; these, however, were loaded with only a quarter of a pound, and carried a ball of stuffed hemp, and sometimes of iron. The balls, at a distance of 60 paces, passed through a board two inches in thickness: the ice of the cannons could not have been much more than three or four inches in thickness, and yet it resisted the force of the explosion. The ice which obstructs the navigation of the arctic seas, according to professor Leslie, consists of two kinds; the one produced by the congelation of fresh, and the other by that of salt water. The snow on the islands or continents, being melted in summer, forms collections of fresh water, which soon freezes, and increases yearly, until the mass becomes mountainous, and rises to the elevation of the surrounding cliffs. The melting of the snow, which is afterwards deposited on these enormous blocks, likewise contributes to their growth, and, by filling up the holes and crevices, renders the whole solid. When such a mass has reached the height of 1000 or 2000 feet, the accumulated weight, assisted by the action of the ocean at its base, plunges it into the sea, and it is driven southwards by the winds and currents, and known to mariners under the name of *iceberg*. The icebergs consist of a clear, compact, solid ice, with a bluish-green tint. From the cavities in them, the northern whalers fill their casks with pure fresh water. The other kind is the field-ice, or frozen sea-water, which is porous, incompact, and imperfectly diaphanous. It consists of spicular shoots or thin flakes, which detain within their interstices the stronger brine. This ice never yields pure water, but if the brine be first drained off, the icy mass will yield a brackish liquid, which may sometimes be drunk. Sea-water usually congeals at about 27° of Fahr. Within the arctic circle, the congelation begins by the first of August, and a sheet of ice, perhaps of an inch thick, is formed in a single night. In a short time, the whole extent of the polar seas is covered with a vault several feet thick. As soon as the summer heat commences, it is softened, and, with the first swell of the ocean, breaks up, and the fields of the saline ice are thus annually formed and destroyed. The whalers call a large expanse of saline ice a *field*; one of smaller dimensions, a *floe*; when a field is much broken up, it is called a *pack*. If the ship can sail freely through the floating pieces of ice, it is called *drift-ice*. A portion of ice rising above the common level is called a *hummock*, being produced by the crowding of one piece over another. The *ice-blink* is a whitish appearance in the horizon, occasioned by fields of ice, which reflect the light obliquely against the atmosphere. Much ice is exported from Boston to the West Indies and the Southern States of the U. States. The exportation began in 1805, and has been increasing ever since. In 1819, when ice was scarce in the neighborhood of Boston, a vessel was sent to the coast of Labrador, in order to take ice from an iceberg, and succeeded, though with some damage, in procuring a cargo, which she carried to Martinique.

Artificial Ice. The Greeks and Romans used various means to preserve snow and ice to cool their drinks: still they never carried this art to such perfection as the moderns have done. We are now better acquainted with the means of producing artificial cold. Experience teaches us, that cold arises from the evaporation of liquids. With vitriolic ether, and still better with nitric ether, artificial ice may be produced in this way, in the middle of summer and on the warmest days. Ice is formed in the East Indies, in Calcutta and other places, principally by evaporation. In the level countries there, snow and frost are never known; but in order to have cooling materials in the heat of summer, the inhabitants collect snow and ice, during the winter, from the high mountains, and throw portions of it into small earthen pans, unglazed, which at sun-down are

filled with water. The pans are inserted in the earth, two feet deep, covered with dry straw, and evaporation is then suffered to go on. In clear weather, so much caloric is absorbed from the remaining water by this evaporation, that, with the help of the snow floating in it, the whole becomes ice; this is then put in deep caves before sun-rise, and preserved for summer. About the middle of the 16th century, the custom of cooling drink with saltpetre was introduced into Italy. Afterwards, the method of increasing the cold of snow and ice by a mixture of saltpetre became common. The preparation of artificial ice gradually became more usual; and what was at first only an experiment, at length became an object of luxury. In the beginning of the 17th century, ice-cups were introduced, and fruits frozen in ice were brought upon the tables. Soon after, the French began to freeze the juices of all savory fruits for desserts. Ice is most used for the purpose of cooling in summer, in the south of Italy and in the U. States.

Iceland, an island in the Atlantic ocean, on the confines of the polar circle, between lat. 63° 23′ and 66° 33′ N., and lon. 13° 15′ and 24° 40′ W., area about 40,000 square miles, is supposed by many to be the Ultima Thule of the Romans. About A. D. 860, Naddodr, a Norwegian pirate, was driven on the coast. Gardar, a Swede, circumnavigated it in 864; Floke, a Norwegian, remained on it two winters, and gave it its name from the quantities of ice which drifted into the bays. The first Norwegian colony arrived there in 874. Christianity was introduced in 981, and formally adopted in 1000. In 1261, the islanders submitted to the king of Norway. Iceland affords the spectacle of a peaceful, religious, and even literary society, existing for centuries under all the disadvantages of soil and climate. In its physical structure, the action of fire is every where evident. No stratified rocks have been seen, nor any of which the igneous origin is generally contested. Lava covers a large portion of the island. The interior of Iceland (not less, perhaps, than 26,000 square miles) is a dreary waste, only partially known to the natives, who are sometimes obliged to explore it in search of lost sheep, for the most part presenting only a dark surface of lava, without any trace of vegetation. In the south are extensive tracts of melted rock, through which rents, 100 feet wide, extend for several miles. Above these wilds are lofty mountains, with volcanic rocks, protruding through eternal snows. The glaciers or *yœkuls* cover a great part of the island. The most extensive is that called *Klofa yœkul*, behind the mountains of the east coast, forming, with little interruption, a chain of ice and snow mountains, supposed to fill a space of 3000 square miles. The progressive movement of the glaciers is observed here as well as in Switzerland, and the moraine, or rampart of debris, heaped together by its descent, has been seen, in some places, 60 feet high, and composed of large rocks. The Snæfell, by a late survey of the island, is found to be 6862 feet high, and is supposed to be the loftiest mountain on the island. Most of the high mountains are slumbering volcanoes. Hot springs and boiling fountains are found every where. The volcano of Krabla, between 1724 and 1730, poured forth streams of lava, which covered several square leagues. In 1755, Katlegiaa, on the eastern shore, burst forth with tremendous fury. The eruption was accompanied with earthquakes so violent, that the people thought the destruction of the island at hand. The detonations of the mountain were heard 30 leagues, and showers of ashes fell on the islands of Feroe, 100 leagues distant. Fifty farms were destroyed, and rocks of pumice-stone and lava, carried down into the sea, formed promontories extending three leagues from the shore. These rocks still project above the sea, where formerly were 40 fathoms of water. In 1783, an eruption from mount Skeidera covered with lava some of the best districts of the island; the clouds of ashes impregnated the air with noxious particles; the waters were corrupted, the fish driven from the coasts, and famine and pestilence ensued. The miseries which succeeded this eruption destroyed, in two years, 9000 people (a fifth part of the population), with 28,000 horses, 190,500 sheep, and more than 11,000 head of cattle. The eruptions of mount Hecla are rather numerous than violent. The last took place in 1823. The height of Hecla is 5210 feet. The population is confined to the *fiords* or friths round the island. Some of the low mountains are covered with coarse grass, affording summer pasturage for the cattle; but the only permanently occupied spots are along the shore. The rivers are numerous and of considerable size, especially on the northern side. There are also many lakes in the interior. Springs or jets of boiling water are frequent: those named the *Geysers* are most famous, perhaps on account of their accessibility. They are about 30

miles N. N. W. of Hecla, in a plain covered with hot springs and steaming apertures. The Great Geyser rises from a tunnel-shaped basin, lined and edged with siliceous depositions. The pipe at the bottom, from which the jet issues, is about 10 feet in diameter, and the basin, at its outer edge, is about 56. The emissions generally take place at intervals of six hours, preceded by a rumbling noise or loud report, like that of artillery, with an agitation of the ground. The column, as measured by a quadrant, has been seen to rise as high as 212 feet. The hot springs near the inhabited parts are used for economical purposes; food is dressed over them; and, in some places, huts are built over small fountains to form steam-baths. In other parts of the island are seen caldrons of boiling mud, emitting sulphureous exhalations. Pestilential airs have been known to issue from particular spots in the plains, during the volcanic eruptions, which have destroyed all who approached. Mineral springs, of many kinds and every temperature, are found; some, highly impregnated with carbonic acid gas, are called by the people *ale springs*, having, it is said, the power of inebriating. Iron and copper are found, but the mines are not worked, for want of fuel. The only mineral from which the people derive a revenue is sulphur, of which the supply appears to be inexhaustible. Extensive mountains are incrusted, to the depth of some inches, with this substance, which, when removed, is again deposited in beautiful crystals by the hot steam from below. Fossil-wood, impregnated more or less with bitumen, is found in abundance, and might afford valuable stores of fuel to the people, if they had more activity. It is called *surturbrand*, and is used chiefly in the smithies, and in small quantities. Basaltic columns are seen in many places. The winter, though unsettled, is perhaps less severe than in Sweden and Denmark. The mercury in the thermometer rarely sinks to zero, and the medium temperature of the winter months is, perhaps, not much below the freezing point; the atmosphere is generally clear, and the long nights are cheered by the *aurora borealis*. The floating ice, from the coast of Greenland, has a great effect in increasing the cold, and brings with it polar bears, which commit great ravages on the flocks and herds. From November to February, the inhabitants hardly stir from their houses, which are nearly buried in snow. In July and August, the thermometer often stands at 80 or 90 degrees, but sharp frosts frequently succeed the most sultry days. The vegetable productions are comparatively few. Many varieties, however, of moss and lichens are found. In the forests, the birch trees hardly reach the height of ten feet; with these are mingled several varieties of the willow, and a few solitary individuals of the *pyrus domestica* and mountain ash. The bogs are covered with coarse grass. The Icelanders may be looked upon as a fair specimen of the ancient Scandinavians, having probably undergone less change, for nearly a thousand years, than any other European nation. They are generally tall, with no peculiar physical characteristic, except, perhaps, the length of the spine. Their countenances are open, their complexion fair, their hair light colored, and rarely curled. Corpulency is rare. The houses differ only in size. An outer wall of turf, about four feet and a half high, often six feet thick, encloses all the apartments. On one side, generally that facing the south, are three or more doors, for the most part painted red. These open into the dwelling-house, the smithy, dairy, cow-house. The door of the house opens into a long, dark, narrow passage, from which apartments branch on each side. Each chamber has a separate roof, and is lighted by a small pane of glass, or, more commonly, of amnium, four or five inches in diameter. The thick turf walls occupy more space than the apartments which they enclose. The damp smell which proceeds from them, with the darkness, the filth, and the stench of fish, renders these dwellings insupportable to strangers. Several families sometimes live in the same mass of turf. All the members of the family sleep in one apartment, which is also the general eating room. The kitchen is the only room in which a fire is kept. The women are unceasingly employed. The servants are generally orphans, or the children of poor farmers, and often intermarry with the children of their masters. The diet of the people is very simple. They eat great quantities of butter, generally in a rancid state; when this is scarce, tallow is used. They breakfast on sour milk. The flesh of the shark or sun-fish is sometimes eaten, when it has become tender from putrescence. Fresh meat, rye bread and sago soup are holyday fare. The richer inhabitants, however, are not unacquainted with wine, London porter, and other foreign luxuries. To a stranger, the most palatable and healthful article of Iceland diet is the *lichen Islandicus*, now much in vogue as a specific in cases of consump-

tion. Turf is the general fuel; drift-wood and *surturbrand* or fossil-wood are more rarely used. One of the chief cares of the Icelander is to lay in provisions for winter; and, next to his flocks and herds, the sea is his chief resource. About the beginning of February, the people of the interior and of the northern districts begin to move, and a great part of the male population migrates to the western and south-western coasts. Many travel over 200 miles to the place which they choose for a fishing station. About the beginning of May, they return, leaving the fish, not yet perfectly dried, to the care of some one residing on the spot. The best salmon abound in all the rivers. The cow, the horse and the sheep are the principal sources of wealth, comfort and subsistence to the Icelander. The sheep are of a peculiar kind, mostly horned; some have only two, others three, four and upwards. They are milked, as well as the cows, twice in every twenty-four hours. The wool is not sheared, but left to fall off spontaneously. The women pick, clean and spin it. The cows give 10, 12, or even 20 quarts of milk per day. The horses are small, but well formed and active. The poorest peasant has four or five. Every one can shoe his horse; even the bishop and the chief-justice are sometimes seen thus employed. In 1770, three reindeer were brought from Norway, and have greatly multiplied. Herds of 50—100 are frequently seen. They are not used for domestic purposes, and are very difficult to kill. Hogs and goats are rare. The dogs resemble those of Greenland. There are two kinds of foxes, the white or arctic (*canis lagopus*), and the blue fox (*C. fuliginosus*). The lower orders of the people have a superstitious reverence, mingled with aversion, for the seal. On the west coast, this animal is taken for the sake of its fat. Aware of its observant and inquisitive disposition, the people kindle fires to attract it to the shore, and nets are spread to take it. Sometimes these animals are met at a considerable distance up the country, being attracted by the lights in the houses. They are easily tamed, and, if young, are put into ponds and fed daily. They soon become as tractable as a dog. In June, the eider ducks visit the coast to nestle. (See *Eider Duck.*) They are so familiar as to build their nests all round the roofs, and even inside the houses. A severe penalty is inflicted on those who kill them. The down which the bird takes from her breast to cover her eggs is removed twice, and even three times, during the season. Swans are numerous in the lakes and marshes. Their down and feathers bring in a good revenue to the people. The tern, ptarmigan, golden plover and snipe are common. The shores are frequented by myriads of sea fowl. Cod, haddock, ling, skate and halibut are taken on the coast. Herrings visit the north coast in extensive shoals, in June and July, and are caught in large quantities. The cod is the principal object of the trade with Denmark. Previous to the discovery of Newfoundland, the British were largely engaged in the Iceland cod-fishery, and had 150 vessels so employed at the beginning of the 17th century. At present it is carried on wholly by the Icelanders. The haddock forms a very large share of the food of the inhabitants. Mechanical industry is much hindered by the want of good timber and fuel. The jaws and ribs of whales are, in some parts of the island, used in the frames of houses and boats. The quantities of drift-wood from the west are amazing. The inhabitants of the fiords, in which it is chiefly collected, are the carpenters, coopers and boat-builders of the island. The hot springs in the Borgar fiord enable them to give the boards the requisite pliancy. The staple exports are fish, oil, feathers, sulphur and salt mutton; the imports are wood, salt, tobacco, coffee, iron and fishing-tackle. During the last war between Great Britain and Denmark, the people of Iceland suffered much, their usual supplies of hooks, cordage, grain, &c., being cut off. The Icelanders are a remarkably grave and serious people, apparently phlegmatic, but extremely animated on subjects which interest them. Vice and crime are hardly known among them. To their religious and domestic duties they are strictly attentive, and, in their dealings with others, display a scrupulous integrity. There are very few of them who cannot read and write, and many among the better class would be distinguished, by their taste and learning, in the most cultivated society of Europe. Perhaps there is no country in Europe in which the lower orders are so well informed. The traveller is often attended by guides who can converse with him in Latin. The brilliant period of Icelandic literature was from the 11th to the 14th century. A printing-press was introduced in 1530, by a Swede named Mathieson. The first types were of wood, and rudely formed, but before the end of that century, several valuable publications appeared, displaying remarkable typographical elegance.

In 1779, an Icelandic society was instituted at Copenhagen, comprising 130 of the most learned and intelligent men of the island. It was dissolved in 1790. Another was established in the island in 1794, with 1200 members. The society have published two books of Thorlakson's translation of Milton's Paradise Lost. The remainder has not been printed. A complete copy of this translation, which is said to be the best version of this great poem in any language, was procured by Mr. Henderson. The Icelanders have also translations of Pope, Young, and several other English writers. Several schools appear to have existed in the 11th century. The only school on the island at present is at Bessestad. But the instruction of his children is one of the regular occupations of the Icelander, who finds a zealous assistant in the pastor of the parish. The ecclesiastical code of the country allows the clergy to prevent any marriage where the female is unable to read. The amusements of the people are chiefly literary. In all their social meetings, the repetition of poetry, and the reading of the *sagas* or histories, constitute the chief entertainment. The reformation was introduced in 1551, and at present there is no religious dissension among the natives. The inhabited part of the island is divided into 184 parishes. The island forms one bishopric. Every clergyman keeps a register, showing the moral and religious state of his parish. 3000 copies of the Icelandic Bible were printed by the British and Foreign Bible society, in 1813, for gratuitous distribution in the island. The government, as in other Scandinavian nations, was originally aristocratic. When the island became subject to a foreign power, the distinctions of rank gradually disappeared. The governor of Iceland is generally a Dane, appointed by the king of Denmark. The royal authority has not, at present, any constitutional check, but is exercised, nevertheless, in a mild and paternal way. The supreme court of judicature is held annually at Reikiavik. An appeal is permitted, in all cases, to the courts at Copenhagen. The laws are chiefly grounded on the ancient code, called *jonsbok*, compiled in 1280. The civilization of the Icelanders is in nothing so remarkable as in the completeness of their legislation. Trial by combat was abolished in 1001, and punishment for witchcraft in 1690, nearly 30 years before a similar improvement was made in the laws of Great Britain. In case of capital conviction, the criminal is sent to Norway to undergo his sentence, as it is not easy to find an executioner among the islanders. The taxes paid are very trifling, not perhaps exceeding 50,000 rix dollars. The laws respecting the maintenance of the poor are very strictly enforced. There are no hospitals except for lepers, who are, unfortunately, common. The sick, aged and infirm are, therefore, billeted on the farmers, who are obliged to give relief to their kindred within the fourth degree of consanguinity. Hospitality is a prominent virtue. Iceland was formerly more populous than at present. The history shows that the climate has been gradually growing more severe and the soil more ungrateful. There is a considerable excess in the female population, and the longevity of the women is greater than that of the men, owing to the greater hardships of the latter. In 1804, the farms amounted to 4751, the horned cattle to 20,325, the sheep to 218,818, the horses to 26,524. Reikiavik, the chief place of the island, is the seat of the governor, the episcopal see, the supreme court, and is the principal mercantile station. It contains about 550 inhabitants. About 15 miles from the south coast are the Vestmanna islands, 14 in number. Only one of them, Heimacy or Home island, is inhabited. The inhabitants (only 160) support themselves by fishing and bird-catching. In 1627, some Algerine corsairs carried off the occupants. Those who survived were ransomed in 1636, but only 13 persons regained their native island.—See the translation of Olafsen and Povelsen's *Travels in Iceland* (published in Paris, 1802, 5 vols., 8vo.); *Letters on Iceland, by Von Troil* (London, 1780); *Travels in Iceland in* 1810, *by Sir G. S. Mackenzie* (Edinburgh, 1811); *Journal of a Residence in Iceland, by E. Henderson* (Edin., 1818). For the literature, see Mallet's *Introduction to the History of Denmark;* Schlozer's *Fragments of Northern History;* Fin Johnson's *Hist. Eccles. Islandicæ;* and Eichhorn's *Alg. Geschichte der Literatur.*

Iceland Moss. (See *Lichen.*)

Ice Plant (*mesembryanthemum crystallinum*). This singular plant has received the above appellation from the little transparent vesicles which cover its whole surface. The stems are herbaceous, as large as the little finger, spread upon the ground, and very much ramified; the flowers are white, and, as in the rest of the genus, furnished with a great number of linear petals, which give them the appearance of compound flowers, though belonging to a very different family. It is a native of the

sea-coast of South Africa, the Canaries, and is also found in the vicinity of Athens. The other species of *mesembryanthemum*, upwards of 300 in number, forming one of the most numerous and remarkable genera of plants, are, almost without exception, confined to South Africa, and constitute a marked feature in its vegetation.

Icetas; tyrant of Leontini, who caused the sister and wife of Dion, who had fled to him for protection, to be thrown into the sea. He was called in by the Syracusans against the tyrant Dionysius, whom he defeated. But his ambitious designs induced the Syracusans to have recourse to the Corinthians, under Timoleon (q. v.), who defeated Icetas (345 B. C.), forced him to resign his power, and renounce his league with the Carthaginians. Having again taken arms against Timoleon, he was captured, and put to death, with his wife and children.

Ichneumon (*herpestes*, Illig.). These animals belong to the civet family, and are distinguished from their kindred genera by their narrower and more pointed muzzle, by the shape of their lower lip, and, more especially, by the absence of the double cavity beneath the tail, which is replaced by a single pouch, of considerable size, but destitute of secreting glands. Their hair is long, brittle, and generally variegated in color. The ordinary color of its coat is chestnut brown and fawn; nose and paws, deep chestnut, or black. It is about 18 inches from the snout to the root of the tail. The habits of the ichneumon are very similar to those of the ferret. In the countries where they are found, their sanguinary disposition and predatory habits render them a great annoyance to the inhabitants, from the destruction they cause among poultry. This is, however, compensated, in some degree, by the incessant war they wage against reptiles, the eggs of which they devour with great avidity. The most celebrated species inhabits Egypt and the adjacent countries, where it is called *Pharaoh's rat*. It is very common in the northern parts of Egypt, between the Mediterranean and Siout. It is of a gray color, and has a long tail, terminated by a black tuft; it is larger than a cat, but formed like the weasel. This species was ranked by the ancient Egyptians amongst their numerous divinities, on account, it is supposed, of the benefits which it confers on man by the destruction of crocodiles, whose eggs it digs out of the sand and sucks. The story of its overcoming these formidable reptiles themselves, by gliding down their throats, is, of course, a mere fable. Many other fabulous stories are related of the ichneumon by the Greek and Roman writers, Herodotus, Ælian, Diodorus, Pliny, &c. They are exceedingly expert in seizing serpents by the neck, in such a manner as to avoid any injury to themselves. Lucan alludes to this (in lib. iv, 724), in speaking of the asp. The ichneumon is domesticated and kept in the houses in Egypt, and is more useful than a cat in destroying rats and mice. They grow very tame, are exceedingly active, springing on their prey with great agility. They often squat on their haunches, and feed themselves with their fore-paws, like a squirrel. They are great enemies to poultry, and will often feign themselves dead till their prey comes within reach. Like the cat, they are great lovers of fish. When they sleep, they bring their head and tail under their belly, and appear like a round ball. Their voice is very soft, somewhat like a murmur, and, unless they be struck or irritated, they never exert it. Their great disadvantage, as domestic animals, is their unconquerable predilection for poultry, which they destroy whenever they have an opportunity, for the purpose of sucking their blood. In a wild state, they swim and dive in the manner of an otter, continuing beneath the water for a great length of time, and support themselves by fishing. These animals are shortlived, but grow very rapidly.

Ichneumon is also the name of a large genus of insects, belonging to the great order of *hymenoptera*. As the species of this genus are very numerous, so their manners are extremely diversified; but, in the general outlines of their character, they all agree, particularly in their depredations among the insect tribes. In some, the female has a wimble attached to her abdomen, and with this instrument, delicate as it appears, she is capable of perforating the hardest substances. The larvæ of wasps are the devoted prey of these insects, who no sooner discover one of their nests, than they perforate the clay of which it is constructed, and deposit their eggs within it. Others glue their ova to the skin of a caterpillar, whilst others, again, penetrate through it, and lay their eggs in its body. In all these cases, the young, as soon as they are hatched, prey on the caterpillar or larva, without, however, destroying it at once, as upon the life of its victim that of the spoiler appears to depend. The caterpillar, in fact, seems healthy, until the larvæ of the ichneumon have spun their

cocoons and entered the chrysalis state. We often see caterpillars fixed to a leaf or branch by the threads spun by the ichneumon. These carnivorous insects are of various sizes; some are so small that the *aphis*, or plant-louse, serves as a cradle for their young; others again, from their size and strength, are formidable even to the spider, destroying them with their powerful stings.

ICHTHYOLOGY (from the Greek ἰχθυς and λογος) is the science of fishes, or that part of zoology treating on these animals. Under the head of *Fishes* (q. v.), a general account of the habits and peculiarities of this division of animated nature has been given. It therefore only remains to present their classification according to the latest authorities. The following table has been arranged from the last edition of *Le Regne Animal*, and will show the great improvements and additions that have been made in ichthyology by the learned author. He justly observes, that this class of animals presents great difficulties when it is wished to subdivide it into orders, founded on fixed and obvious characters. Fishes form two distinct series, viz., *fish properly speaking*, and the *chondropterygiens* or *cartilaginous*. The first are divided into orders, viz.:

ORDER I.
ACANTHOPTERYGIENS.

FAMILY I.
PERCOIDEÆ.

DIVISION I.
THORACIC.

SUBDIVISION I.

Perca, *L.*
Labrax, *Cuv.*
Lates, *Cuv.*
Centropomus, *Lacep.*
Grammistes, *Cuv.*
Aspro, *Cuv.*
Apoyon, *Lacep.*
Cheilodipteres, *Lacep.*
Pomatomus, *Riss.*
Ambassis, *Commers.*
Lucio-Perca, *Cuv.*

Sub-genera, 5.

SUBDIVISION II.

Serranus, *Cuv.*
Plectropoma, *Cuv.*
Diacope, *Cuv.*
Mesoprion, *Cuv.*
Acerina, *Cuv.*
Rypticus, *Cuv.*
Polyprion, *Cuv.*
Centropristis, *Cuv.*
Gristes, *Cuv.*
Cirrhites, *Commers.*
Chironemus, *Cuv.*
Pomotis, *Cuv.*
Centrarchus, *Cuv.*
Priacanthus, *Cuv.*
Dules, *Cuv.*
Therapon, *Cuv.*
Pelates, *Cuv.*
Helotes, *Cuv.*
Trichodon, *Steller.*
Sillago, *Cuv.*
Holocentrum, *Artedi.*
Myripristis, *Cuv.*
Beryx, *Cuv.*
Trachichtys, *Shaw.*

Sub-genera, 3.

DIVISION II.
INGULAR.

Trachinus, *L.*
Percis, *Bl.*
Pinguipes, *Cuv.*
Percophis, *Cuv.*
Uranoscopus, *L.*

DIVISION III.
ABDOMINAL.

Polynemus, *L.*
Sphyræna, *Bl.*
Paralepis, *Cuv.*
Mullus, *L.*

Sub-genera, 2.

FAMILY II.

Trigla, *L.*
Prionotes, *Lacep.*
Peristedion, *Lacep.*
Dactylopteres, *Lacep.*
Cephalacanthes, *Lacep.*
Cottus, *L.*
Hemitripterus, *Cuv.*
Hemilepidotus, *Cuv.*
Platycephalus, *Cuv.*
Scorpæna, *L.*
Pterois, *Cuv.*
Blepsias, *Cuv.*
Apistes.
Agriopes.
Pelors.
Synanceia, *Bl.*
Monocentris, *Bl.*
Gasterosteus, *Cuv.*
Oreosoma, *Cuv.*

Sub-genera, 4.

FAMILY III.
SCIÆNOIDEÆ.

Sciæna, *L.*
Eques, *Bl.*
Hæmulon, *Cuv.*
Pristipoma, *Cuv.*
Diagramma, *Cuv.*
Lobotes, *Cuv.*
Cheilodactyles, *Lacep.*
Scolopsides, *Cuv.*
Micropteres, *Lacep.*
Amphiprion, *Bl.*
Premnas, *Cuv.*
Pomacentres, *Lacep.*
Dascyllus, *Cuv.*
Glyphisodon, *Lacep.*
Helias.

Sub-genera, 7.

FAMILY IV.
SPAROIDÆ.

Sargus, *Cuv.*
Chrysophris, *Cuv.*
Pagrus, *Cuv.*
Pagelus, *Cuv.*
Dentex, *Cuv.*
Cantharus, *Cuv.*
Boops, *Cuv.*
Oblada, *Cuv.*

FAMILY V.
MÆNADEÆ.

Mæna, *Cuv.*
Smaris, *Cuv.*
Cœsio, *Lacep.*
Gerres, *Cuv.*

FAMILY VI.
SQUAMMIPENNÆ.
Chætodon, *L.*
Psettus, *Commers.*
Pimelepterus, *Lacep.*
Dipterodon, *Cuv.*
Brama, *Bl.*
Pempheris, *Cuv.*
Toxotes, *Cuv.*
Sub-genera, 7.

FAMILY VII.
SCOMBEROIDÆ.
Scomber, *L.*
Xiphias, *L.*
Centronotus, *Lac.*
Rhinchobdella, *Bl.*
Notacanthus, *Bl.*
Seriola, *Cuv.*
Nomeus, *Cuv.*
Temnodon, *Cuv.*
Caranx, *Cuv.*
Vomer.
Zeus, *L.*
Stromateus, *L.*
Seserinus, *Cuv.*
Kurtus, *Bl.*
Coryphæna, *L.*
Sub-genera, 35.

FAMILY VIII.
TÆNIODEÆ.
Lepidopus, *Gouan.*
Trichiurus, *L.*
Gymnetrus, *Bl.*
Stylephorus, *Sh.*
Cepola, *L.*
Lophotes, *Gioma.*

FAMILY IX.
THEUTOIDEÆ.
Siganus, *Forsk.*
Acanthurus, *Lacep*
Prionures, *Lacep.*
Naseus, *Commers.*
Axinurus, *Cuv.*
Priodon, *Cuv.*

FAMILY X.
GILL-COVERS PLAITED.
Anabas.
Polyacanthus, *Kuhl.*
Macropodes, *Lacep.*
Helostomus, *Kuhl.*
Osphromenus, *Commers.*
Trichopodes.
Spirobranchus, *Cuv.*
Ophicephalus, *Bl.*

FAMILY XI.
MUGILOIDEÆ.
Mugil, *L.*
Tetragonurus, *Riss.*
Atherina, *L.*

FAMILY XII.
GOBIOIDEÆ.
Blennius, *L.*
Anarrhichas, *L.*
Gobius, *L.*
Callionymus, *L.*
Platyptera, *Kuhl.*
Chirus, *Steller.*
Sub-genera, 15.

FAMILY XIII.
PECTORALS PEDICULATE.
Lophius, *L.*
Batrachus, *Bl.*
Sub-genera, 3.

FAMILY XIV.
LABROIDEÆ.
Labrus, *L.*
Xirichthys, *Cuv.*
Chromis, *Cuv.*
Scarus, *L.*
Sub-genera, 15.

FAMILY XV.
MOUTH ELONGATED.
Fistularia, *L.*
Centriscus, *L.*
Sub-genera, 4.

ORDER II.
MALACOPTERYGIENS ABDOMINAL.

FAMILY I.
CYPRINOIDEÆ.
Cyprinus, *L.*
Cobitis, *L.*
Anableps, *Bl.*
Pœcilia, *Schn.*
Lebias, *Cuv.*
Fundulus, *Lacep.*
Molinesia, *Lesueur.*
Cyprinodon, *Lacep.*
Sub-genera, 10.

FAMILY II.
ESOSES.
Esox, *L.*
Exocetus, *L.*
Mormyrus, *L.*
Sub-genera, 10.

FAMILY III.
SILUROIDEÆ.
Silurus, *L.*
Malapterura, *Lacep.*
Aspredo, *L.*
Loricaria, *L.*
Sub-genera, 16.

FAMILY IV.
SALMONOIDEÆ.
Salmo, *L.*
Sternoptyx, *Herman.*
Sub-genera, 20.

FAMILY V.
CLUPEOIDEÆ.
Clupea, *L.*
Odontognathus, *Lacep.*
Pristigaster, *Cuv.*
Notopterus, *Lacep.*
Engraulis, *Cuv.*
Megalops, *Lacep.*
Elops, *L.*
Butirinus, *Commer.*
Chirocentrus, *Cuv.*
Hyodon, *Lesueur.*
Erythrinus, *Gron.*
Amia, *L.*
Sudis, *Cuv.*
Osteoglossum, *Vandelli.*
Lepisosteus, *Lacep.*
Polypterus, *Geof.*
Sub-genera, 4.

ORDER III.
MALACOPTERYGIENS SUBBRACHIENS.

FAMILY I.
GADOIDEÆ.
Gadus, *L.*
Macrorus, *Bl.*
Sub-genera, 9.

FAMILY II.
PLEURONECTOIDEÆ.
Pleuronectes, *L.*
Sub-genera, 6.

FAMILY III.
DISCOBOLI.
Lepadogaster, *Gouan.*
Cyclopterus, *L.*
Echeneis, *L.*
Sub-genera, 4.

ORDER IV.
MALACOPTERYGIENS APODES.

Muræna, *L.*
Saccopharynx, *Mitchell.*
Gymnotus, *L.*
Gymnarchus, *Cuv.*
Leptocephalus, *Pen.*
Ophidium, *L.*
Ammodytes, *L.*
Sub-genera, 11.

ORDER V.
LOPHOBRANCHIÆ.

Syngnathus, *L.*
Pegasus, *L.*
Sub-genera, 3.

ORDER VI.
PLECTOGNATHIÆ.

FAMILY I.
GYMNODONTÆ.

Diodon, *L.*
Tetraodon, *L.*
Orthagoriscus, *Sch.*
Triodon, *Cuv.*

FAMILY II.
SCLERODERMATA.

Balistes, *L.*
Ostracion, *L.*
Sub-genera, 4.

The second series of fishes, or the *cartilaginous*, is divided into two orders—the *sturiones*, or those with *free branchiæ:*

Acipenser, *L.*
Spatularia, *Sch.*
Chimæra, *L.*
Sub-genera, 2.

ORDER II.
BRANCHIÆ FIXED.

FAMILY I.
PLAGIOSTOMÆ.

Squalus, *L.*
Zygæna, *Cuv.*
Squatina, *Dum.*
Pristis, *Lath.*
Raia, *L.*
Sub-genera, 20.

FAMILY II.
CYCLOSTOMÆ.

Petromyzon, *L.*
Myxina, *L.*
Sub-genera, 3.

ICHTYOLITE (*Greek*) means, in mineralogy, a petrified fish, or a stone with the impression of a fish upon it.

ICHTHYS (ἰχθυς, Greek for *fish*); a word found on many seals, rings, lamps, urns and tombstones, belonging to the earliest Christian times. Each character forms an initial letter of the following words: Ἰησοῦς Χριστὸς Θεοῦ Υἱὸς Σωτήρ; that is, *Jesus Christ, the Son of God, the Savior.* The picture of a fish is also sometimes engraved on similar works, having a mystical meaning. The latter may have merely originated from the word ἰχθυ, and this again from the initials of the above-mentioned words; but it is much more probable that the ancient Christians gave to the image of the fish (so much revered as a religious symbol among most ancient nations) a mystical meaning, containing some allusion to their religion; as many signs and ceremonies were introduced from ante-Christian times, with some change of meaning. It was natural enough that nations who expressed all their religious and scientific conceptions symbolically, should adopt the fish as an emblem. On account of its immense fertility, the fish was emblematical of the great fructifying power of nature; and, as many kinds of fish indicate, by certain motions, the changes of weather, it became an object from which the priests prophesied; hence it readily became sacred to them. The fish was worshipped by the Syrians, Assyrians, Phœnicians, and by the Western Asiatics in general.

ICOLMKILL, or I-COLUMB-KILL; one of the Hebrides, called by the monkish writers *Iona.* Its original name, by which it is still known in its vicinity, was *I*, signifying *island;* but, St. Columba having founded a monastery there, it came to be called *I-Columb-kill* (the Island, Columba's Cell). It is about three miles in length by one in breadth, and is separated from Mull by a channel about a half a mile wide. Icolmkill is chiefly interesting to the antiquarian for the ruins of its ancient religious edifices. These were established, about the year 565, by St. Columba, who left Ireland, his native country, with the intention of preaching Christianity to the Picts. The remains of these edifices, almost all constructed of fine sienite, together with crosses and sepulchral monuments, are the antiquities now extant. The exact date of none of the former is known, but the church is said to have been built by queen Margaret, towards the latter end of the 11th century. It is built in the form of a cross, 164 feet long without, and 34 broad; the body of the church is 60 feet in length, and the two aisles of the transept, or cross, are each 30 feet long and 18 broad within the walls. The east window is a beautiful specimen of Gothic workmanship. In the middle of the cathedral rises a tower, 22 feet square, and between 70 and 80 high, supported by four arches, and ornamented with bass-reliefs. Here are the tombs of 48 Scottish kings, four kings of Ireland, eight Norwegian monarchs, and one king of France. The Cell of I be-

came the mother of 100 monasteries; the princes and nobles of Scotland were sent thither for education, and it was the favorite sepulchre of the Scotch and Irish kings. The island is described by Mr. Pennant, doctor Johnson, and other travellers.

Icon (εἰκών); an image.—*Iconolatry;* adoration of images.—*Iconoclasts* (q.v.); breakers of images.—*Iconography;* the representation of statues, busts, household gods, mosaic works, and pictures in water-colors. Michael Angelo and Ursinus were the restorers of this art, which was carried farther by John Angelus Canini and Bernard de Montfaucon. Canini published his Iconography at Rome, in 1669 (1 vol., 4to.), and Montfaucon the *Antiquités Expliquées.* The latest work of this kind is Visconti's *Iconographie Ancienne* (Paris, 1808—17, 4 vols., 4to.); it contains the portraits of the princes and celebrated men of antiquity. Three volumes form the *Iconographie Grecque*, the following the *Iconographie Romaine;* the fifth volume was published, in 1821, by A. Mongez; the sixth volume concludes the whole. Also the *Iconographie des Contemporains, depuis* 1789, *jusqu'à* 1820, by Delpech (Paris, 1824, 30 numbers, each with four portraits and a fac simile), has met with great success. The *Iconographie du Regne animal*, by Guérin, was published at Paris (1829).

Iconoclasts; that Christian party which would not tolerate images in the churches, much less the adoration of them. This dispute began in Greece, and extended from thence over Europe; it was most violent in the eighth and ninth centuries. In the three first centuries after Christ, the Christians had no paintings or images in the churches. The first cause of the Christian worship of images was, partly, the custom of erecting columns in honor of the emperors, with their statues, partly the attempt to preserve the memory of the bishops and the martyrs by images. In the fourth, and still more in the fifth century, they were placed in the churches, yet without receiving any adoration; but in the sixth century, people began to kiss the images, in token of respect, to burn lights before them, to offer incense in honor of them, and to ascribe to them miraculous power. Some bishops endeavored to dissuade Christians from this worship of images; others tolerated them as becoming decorations of the church; while others, in their reverence for them, approximated to complete idolatry. The Eastern emperor Leo III, the enemy of superstition and the worship of images, issued an edict, in 726, ordering the people to remove from the churches all the images, except that of Christ, and to abstain entirely from the worship of them. This order occasioned commotions, first in the islands of the Archipelago; and, as the popes Gregory II and III admitted of the worship of images, and the emperor Leo refused to recall his edict on their command, they excommunicated him, and his subjects in Italy threw off their allegiance. Thence arose two parties in the Christian church, namely, the *Iconolatræ* and the *Iconoclasts*, who have mutually persecuted each other, even to death. Leo's son and successor, Constantine, proceeded with less rigor. He convened a council at Constantinople (754), in which the use, as well as the worship of images, was condemned. Constantine's son, Leo IV, who ascended the throne 773, followed the same course; but his wife, Irene, caused him to be poisoned, in 780, and a council at Nice, in Bithynia, Natolia, restored the worship of images (786), and inflicted punishment upon those who maintained that nothing but God ought to be worshipped. Although the Greeks and Italians were addicted to the worship of images, yet most Christians of the West, as the Britons, Germans, Gauls, did not follow their example; on the contrary, they asserted that it was lawful to retain images, and expose them in the churches, but that they could not be worshipped without offending God. Charlemagne, probably assisted by Alcuin, wrote against the worship of images, and a council which he caused to be held at Frankfort on the Maine (794) confirmed his opinion, notwithstanding the opposition of pope Adrian. Among the Greeks, the controversy concerning images broke out anew after the banishment of Irene (802), and lasted almost half a century. Her successor, Nicephorus, did not, indeed, remove the images from the churches, but he forbade the adherents of the images from persecuting their adversaries. Finally, the empress Theodora, by a council held at Constantinople, 840, restored the worship of images among the Greeks, which was confirmed by a second council, held, 879, in the same place. In the Western Empire, images were at first retained only to preserve the memory of pious men, but the worship of them was forbidden. This use of them was confirmed by a council summoned by Louis the Debonnaire, in 824; but this opinion was gradually abandoned, and the decision of the pope, which allowed the worship of images,

finally prevailed in the Western church. (*See the following article.*)

Iconolatry (from the Greek εἰκών, image, and λατρεία, worship); the worship or adoration of images. The preceding article shows what dissensions the worship of images has produced in Christendom. To Protestants, the respect (whatever it may be called) which the Catholics pay to images is an object of great dislike: they consider it the breach of one of the first commandments of Christianity—to worship in the spirit and in truth—whilst, on the other hand, the Catholics say that malice or ignorance only can ascribe to them the heathen custom of adoring images. Every thing, say they, depends upon the meaning given to the word *adore*. "In vain," says the Catholic writer in the *Dictionnaire de Théologie*, article *Adoration*, "do they (the Protestants) maintain that God alone shall be adored: if they mean by it, *honored as the Supreme Being*, it is true; if they understand by it, that he is the only being to be honored, it is a falsehood." He thus continues: "We respect their (the saints') images, because they represent them, and their relics, because they belonged to them; but we do not adore them, if by *adoring* is understood worshipping them like the Supreme. If some Catholic authors, from a careless use of language, have improperly applied the expression *adoration*, this proves nothing, as our creed is clearly exposed in all our catechisms." The Protestants maintain, first, that "none is holy but the Father;" and no gradation in worship can exist; that the mass of men, always being inclined to take the form or sign for the essence, do so also among the Catholics (if we are to suppose the images were not intended for real worship by the church), as all Catholic countries sufficiently prove, by the unrestrained worship and miraculous powers ascribed to images; and, thirdly, that there is a vast difference between the "respect" paid by Catholics to images, and that shown to them by Lutherans, who undoubtedly respect the religious paintings in their churches, on account of the subjects represented, but neither pray before them, nor kiss them, nor ascribe miraculous power to them, nor think them essential to religious service. The Calvinists are still more rigid than the Lutherans in regard to paintings and similar ornaments in churches.

Iconozo; the name of two natural bridges in Colombia, province of Cundinamarca (New Granada), on the road from Santa Fe de Bogota to Ibaque, south-east of the village of Pandi. They traverse the river of Somma Paz, which runs in a narrow, deep valley, that would be inaccessible, if it were not for these bridges, which stand one above the other. The most elevated is 325 feet above the river, 2870 feet above the level of the sea, over 40 feet wide, and is composed of a solid rock, in the form of an arch; its thickness in the centre is seven or eight feet. The second bridge is more than 50 feet below the other. It appears to be the result of the fall of a part of the rock which formed the first. In the centre is an opening, through which is seen the abyss, and innumerable night-birds hovering above the water, which falls into a cavern so dark that its sides are not distinguishable.

Id., Ibid.; abbreviations of *idem*, *ibidem*, *the same* (author), or *at the same place*.

Ida (in ancient geography); 1. a mountain in the Troad, at the foot of which lay the city of Troy, and whose declivity towards the sea forms the scene of the famous events during the siege of Troy. Its southern part was called *Gargarus*, and one of its highest peaks, *Cotyllus*. On mount Ida was a temple to Cybele, who was called the Idæan mother (*Idæa mater*). Here Paris ended the strife between the three goddesses, and gave to Venus the prize of beauty; here Ganymede was seized and carried to Olympus; and in general, mount Ida was the scene of many Grecian fables. It produced a great number of pines, and was famous for its pitch. 2. A mountain in the island of Crete, or, more properly, the middle and highest summit of the chain which divides the island from east to west. The eastern part was called *Dicte*, the western *Leuci* (*albi montes*). This highest peak, particularly called *Ida* (now *Psiloriti*), has at its foot a circumference of 600 stadia. This peak terminates in two rocky summits, almost always covered with snow and ice. It affords, from its height, a fine prospect, and is covered with woods of pine, maple and cedar, but it is not very fertile. Among the few plants which grow upon this mountain is the *tragacantha* (goat's thorn). Copious streams flow down its sides, and enrich the neighboring summits. The first inhabitants of Crete dwelt in its caves, and iron is said to have been first found there. Mount Ida is famous as the birthplace of Jupiter. (See *Candia*.)

Ideal; an imaginary model of perfection. In the fine arts, the ideal is distinguished from the exact imitation of reality by avoiding the imperfections which always disfigure the individual, and giving

to each excellence its highest perfection. Imagination creates ideals, in the fine arts, by abstractions from individual forms, separating the individual and casual from the general and the essential, and thus produces ideals of a particular kind. If it performs the same process on these, again abstracting the general and essential, it creates new ideals of a still higher kind; and, if this abstraction be carried on further, we arrive at last at the pure ideal, which is incapable of any further separation and generalization—the ideal form of the whole genus. Thus man creates forms elevated above the real forms of nature: we do not say above nature itself, because we understand by nature not only the actual appearances of the sensible world, but also the laws and prototypes which lie at their foundation, and at which imagination arrives in the way indicated. As in thousands of crystals we do not find one which forms a perfect mathematical figure, while the effort of nature to produce such a figure is obvious in all, so is it with the beautiful. All the individual instances may be regarded as the imperfect attempts of nature to produce a faultless model. In creating the ideal of beauty, man does not follow, as some suppose, the arbitrary suggestions of fancy, but strives to discover and present the prototypes of nature. Imagination finds the materials of the ideal in reality, but she unites the separate traits of the grand and the beautiful, dispersed through nature in one perfect ideal. So, too, there may be ideals of the hateful, the horrid, the malignant; for the ideal aims merely at completeness, whether in the good or the bad, the grand or the mean, the graceful or the ugly, the heroic or the ridiculous. Dante often gives us the ideal of physical suffering, whilst the Koran aims to present the ideal of sensual enjoyment. The caricature is, under a certain point of view, an ideal. The characteristic, which is founded on the deviation of the individual form from the generic, is therefore opposed to the ideal, which loses by any deviation from the generic form; but, on the other hand, the representation gains in character, and thus satisfies the claims of the fine arts, which require not only the beautiful but the true. Truth must in no case be sacrificed to beauty. A medium must therefore be employed, by which the truth may be represented as beautiful. This medium is the true ideal of the imitative arts. Genius only can decide how far the characteristic and the generic are to be mingled. (See the article *Copy*.)

Idealism is the name usually given to that system of philosophy, according to which, what we call external objects are mere phenomena of our own minds. It originated with Descartes. Malebranche went a step farther; but bishop Berkeley was the first who sought to prove the non-existence of matter, and is therefore regarded as the founder of modern idealism. (See *Berkeley*.)

Ideler, Christian Lewis, a distinguished German scholar, was born near Perleberg, in Prussia, in 1766, was for some time royal astronomer at Berlin, and is, at present, ordinary professor of philosophy. Ideler compiled a Manual of the Italian Language and Literature (two volumes, 1800—2; second edition, 1820—22), edited a Spanish edition of Don Quixote (six volumes, Berlin, 1800), and wrote Historical Investigations concerning the Astronomical Observations of the Ancients (German, Berlin, 1806); Inquiries into the Origin and Meaning of the Names of Stars (Berlin, 1809); Manual of Mathematical and Technical Chronology (two volumes, Berlin, 1825). He likewise compiled, in connexion with J. W. H. Nolte, a Manual of the English Language (fourth edition, 1823), and a Manual of French Literature (seventh edition, 1825).

Identity, System of. (See *Schelling*.)

Ideographic; that way of writing which expresses the ideas and not the sound. Part of the Chinese characters are ideographic; as, for instance, when the sign which signifies *hand*, and some other sign, expressing a material, designate the trade in which this material is made or used: this is *ideographic* writing. (See *Chinese Language*, and *Hieroglyphics*.)

Ides, or Idus; with the Romans, the 15th day of March, May, July and October. In the other months, it was the 13th, owing to the variation of the nones. (q. v.) These days were sacred to Jupiter, to whom the *flamen dialis* sacrificed a sheep. The *ides* were also sacred to different deities. The *ides* of March, on account of Cæsar's death, was an *ater dies*, and was called *paricidium*. The senate was not allowed to sit on that day. (See *Calendar*.)

Idiosyncrasy (*Greek*) means the peculiar effect produced by certain agents upon the bodily frame; or the peculiar, and, frequently, morbid feeling of liking or dislike which a person has, with regard to certain objects, whether physical or intellectual.

Idiot (from the Greek ἰδιώτης, which signified a private citizen); one who took no interest in the general welfare. The

modern meaning therefore deviates much from the old one.

Idioticon; a dictionary confined to a particular dialect, or containing words and phrases peculiar to a part of a country. There exist in Germany several very valuable *Idiotica*.

Idocrase is found most usually in distinct crystals, with the general form of short, square prisms. Their primary form is a right prism, with square bases; and the crystals yield to cleavage parallel to all its planes, with sufficient brilliancy to obtain incidences of 90° by the reflective goniometer in every direction. Lustre, vitreous, inclining to resinous, sometimes very distinctly the latter; color, various shades of brown, passing into leek-green, pistachio-green, olive-green and oil-green; streak, white, semi-transparent, or only translucent on the edges. If viewed in the direction of the axis, the colors incline more to yellow; perpendicular to it, more to green; hardness between that of feldspar and quartz; specific gravity, 3.399. It also occurs massive and granular. Idocrase was first found among the lavas of mount Vesuvius, and hence its old name, *Vesuvian*. It was afterwards discovered at Eger, in Bohemia, and, being taken for a new mineral, was called *Egeran*. A variety, resembling egeran, has been called *loboite* and *frugardite*. Another, from Tellemarken, in Norway, of a blue color, and containing copper, has been called *cyprine*. Idocrase has yielded by analysis the following results (the two first were obtained by Klaproth, the third by count Dunin Borkousky):

	Vesuvian from Vesuvius.	Vesuvian from Siberia.	Egeran from Bohemia.
Silica,	35.50	42.00	41.00
Alumine,	33.00	16.25	22.00
Lime,	22.25	34.00	22.00
Magnesia,	0.00	0.00	3.00
Oxide of iron,	7.50	5.50	6.00
Oxide of manganese,	0.25	a trace	2.00
Potash,	0.00	0.00	1.00

The varieties from Vesuvius and from Fassa in the Tyrol, easily melt into a dark-colored globule. The localities of idocrase in Europe are numerous. In the U. States, it has been met with, handsomely crystalline, at Worcester, in Massachusetts, of a reddish brown color, like the egeran of Bohemia; in Newton, New Jersey, also in white limestone, with blue corundum, in large yellowish-brown crystals; and at Amity, Orange county, New York, in white limestone, with augite, spinelle and brucite.

Idolatry. Reason commands us to adore a supreme, infinite, perfect being, whom we call *God*. Idolatry, however, reveres a false god, an idol, a being which is not God—a finite being instead of the infinite. We learn from history, that the pure idea of the inexpressible Godhead spreads but slowly; for man always seizes the form instead of the substance, and is long in acquiring a purely spiritual conception. This is the case with individuals as well as with whole nations. History teaches us also, that the fear of misfortunes and the desire of happiness have been the chief sources of idolatry. At first, natural causes were unknown to men. They could not explain the growth of fruit, the origin of heat, of light, of the winds, &c. Without the labor of profound investigation, their imaginations created rulers of either sex, to whom they ascribed the direction of all outward events. Thus, some revered stars, trees, stones, springs, &c. Others gave their gods human shapes, and, at the same time, human passions, desires and wants. Thus anthropomorphism (the representation of the Deity with human qualities, either actual or symbolical) took its origin. Men endeavored to gain the favor of God, as they did that of their fellow men, by offerings and prayers. Each nation had its particular god, who was not the common father of all men, but its own tutelar divinity, and so had every tribe, family, and even individual. The image of this tutelar god had its place in the house, and became the god of a house, of a man, or of a family. His presence and power were limited to the place of his residence: he became the protector and counsellor of him by whom he was chosen. The god of the hunter and of the warrior became the god of hunting and of war. The god of the shepherd took care of the herds, and the god of the husbandman became the patron of agriculture and the bestower of fruitful seasons. Those divinities required particular ministers, whose duty it was to regulate their worship, to bring before them the wishes of men, and return their answers to the suppliants. This office, selfish cunning turned to its own advantage. Individuals pretended to a familiar intercourse with the gods: thus originated prophecies and oracles. Many sensible men, even in the most ancient times, were, however, convinced of the folly of all this, and were led to the idea of one God.

Idomeneus; son of Deucalion, and grandson of Minos, king of Crete. He was remarkable for his beauty, and was

one of the suitors of Helen: he, however, continued a friend of Menelaus, and often visited him in Lacedæmon. With Merion, he led the Cretans, in 80 ships, to Troy, and distinguished himself by his valor. At the funeral games of Patroclus, he quarrelled with Ajax Oïleus, maintaining that Diomed had won the prize in the chariot race, while Ajax claimed it for Eumelus. Achilles ordered them both to be silent, and Diomed asserted that Idomeneus had feeble eye-sight, through age, whence it appears that he must then have been very old. After the conquest of Troy, he embarked with Nestor, among the first of the Greeks, and, during the voyage, was assailed by a violent tempest. To escape from it, he made to Neptune the rash vow, that he would sacrifice to him the first person whom he should meet. The storm abated, and he arrived happily at the port; but the first person he met was his only son, who had heard of the arrival of his father, and came to welcome him. Nevertheless, Idomeneus sacrificed him. His subjects, who feared the vengeance of the gods upon their land for such a deed, rebelled, and drove him from the island. He went to Italy, and founded the city of Salentum, where he introduced the laws of Minos, and was honored as a god after his death. According to other historians, he was driven from Crete by Leucus, and went to Colophon, where he died, and was buried on mount Cercaphus. Others, and especially Diodorus, say nothing of the vow, but relate that he returned safely to Crete, where he died quietly, after a long and peaceful reign; that he was buried near Gnossus, and received divine honors.

Idria, a town in Carniola, in the Austrian kingdom of Illyria, so celebrated for its quicksilver mines, lies in a valley surrounded on every side by lofty mountains, covered by thick woods; population, 4139, who are mostly engaged in mining, or in occupations connected therewith. The valley being extremely narrow, the houses stand on the sides of the hill, each with a garden annexed to it, in which the miners raise a few vegetables, notwithstanding the inclemency of the climate and the sterility of the soil. The little river Idrizza, in winter a formidable torrent, runs through the midst. The number of laborers, above and below ground, is stated at 900, exclusive of upwards of 300 wood-cutters, who fell timber in the forests, which they float down the rivers, or prepare in various ways. The annual produce of these mines amounted formerly, for a considerable period, to from 500 to 600 tons of quicksilver. The greatest part of it used to be exported to Spain, whence it was sent to America for the amalgamation of silver ores; but the revolutions, terminating in the independence of the Spanish colonies, effectually interrupted those dealings, and, as the market for the produce was diminished, the mines of Idria were wrought with less vigor, and the amount now produced is not more than half that abovementioned. A great part of the quicksilver is conveyed to Vienna and sold on the account of the emperor. England, it is said, takes the largest share. The mines of Idria have the reputation of being the most magnificent in the world. The galleries and adits are so neat and spacious, that no disagreeable exhalation is perceptible. The entrance is by a lofty, vaulted cavern, conducting to the descents: these are formed by clean stone steps, which are kept in excellent order. The steps have several landing places, paved with broad flags, and provided with benches to rest on. As the miners proceed deeper into the pit, the passages continue to be arched over, and provided with steps. In a very few places, the vault is supported with wood, and occasionally the solid rock is cut through, which, of course, needs no support. The ore is not of uniform richness: some specimens furnish 80 per cent., but the average does not exceed 50. The small quantity of virgin quicksilver that is occasionally found, is shown as a rarity. The principal shaft is 80 fathoms in depth. In the beginning of the present century, the wood-work in the galleries of these mines took fire, and the conflagration raged so obstinately as to threaten the destruction of the whole. The heated, sulphurous exhalations prevented the workmen from approaching the scene of danger, and the flames could not be extinguished until the river was led, by an artificial channel, to discharge itself into the mines. The mines belong to the government, and are wrought entirely at its expense. The district of Idria contains 63 square miles, and 10,000 inhabitants, who manufacture linen and laces.

Iduna. (See *Northern Mythology.*)

I. E.; abbreviation of *id est*, Latin for *that is.*

Iferten. (See *Yverdun.*)

Iffland, Augustus William; a celebrated German actor and dramatic writer, born at Hanover, April 19, 1759. His taste for the theatre manifested itself in his infancy, and he was so much affected by the

representation of the Rhodogune of Corneille, that his parents would suffer him to be taken to the theatre but very rarely. Nothing, however, could prevent him from indulging his natural inclination; and his father having declared that he would never permit him to be an actor, he left home privately, and made his debut at Gotha, in 1777. The poet Gotter, who then resided in that city, assisted young Iffland with his advice. When this theatre was dissolved, he went to Manheim, in 1779, and, in 1796, was invited to Berlin, to take the direction of the theatre there, and, in 1811, was appointed general director of all the royal plays. He died Sept. 22, 1814. His autobiography is in volume first of his works. He was no less famous as a writer than as an actor. His first production was a tragedy, called Albert of Thurneisen, which was well received by the public, and was followed by a number of dramatic pieces for the theatre of Manheim, among which may be mentioned, the Neighbors; Daughters to be married; the Act of Birth; the Idlers; Mr. Musard; besides translations from the French of Picard and Duval, and from the Italian of Goldoni. The works of Iffland are very numerous. An edition of them was published under his own direction, at Leipsic, in 1798 (17 vols., 8vo.). It comprises, besides 47 plays, memoirs of his theatrical career, and reflections on the theory of his art. Madame de Staël said of him, that there was not an accent or a gesture, for which Iffland could not account as a philosopher and an artist.

Ignatius Loyola. (See *Loyola*, and *Jesuits*.)

Ignatius, Saint; one of the fathers of the church, who suffered martyrdom at Rome, during the third persecution of the Christians. He was a Syrian, and is said to have been an immediate disciple of St. John the Evangelist, who, in the 67th year of the Christian era, committed the church at Antioch to his pastoral superintendence. There he presided for upwards of 40 years, when the emperor Trajan, after his triumph over the Dacians, entering the city, exercised many severities towards the Christians, and summoned the prelate himself before him. Ignatius conducted himself with such boldness in the imperial presence, that he was forthwith sent to Rome, and ordered to be exposed in the amphitheatre to the fury of wild beasts. This dreadful death he underwent with much fortitude, having availed himself of the interval between his sentence and its execution to strengthen, by his exhortations, the faith of the Roman converts. Of his works, there remain seven epistles, edited, in 1645, by archbishop Usher, republished by Cotelerius, in 1672, in his collection of the writings of the apostolical fathers, and again printed, in 1697, at Amsterdam, with notes, and the commentaries of Usher and Pearson. An English translation of them, from the pen of archbishop Wake, is to be found among the works of that prelate. There are some other letters, of minor importance, which are generally considered to have been attributed to him on insufficient authority.

Ignition (glowing heat) denotes that state of certain bodies, in which, from being exposed to a high temperature, they appear luminous. Two kinds of ignitible bodies are distinguished; namely, such as become entirely changed by ignition, as charcoal, sponge, &c., and such as retain their former state, as iron, for example. The first is a regular combustion, in which, however, no gas rises from the bodies in the form of flame. The second is a mere heat. Of the metals, many liquefy before they become ignited; for example, lead and tin. Iron, on the other hand, becomes ignited long before it melts. Three stages of ignition may easily be distinguished. Iron, at about 770 degrees of Fahrenheit, becomes brownish red, which is the commencement of ignition. At a higher temperature, it becomes red hot; at about 1000 degrees of Fahrenheit, it becomes white hot, and emits a very white, brilliant light. If gradually cooled, ignition diminishes in the same inverse order. In this gradual transition, we perceive all the different colors of light. Hence the Dynamists conclude that caloric, in ignition, actually combines with bodies, and does not merely penetrate their pores, as the atomists teach.

Ignis Fatuus. (See *Meteor*.)

Iguala, Plan of. This name is given by the Mexicans to the articles of pacification and agreement, proposed at Iguala, February 24, 1821, by Iturbide, who, at that time, was commander of the royalist army under the viceroy Apodaca. The plan provided, 1. for the preservation of the Catholic religion; 2. for the intimate union of the Europeans and Mexicans; and 3. for the independence of Mexico. These articles are otherwise denominated the *three guarantees*, and their promulgation accomplished the separation of Mexico from Spain. (See *Iturbide*, *Mexico*.)

Iguana. These reptiles are thus characterized by Cuvier: body and tail cover-

ed with small imbricated scales; the ridge of the back garnished with a row of spines, or rather of elevated, compressed and pointed scales; under the throat, a compressed and depending dewlap, the edge of which is attached to a cartilaginous appendage of the hyoid bone. Their thighs are provided with a similar arrangement of porous tubercles with the true lizards, and their head is covered with scaly plates. Each jaw is furnished with a row of compressed triangular teeth, having their cutting edges serrated; there are also two small rows on the posterior part of the palate. There are many species described by naturalists, most of which are natives of tropical America. They live for the most part on trees, but sometimes go into the water. They feed on fruits, seeds and leaves. The female deposits her eggs, which are about the size of a pigeon's egg, in the sand. Many of the species are considered as great culinary delicacies by the natives of the countries in which they are found. The common iguanas (*I. tuberculata*, Laur.) are eagerly sought, especially in the spring. They are caught by means of a noose attached to the end of a stick. The iguana, although formidable in appearance, is timid and defenceless. It is very active, though, when it has taken refuge in a tree, it appears to depend on the security of its situation, and permits itself to be taken by its pursuers. Where the noose cannot be conveniently used, it is struck on the head with a stick and stunned. They attain a great size, being sometimes found five feet in length. The word *iguana* is said, by some authors, to be derived from the Indian *hiuana*, and, by others, to have originated in the Javanese word *leguan*.

Ildefonso, St.; a village containing La Granja, a royal palace of the king of Spain, in Old Castile, built in a mountainous country, by Philip V, in imitation of Versailles; 6 miles N. E. Segovia, 40 N. by W. Madrid. Population, 4887. The exterior of the palace is not very magnificent, but the interior contains a great number of valuable paintings, statues, &c. The gardens are very magnificent, being the chief ornament. The elevation of the palace above the sea is 3789 feet, the highest royal residence in Europe. The castle and gardens of St. Ildefonso cost about 45,000,000 of piastres. At this place a peace was signed between the king of Spain and the French republic, August 4, 1795.

Ile de France. (See *France, Isle of.*)

Ili (*Turkish* for *country*); a word appearing in geographical names, as *Roumili* (country of the Romans).

Iliad. (See *Homer.*)

Ilissus; a rivulet which watered the plain of Attica, and flowed down from the Hymettus (q. v.), laved Athens, and was lost with the Cephissus in the morasses.

Ilithyia; among the Greeks, the goddess who assisted women in childbirth. The name, which some have derived from the Oriental languages, appears to be purely Greek, and to signify *she who comes*. This goddess, when her assistance is required, comes at the third call, and the female is saved. Pausanias says that, not far from the chapel of Serapis, at Athens, a temple was built to Ilithyia, who, coming from the Hyperboreans, had assisted Latona, when seized with the pangs of childbirth, in Delos. The Cretans, on the contrary, believed that Ilithyia was born at Amnisus, in the country of Gnossus, and was a daughter of Juno. Thus there were two Ilithyias, who are to be distinguished from each other. According to Grecian mythology, Juno, the institutress and protectress of marriage, had two daughters—Hebe, or the pure virgin, and Ilithyia, or she who bears. Juno therefore could send or refuse the assistance of her daughter Ilithyia, and is often represented herself as the bringer into light (Lucina), as is evident from the passage in Terence, *Juno Lucina, fer opem*. According to Horace, in his secular ode, Ilithyia and Lucina were the same. The second goddess of the name was a divinity regarded, in Asia Minor, as the emblem of the creative and all-nourishing power of nature, and her worship spread from Media along the shores of the Black sea to Asia Minor. The image of this goddess, in heaven, was the moon; on the earth, a cow. Her principal abode was Ephesus, and, her worship being confounded with that of the children of Latona in later times, she became the Artemis of the Greeks, and the Diana of the Romans. The number of Ilithyias afterwards increased to three, of which two were good, and one evil. All three were, at a later period, called *genetyllides*, or *goddesses of childbirth*.

Ilium, in ancient geography; the name of two cities, which are distinct from each other:—1. New Ilium, now known under the ancient name of *Troy*, or the modern name of *Trojahi*, in the territory of Troas, near the influx of the Hellespont into the Ægean sea. 2. Old Ilium, or the celebrated city of Troy, so

called from Ilus, son of Troas, was situated farther from the coast. (See *Troy.*)

ILLE-ET-VILAINE. (See *Department.*)

ILLIMANI. (See *Nevados de Illimani*, and *Andes.*)

ILLINOIS; one of the U. States; bounded north by the territory of Huron, east by lake Michigan and the state of Indiana, south by the Ohio river, which separates it from Kentucky, and west by the Mississippi, which separates it from the state and territory of Missouri. Lat. 37° to 42° 30′ N.; lon. 87° 20′ to 91° 20′ W.; 380 miles long, from north to south, and 210 miles wide, from east to west; square miles, 58,000. Population, according to the U. States' census of 1830, 157,575, and according to the state census of the same year, 161,055. There are, besides, about 5900 Indians, chiefly of the tribes of the Sacks and Foxes, and the Pottawatamies. The state is divided into 48 counties. The capital of the state is named Vandalia. It is situated on the Kaskaskia river, a little south of the centre of the state. The other principal towns are Kaskaskia, Cahokia, Edwardsville and Shawneetown. The principal rivers, besides the Mississippi, Ohio, and Wabash, which bound the state on the west, south and east, are the Illinois, Kaskaskia, Little Wabash, Big, Muddy and Rocky rivers. The sources of the Illinois and Rocky rivers are near those of the streams which empty into Michigan lake, and the country is so flat that, in the wet seasons, the waters of the rivers unite, so that boats pass through them from the Mississippi to the lake. It is proposed to construct a canal, which shall unite the permanently navigable parts of the Illinois with lake Michigan, and, to promote this object, a large grant of land, lying upon the route of the proposed canal, has been made by congress. The southern and middle parts of the state are for the most part level. The banks of the Illinois and Kaskaskia, in some places, present a sublime and picturesque scenery. Several of their tributary streams have excavated for themselves deep and frightful gulfs, particularly those of the Kaskaskia, whose banks, near the junction of Big Hill creek, present a perpendicular front of solid limestone 140 feet high. The northwestern part of the territory is a hilly, broken country, though there are no high mountains. The climate is not materially different from that of the same latitudes in the Atlantic states. The low and wet lands, in the southern part, are unhealthy. The cold of winter is sometimes extremely severe. The soil has been divided into six distinct kinds:—1. Bottom lands, bearing a heavy growth of honey locust, pecan, black walnut, beach, sugar maple, buckeye, pawpaw, grape vines, &c. This land is of the first quality, and is found, in greater or less quantities, on all the considerable rivers. It is of inexhaustible fertility, and is annually cultivated without manure. 2. Newly-formed land, found at the mouths and confluences of rivers. It produces sycamore, cotton wood, water maple, water ash, elm, willow, oak, &c. There are many thousand acres of this land at the mouth of the Wabash, and at the confluence of the Ohio with the Mississippi. It is annually inundated, and is unhealthy. 3. Dry prairies, approaching the rivers and bordering on the bottom land, from 30 to 100 feet higher, and from 1 to 10 miles wide. These prairies are destitute of trees, except where they are intersected by streams of water and occasional tracts of woodland. It has been estimated that as much as two thirds of the whole state consists of open prairie. The dry prairie has a black rich soil, well adapted to the purposes of agriculture, and is covered with rank grass. 4. Wet prairie, found remote from streams, or at their sources. This is generally cold and unproductive, abounding with swamps and ponds, covered with tall grass. 5. Land covered with timber, moderately hilly, well watered, and of a rich soil. 6. Hills of a sterile soil, and destitute of timber, or covered with stunted oaks and pines. The prevailing forest tree in Illinois is oak, of which as many as 13 or 14 different species have been enumerated. Honey locust, black walnut, mulberry, plum, sugar maple, black locust, elm, bass wood, beach, buckeye, hackberry, coffee nut, sycamore, spice wood, sassafras, black and white haws, crab apple, wild cherry, cucumber, and pawpaw, are found in their congenial soils throughout the territory. White pine is found on the head branches of the Illinois. On the Saline river, a branch of the Ohio, are salt springs, from which salt is manufactured at a cheap rate. About 300,000 bushels of salt are made here annually. At Galena, on Fever river, near the north-western corner of the state, are very rich lead mines, from which great quantities of that metal are obtained at a very trifling expense. The working of these mines was begun in the year 1821. In 1824, there were made 175,220 lbs. of lead; in 1825, 664,530 lbs.; in 1826, 958,842 lbs.; in

1827, 5,182,180 lbs.; in 1828, 11,105,810 lbs.; in 1829, 13,343,150 lbs.; and in 1830, 8,323,998 lbs. The diminution in the quantity made in 1830, compared with the produce of the preceding year, was occasioned by the great reduction in the price of lead. The quantity of lead received by the U. States, in 1830, from the miners, for rents, was 504,214 lbs. The chief produce of the state is Indian corn, wheat, and the other agricultural productions of the Northern States. A few families emigrated from Canada about the year 1720, and settled at Kaskaskia and Cahokia, where their descendants still remain. In 1800, the whole population of the territory, which now forms the state, exclusive of Indians, was 215. In 1810, the population was 12,282; in 1820, 55,211; and in 1830, 157,575, of whom, at the last named date, 1653 were free blacks, and 746 slaves. The territory of Illinois was formed into a state, and admitted into the Union, in 1818. The constitution provides that no more slaves shall be admitted into the state. The legislative power is vested in a general assembly, consisting of a senate and a house of representatives. The senators are chosen for periods of four years, and the representatives for two years. The executive power is vested in a governor, who is chosen for four years, and is ineligible for the next succeeding four years. There is a supreme court established by the constitution, and there are inferior courts established by the general assembly. The judges are appointed by the assembly, and hold their offices during good behavior, or till removed by the governor, on the address of two thirds of each branch of the general assembly. One section of land, in each township, amounting to a thirty-sixth part of the township, is granted for the support of schools; and three per cent. of the net proceeds of the U. States' lands sold within the state, is appropriated for the encouragement of learning, of which a sixth part is required to be bestowed on a college or university. A further provision has been made for a university by the grant of two townships of land by the U. States. A college has been established at Jacksonville, which is yet in its infancy. It is proposed to extend the national road from Indianopolis to Vandalia, and thence to St. Louis.

Illinois; a river formed by the junction of the Theakiki and Plein, in the northwest part of Indiana, in latitude 41° 48′ N. It passes into Illinois, pursues generally a south-westerly direction, and flows into the Mississippi, 21 miles above the Missouri. It is upwards of 400 yards wide at its mouth, and is about 400 miles long from its junction to the Mississippi, and is of easy navigation. It has a very gentle current, unbroken by falls or rapids, and passes through a fine country. The Plein, its northern head branch, interlocks with the Chicago, which flows into lake Michigan. A canal has been projected to unite the head waters of the Illinois with lake Michigan, and thus connect the Mississippi and the great lakes.

Illuminati (viz. the *enlightened*); a secret society, founded 1776, by Adam Weishaupt, professor of law at Ingolstadt, for mutual assistance in attaining a higher degree of morality and virtue. It contained, in its most flourishing condition, 2000 members, among whom were individuals of distinguished talents and high rank. The constitution and organization were taken partly from the Jesuits, and partly from the masons. By order of the Bavarian government (1784) the society was dissolved. The society had no influence whatever on the French revolution, as has often been said.

Illuminating. (See *Manuscripts, Illuminated.*)

Illyria. The Illyrians, a nation of kindred origin with the ancient Thracians (mingled with Greeks, Phœnicians, Sicilians and Celts), were spread over the whole coast on the east of the Adriatic, the neighboring islands, and Western Macedonia as far as Epirus. Philip, king of Macedonia, took from them the part of their country extending from Macedonia to the river Drinius (now Drino), and Illyria (Illyricum, Illyrica) was divided into Illyrica Græca and Barbara. The former (modern Albania) was incorporated with Macedonia. It contained Dyrrachium (Durazzo), formerly Epidamnus, where the Romans commonly embarked for Italy, and Apollonia, a Greek commercial city of some importance, with an academy. The latter division extended from the river Arsia (now Arsa), in Istria, to the Drinius, and was divided into Japydia, Liburnia and Dalmatia. This province obtained distinction in the history of the Roman emperors, several of whom were born here. Piracy was one of the principal means of subsistence of the Illyrians, whose kings, therefore, were frequently embroiled in quarrels with the Romans, which, at last, ended in the subjection of the Illyrians, under their king Teuta, 228 B. C. The savage race sought, indeed, from time to time, to shake

off their chains; but being beaten by Cæsar, and greatly enfeebled by Augustus, Germanicus, and Tiberius, the country at last became a Roman province, and, as such, held a high rank. The name, to which, in the fourth century, was added the epithet of *magnum* (great), included almost all the Roman provinces situated in the East. At the division of the Roman empire, Illyria fell to the empire of the West, but, upon its overthrow, in 476, it came to the emperor of the East. In the middle of the sixth century, Sclavonian colonists from Russia and Poland settled there, and soon succeeded in rendering themselves independent of the weak Byzantine government. Thus arose the small kingdoms of Dalmatia and Croatia. In 1020, the emperors did, indeed, reconquer these provinces, but, 20 years afterwards, they regained their independence. In 1090, the Venetians and Hungarians also made themselves masters of a small part of Illyria. In 1170 arose the Rascian kingdom, from which, 200 years later, that of Bosnia was formed. Dalmatia, at first, was taken by Venice, but, in 1270, the greater part of it was conquered by the Hungarians, who penetrated to the Black sea. Both they and the Venetians lost nearly all these conquests to the Turks; for the Venetians retained only a small part of Dalmatia, while Hungary kept possession only of Sclavonia, and a part of Croatia. The peace of Campo-Formio, October 17, 1797, brought Venetian Dalmatia, and its islands as far as Cattaro, under the dominion of Austria. Twelve years later, Old Illyricum was again restored. "The circle of Villach, Carinthia, what was formerly Austrian Istria, Fiume and Trieste, the lands known by the name of the *Littorale*, and all that remains to us on the right bank of the Save, Dalmatia, and its islands, shall bear the name of the *Illyrian provinces*." Such was the decree of the emperor of the French, October 14, 1809. This state of things lasted 15 months, during which Illyria received an addition of 650 square miles, by the junction of a part of Italian Tyrol, ceded by Bavaria; when, April 15, 1811, appeared a decree of the French emperor, definitively organizing the Illyrian provinces in their military and financial concerns. The country, independently of its great commercial cities and seaports, which were very important to the navy of an empire such as that of France was to be, had great internal resources. Since 1815, Illyria has been an Austrian kingdom, and, together with the separate kingdom of Dalmatia (q. v.), the chief support of the Austrian navy. In 1825, the circle of Clagenfurt, the territory of Carinthia, together with the province of Laybach, were incorporated with Illyria. The Illyrian Littorale, since 1825, includes, together with the commercial district of Trieste, two circles—those of Görtz and Istria. The Istrian government has its seat in Mitterburg. The kingdom of Illyria contains 9,137 square miles, with 35 cities, 59 market towns, 7891 villages, and 897,000 inhabitants, mostly Sclavonians, Morlachians and Germans. The people are mostly rude and warlike. (See *Austria*.) The government is divided into two branches, one of which has its seat at Laybach, capital of the kingdom, the other at Trieste. (See Russell's *Travels in Germany*.)

Imagination; the faculty of the mind which forms images or representations of things. It acts either in presenting images to the mind of things without, or by reproducing those whose originals are not, at the moment, present to the mind or the sense. We therefore distinguish—(1.) original imagination, or the faculty of forming images of things in the mind—that is, the faculty which produces the picture of an object which the mind perceives by the actual impression of the object—from the (2.) reproductive imagination, or the faculty which recalls the image of an object in the mind without the presence of the object. Besides the power of forming, preserving and recalling such conceptions, the imagination has also the power (3.) to combine different conceptions, and thus create new images. In this case, it operates involuntarily, according to the laws of the association of ideas, when the mind is abandoned to the current of ideas, as in waking dreams or reveries. The association of ideas is either directed to a definite object by the understanding, or it operates only in subjection to the general laws of the understanding. In the former case, the imagination is confined; in the latter, its operations are free, but not lawless, the general law of tendency to a definite end fixing limits to its action, within which it may have free play, but which must not be overstepped. The free and yet regulated action of the imagination alone can give birth to the productions of the fine arts. In this case, it forms images according to ideas. It composes, creates, and is called the *poetical faculty*. From the twofold action of the imagination, we

may distinguish two spheres, within which it moves—the prosaic and the poetical. In the former, it presents subjects on which the understanding operates for the common purposes of life. Here it is restricted by the definite object for which we put it in action. In the latter, it gives life to the soul, by a free, yet regulated action, elevates the mind by ideal creations, and representations above common realities, and thus ennobles existence. Imagination operates in all classes, all ages, all situations, all climates, in the most exalted hero, the profound thinker, the passionate lover, in joy and grief, in hope and fear, and makes man truly man.

Iman, Imamode, Imam; a class of Turkish priests. It is necessary that they should have studied in Turkish schools, but their acquisitions are generally limited to the power of reading the Koran, and an enthusiastic gesticulation. They attend in the *dschamis* and mosques, call the people to prayer from the minarets, perform circumcision, &c. They are chosen by the people, and confirmed by the secular authority, under whose jurisdiction they also are in criminal and civil affairs. In ecclesiastical affairs, they are independent, and are not subject to the mufti, though he is the supreme priest. They may quit their office and reënter the lay order. They are distinguished by a wider turban, of a different form from the common ones, and by their sleeves. They enjoy some privileges, and cannot be put to death, without being stripped of their ecclesiastical dignity. A Turk loses his hand, and a Christian his life, if he beats an iman. The sultan, as chief of all ecclesiastical affairs, has the title of *iman*.

Imarethi, in Turkey; houses where boys at schools, and students of the colleges, and the poor, receive their dinner. The Mohammedan government have spent large sums for the establishment of the imarethis. In Constantinople, 30,000 people are said to dine in them daily.

Imaus; the ancient name of the Himalaya mountains. (q. v.)

Imbert, Bartholomew, an ingenious French writer, was born in 1747, at Nismes. He was the author of several compositions of merit, both in prose and verse, which obtained a high degree of popularity. Of these the one most favorably received was a poem which has for its subject the judgment of Paris. His fables, written in the manner of Fontaine, are less esteemed. He was also the author of some successful dramatic pieces, and of a novel entitled *Les Egaremens de l'Amour*. He died of an attack of fever, in 1790.

Imbezzling. (See *Embezzlement*.)

Immersion. (See *Occultation*.)

Immortality; the condition of that which is not subject to death. Immortality has a beginning, and thus differs from eternity, which has neither beginning nor end. Eternity is an attribute of God; immortality of some of his creatures, as, for instance, of the soul. The dogma of the immortality of the soul is very ancient. It is connected with almost all religions, though under an infinite variety of conceptions. By the immortality of the soul, we understand the endless continuation of our personality, our consciousness and will. Philosophers have endeavored, in different ways, to prove the immortality of the soul—the anchor of man's hope amid the storms of life—in modern times, particularly, from the immateriality of the soul. But this immateriality is not susceptible of rigorous proof, and, if it were, it would only follow that the soul need not perish with the death of the body. It might still pass into a state of unconsciousness, as in a deep sleep and a swoon, a state little better than annihilation; yet the idea, that the dissolution of the body involves the annihilation of existence, is so cheerless, so saddening, that the wisest and best of men, of all ages, have rejected it, and all civilized nations have adopted the belief of its continuation after death, as one of the main points of their religious faith. There are so many reasons to render it probable, which are as convincing to most men as any strict proof could be, that, with most nations, the belief in the immortality of the soul is as clear and firm as the belief in a God; in fact, the two dogmas are intimately connected in the minds of most men. The hope of immortality must be considered a religious conviction. Reason commands man to strive for continued perfection. This duty man cannot relinquish, without abandoning, at the same time, his whole dignity as a reasonable being and a free agent. He must, therefore, expect that a continuation of his better part, as the necessary condition for his progress in perfection, will not be denied to him. Hence the belief in immortality becomes intimately connected with our belief in the existence and goodness of God. The perfection at which man aspires, depends on the continuance of his individuality; and, therefore, he is hardly more startled by the doctrine of the materialist, who denies all difference between the mind and

the body, than by the opinion which maintains that after death the soul of man loses its individuality, and is absorbed in the universal spirit. The noblest feelings are called into exercise by objects which affect man as an individual. Love cannot exist without individual objects of affection; and man trembles at the idea, that the purest enjoyments of which he can conceive, shall perish by the extinction of his individual nature. The proofs of immortality which the Scriptures afford, are familiar to our readers. The views of man, in regard to the nature of his future existence, are chiefly influenced by his ideas of the relation of the body to the soul. As soon as man begins to observe the peculiar operation of the soul, the idea of its existence after death arises, and is supported by the emotions of hope and fear, by many inexplicable phenomena of nature, and even by illusions. At first, this continuation of its existence is conceived of in connexion with that of the body, and with a state of being not essentially different from the present, in which the hunter shall renew his chase, and his corporeal senses shall have their accustomed gratifications. This perhaps is the reason of the careful preservation of dead bodies at an early period. Subsequently, a new and more finely organized body is conceived of, or the soul is represented as of a more aërial substance (hence the name of *spirit*, *air* or *breath*, is commonly used, in the more ancient languages, to denote the soul); or as a shadow, which, being separated from the body by death, continues its existence by itself. In this case, the life after death is also considered as a shadow of the present, as in the Greek mythology. Whilst the life of the soul was conceived of as connected with the earthly body, or with a new and ethereal body, it became necessary to assign a distinct place, different from that in which we live, for its habitation. The invisible world is conceived of by most nations, at first, as subterranean. In a more advanced stage of the progress of mankind, the imagination attributes changes of condition to the future life, and the doctrine of the metempsychosis, or the progress of the mind, in different stages, is now formed. (See *Transmigration of Souls.*) The belief in apparitions, in conjurations of the dead, and the influence of the dead upon the living, is intimately connected with the belief in immortality. The conception of the state of the departed depended, of course, upon the state of civilization, and what was considered as perfection here, was believed to be enjoyed in the after life, whether this perfection were skill in hunting, or the intellectual enjoyment of knowledge. It was also natural, that the after life should be considered as standing in connexion with this; and thus morality, as well as the belief in the justice of the Ruler of man's destiny, created the belief of a retribution after death, which has also been considered, according to the state of civilization, in all possible gradations, from the coarsest bodily pain to the intellectual pain of exclusion from the presence of God; hence naturally arose the idea of places where this retribution was accomplished—hell and heaven. This idea of a state of retribution, seems to have given rise to the notion of the resurrection of the body. Connected with the belief in the immortality of the soul, is the belief in a state where souls are purified after death, as existing among the Egyptians and the Catholics. (See *Purgatory.*) No religion teaches so pure a state of the soul after this life, as the Christian, according to the gospel. Of the many works which have treated of this important subject, we may mention one by an eminent German naturalist, J. H. F. von Autenrieth, *Ueber den Menschen und seine Hoffnung einer Fortdauer vom Standpunkte des Naturforschers* (On Man and his Hope of Immortality, as deduced from the Light of Nature) (Tübingen, 1815). The Pentateuch, as many theologians believe, contains nothing relative to a future life. The rewards and punishments which Moses proposed, are all temporal, and the latter, he threatens, will be extended even to the third and fourth generations, but not to a future state. The writings of the Old Testament seem to show that the Jews had no belief in the immortality of the soul, until after they had become acquainted with the doctrines of the East in the Babylonish captivity, previous to which they seem either not to have believed in it at all, or to have held the return of the soul to the Supreme Spirit, as Solomon, for instance, teaches. The Pythagoreans and Stoics held this doctrine, as likewise several fathers of the church. In Maccabees, written long after the Babylonish captivity, the belief in the immortality of the soul, and a state of retribution, is expressed in positive terms. The transmigration of the soul, believed by the Pythagoreans, was not adopted by the Stoics. Epictetus says, "You do not go to a place of pain: you return to the source from which you came—to a delightful reunion with your

primitive elements; there is no Acheron, no Tartarus, no Cocytus, no Phlegethon." Seneca, Epicurus and Democritus also teach the same. The Peripatetics adopted the same doctrine, but their founder considered death in a less consoling light. "Death," says Aristotle, "is the most terrible of all things; it is the end of our existence, and after it, man has neither to expect good nor to fear evil." In 1794, the French people passed a decree, acknowledging the immortality of the soul, and the existence of a Supreme Being.

Impalement (from *palus*, Latin, a *stake*); the putting to death by thrusting a stake through the body, the victim being left to perish by lingering torments, which sometimes last for days, and are aggravated by a feverish thirst. This manner of inflicting death was known to the Romans, though not practised by them. It is used by the Turks, as a punishment for Christians who say any thing against the law of the prophet, who intrigue with a Mohammedan woman, or who enter a mosque. Soleyman, a young Mussulman, the assassin of general Kléber, in Egypt, was impaled in the presence of the French army. He died, after several days of the most horrible torments, and not until after the birds of prey had already torn the flesh from his body. The horrors of this scene exceeded even the fearful description of impalement in the Corsair.

Impannel. (See *Jury*.)

Impeachment. An impeachment is an accusation and prosecution for a crime or misdemeanor; but is distinguished from other criminal prosecutions, either by the tribunal before which the proceedings take place, the rank or office of the party accused, or the offence alleged, or by all these circumstances; for the constitutions and usages vary in different states in regard to the offences which are the subjects of an impeachment, as well as in regard to the descriptions of persons who are subject to this kind of prosecution, and the constitution of the tribunal having this jurisdiction. The term *impeachment* is usually applied to prosecutions of judicial and executive officers for misdemeanors involving an abuse of their official functions, or immediately connected with those functions. The necessity of some tribunal, distinct from the ordinary courts, for the trial of certain offences, or for any high misdemeanor in certain officers, is apparent, since the judges of the highest courts cannot, in all cases, safely be intrusted with the trial of each other; and if they could be so trusted, the duty of persons, who are, in the ordinary course of administration, associated together in the exercise of their public functions, to try their fellows for offences involving not only reputation, but life, would be most ungrateful, and too painful to impose, even if it could be supposed that justice would always be strictly administered; and, besides, the ordinary judicial tribunals are not so constituted, in all states, as effectually to secure them against the influence and power of the officers of the state. The first object, then, in trials of this description, is to bring them before a tribunal sufficient in authority to overawe any individual, however high or powerful. In countries governed by absolute monarchs, or those whose prerogatives overbear all other powers in the state, the practice is, either for the sovereign himself to give decisions in those cases which are usually the subjects of impeachment, or to constitute tribunals for this purpose by special commission, which is, in effect, equivalent to the direct exercise of those judicial functions by the sovereign himself; for if he has any strong bias in the particular case, he will be influenced by it in the appointment of the judges, as much as he would be in the decision, were he to act as judge himself. But in every free government, that is, in every government under which each citizen knows no absolute sovereign but the law itself, and every one, whether ruler or ruled, is constrained to an unqualified submission to its sovereignty, there must be a permanent tribunal established by the fundamental constitution, for the application of the sovereign law to try the judicial and executive officers, in respect to acts done by them in their respective branches of the administration of the government. This is one of the indispensable parts of a well constituted government, since it guaranties the sovereignty, and the faithful administration of the laws. It is therefore a part of the government in which the whole people are as directly interested as in the establishment of the ordinary tribunals. The charter of the French government, granted at the restoration of the Bourbons, follows the British constitution in lodging this judicial power in the house of peers. The powers and jurisdiction of the British house of peers are very extensive in respect to impeachments, and, at the same time, not very precisely defined. It does not appear distinctly what persons or what misdemeanors are exempted from

this jurisdiction; but it is, in practice, usually exercised in respect to misdemeanors of an important character, alleged against judicial or executive officers. These prosecutions are instituted by the house of commons, and are usually commenced by sending an oral message from the house of commons to the lords, announcing the intended impeachment; and afterwards articles of impeachment are drawn up much in the form of an indictment, and the house of commons attends the prosecution as a committee of the whole, or appoints managers to conduct the prosecution, and demand judgment. As the crimes triable by impeachment are not limited, so the severest punishments may be inflicted in pursuance of the judgments rendered. In the U. States, the constitutional provisions, on the subject of impeachment, are derived from the British constitution, but not without important modifications. By the constitution of the U. States, the senate is the high court for the trial of impeachments, which are instituted by the house of representatives, as in England by the commons, and all executive and judicial officers are amenable in this mode of trial. In case of the impeachment of the president of the U. States, the chief justice of the supreme court of the U. States presides, but in no other case. The constitution of the U. States does not require any particular number of the senators to be present, in order to constitute a court of impeachment. The members of the senate and house of representatives are not liable to impeachment, each house having jurisdiction over its own members. Managers are appointed, on the part of the house of representatives, to conduct the prosecution. The party impeached is heard by counsel, if he choose. The arguments having been heard, the senate deliberates with closed doors, but the judgment is given publicly. No person is convicted without the concurrence of two thirds of the members present. The judgment extends only to removal from office, and disqualification to hold any office of honor, trust or emolument, under the government. In the several states, most of the constitutions contain provisions similar to those of the constitution of the U. States, the senate, or upper house, being the court of impe chment, and the house of representatives, or lower house, being the prosecutors. This is the constitution of Maine, New Hampshire, Massachusetts, Connecticut, New Jersey, Pennsylvania, Delaware, South Carolina, Georgia, Kentucky, Tennessee, Ohio, Indiana, Louisiana, Mississippi, Illinois, Alabama and Missouri; but the provisions of the constitutions of some of the states are very different. In Maryland, misbehavior in office is indictable; in Vermont, the tribunal for the trial of impeachments consists of the governor, or lieutenant-governor, and council; in New York, it consists of the senate, the chancellor, and justices of the supreme court; in North Carolina, officers may be prosecuted on impeachment, or indictment by the grand jury of the court of supreme jurisdiction. Some of the constitutions limit impeachment to executive and judicial officers; others render officers generally impeachable. By the constitution of New York, all civil officers are liable to impeachment, and so in some other states; by that of Missouri, the governor, lieutenant-governor, secretary of state, auditor, treasurer, attorney-general, and all judges of courts; by that of New Jersey, the judges and clerks of the courts, the attorney-general, secretary and treasurer. As the punishment that may be awarded on an impeachment is only dismissal from, and disqualification for holding, office, the party impeached may still, under the laws of the several states or of the U. States, be indicted and punished for the same misdemeanor, if it be a subject of such a prosecution.

Imperative. In grammar, the imperative mood of a verb is that which expresses command, entreaty, advice, exhortation; as *go*, *attend*, &c.

Imperator was the name given by the Romans to the commander-in-chief of an army, and *imperium* signified *military command*. *Imperator* was a title of different import in different times. The consuls originally bore the title of *imperator*, before they were called *consuls*. The name was afterwards given by the soldiers and senate to a general, after a great victory, and he retained it till after his triumph. In later times, no one received this title who had not defeated a hostile force of at least 10,000 men. After the overthrow of the republic, *imperator* became the highest title of the supreme ruler. The successors of Augustus used it, and it expressed the same thing as the hated title of *king*. In still later times, it had the signification which we attach to the word *emperor*. It was still given, however, to triumphant generals, and, in this case, had its old signification. The emperors appear to have used it, because they were considered as superior to all the generals. In the times of

the republic, this title was placed after the name; for instance, *Cicero imperator:* as the title of an emperor, it stood before the name. *Imperator* was a surname given by the inhabitants of Preneste to Jupiter, whose statue was carried to Rome, and placed in the capitol, by Titus Quinctius, when he captured Preneste. (See *Emperor.*)

Imperial Chamber. (See *Chamber, Imperial.*)

Imperiali-Lercari, Francis Maria; doge of Genoa. Louis XIV bombarded Genoa during his dogeship, in revenge for her adherence to Spain for 50 years. The doge was obliged to ask the pardon of Louis in person, and attended by four senators. Imperiali conducted with great dignity in this humiliating affair, and when asked what he found most remarkable at Versailles, gave that celebrated answer, "To see myself here."

Impression, in the arts, is used to signify the transfer of certain figures by pressure from a hard to a soft substance. This transfer affords the means of multiplying copies, and takes place in typography, copper-plate printing, lithography, &c. Engravers in copper and wood work in plane surfaces; the gem and stamp engravers, however, produce elevated or sunk figures; consequently, the impressions appear in relievo, and the substances which receive them must be susceptible of being raised or depressed. In order to obtain impressions from copper-plates, a coloring substance must be put in the incisions of the plate. In the case of wood-cuts, the coloring matter is applied to the elevations. In both cases, the copy is procured by pressure. There are two kinds of impressions:—1. that executed upon plane surfaces, as in lithography, copper-plate printing, and copies from wood-cuts. The instruments for it are the printing, rolling and lithographic press. (See article *Copper-Plate Printing.*) The goodness of the copies depends partly on the care and skill of the printer; partly also on the degree in which the plate has been used. The best copies are always among the first hundred, and are called, with us, the *proof impressions;* on the continent of Europe, *avant la lettre*, i. e., those struck off before the name of the engraving is inscribed on the plate. These are sold at a higher price than the subsequent impressions. An engraved plate affords more good copies than an etched one, and this more than one in aqua tinta. Copies are taken from wood-cuts in the same way as from copper-plates. The same degree of care, however, is not necessary in conducting the process.—2. Copies in relievo. These are impressions of medals and gems, or stamps, so as to leave raised or sunken figures (*empreinte*). Medals and engraved gems are valuable, as historical monuments and works of art, and the mode in which copies of them are made is a matter of importance. Representations of them in copper-plate engravings, cannot properly express their character as works of art. Impressions are therefore taken immediately from them, by means of fine sealing-wax, sulphur, wax, glass, &c. Copies in vitreous substances are called *pastes.* (See *Casting*, and *Pastes.*)

Impressment of Seamen. (See *Seamen.*)

Imprimatur (*Latin*, let it be printed); the word by which the licenser allows a book to be printed, in countries where the censorship of books is exercised in its rigor. An account of this worst species of tyranny has already been given under the head of *Books, Censorship of* (see also *Index*). Milton, in his eloquent speech for unlicensed printing or *Areopagitica*, humorously describes this practice of licensing books, exhibiting a specimen of what he calls a quadruple exorcism, approved and licensed under the hands of two or three monks—"Let the chancellor Cini see if this work may be printed;" (signed) V. R., vicar of Florence. Then comes the chancellor—"I have seen this work, and find nothing against the Catholic faith and good morals;" (signed) N. C., chancellor of Florence. Then the vicar reappears—"Considering, &c. this work may be printed;" (signed) V. R.; and, finally, *Imprimatur*, signed by the chancellor of the holy office, in Florence.

Imprisonment for Debt. (See *Debtor and Creditor;* also *Capias.*)

Impromptu (from the Latin phrase *in promptu habere*, to have in readiness); properly, something which is done or said without preparation, on the spur of the moment. It is used particularly to signify extemporaneous poetical effusions.

Impropriations, in the English church; benefices in the possession of laymen, those annexed to ecclesiastical corporations being called *appropriations*, though they are sometimes identified. Blackstone gives the following account of them. Benefices are sometimes appropriated, that is, perpetually annexed to some spiritual corporation, either sole or aggregate, which the law esteems as capable of providing for the service of the church as any single clergyman. This contrivance sprang from the policy of the monastic orders, who begged or bought all the ad-

vowsons within their reach, and then appropriated the benefices for the use of their own corporation. Such appropriations could not be completed without the king's license, and the consent of the bishop. When it was once made, the appropriators and their successors became the perpetual parsons of the church. Blackstone is of opinion that appropriations may still be made in this way. Those formerly made, were originally annexed to bishoprics, prebends, religious houses, manories and certain military orders; but on the dissolution of the monasteries in the reign of Henry VIII, the appropriations of the several parsonages belonging to them were given to the king, and were afterwards granted out, from time to time, by the crown. The appropriator deputed some person to perform divine service in such parish, who, being merely his deputy or vicegerent, was called *vicar*, whose stipend was at the discretion of the appropriator. The distinction, therefore, of a parson and vicar, is that the former is entitled to all the ecclesiastical dues of his parish, while the vicar is, in effect, only the curate of the real parson (the appropriator), and receives but a part of the profits. It is computed that there are 3845 impropriations in England.

Improvvisatori; the name given, in Italy, to poets who compose and declaim, extemporaneously, a poem on any given subject, or sing it, accompanying their voice with an instrument. Among barbarous nations, where fancy is strong, lively and unrestrained, the gift of extemporaneous poetry, especially when assisted by music, is not uncommon (for instance, among several of the African and American tribes); and, from several passages in the ancients, we may infer that the oldest Greek poets extemporized. In modern Europe, this talent appears a natural production of the Italian soil. Spain too, and especially Minorca and Valencia, appear not to be without traces of a similar poetic character. After this art had been introduced into Italy, with the Provençal poetry, in the 12th century, Petrarch appears to have practised it; at least, he is known to have introduced the custom of the *improvvisatori* accompanying their song with the lute. Since the revival of letters, there have been, in Italy, persons of both sexes who have composed, in this manner, poems of considerable length. The Latin language was at first used, which, until the end of the 15th century, was the language of the learned. The love of this poetry was quite a passion under Leo X, at the courts of Urbino, Ferrara, Mantua, Milan and Naples. One of the oldest poets was Serafino d'Aquila (born in 1466, died in 1500), a poet now forgotten, but, in his own time, the rival of Petrarch. He was surpassed by his contemporary Bernardo Accolti, called *l'unico Aretino*. It is said that, when he repeated his verses in a public place, every thing was in motion, the shops were shut, occupation ceased, and learned and ignorant all rushed towards him. Of nearly equal fame was the Florentine *improvvisatore* Cristoforo, surnamed the Highest (*Altissimo*). Among the *improvvisatori*, towards the end of the 15th and at the beginning of the 16th century, were Nicolo Leoniceno, Giammario Filelso, Pamfilo Sassi, Ippolito of Ferrara, Battista Strozzi, Pero, Nicolo Franciotti, Cesare da Fano. Three poets of this time were blind—Cristoforo Sordi, Aurelio Brandolini, and his brother Rafaello. The learned Greeks, who, at the beginning of the sixteenth century, fled from Constantinople to Italy, there spread their customs, together with a taste for their language and literature. In different cities of Italy, they introduced the *symposia*, in which were united the pleasures of the table and the pleasures of the mind. Leo X was very fond of them, and willingly invited learned men to his table. Among them was his favorite Andrea Marone, a great *improvvisatore*. The contemporary authors relate wonderful things of his talent. Adrian VI, who looked upon poets as a sort of idolaters, banished him from the Vatican, where Leo had assigned him a lodging; but Clement VII recalled him. Another poet, Querno by name, was a sort of court fool to Leo. Being very fond of wine, he obtained permission to drink from the pope's own glass at table, on condition that he would make at least two Latin verses on every subject proposed to him, and, if they were bad, his wine was mixed with at least an equal quantity of water. Leo called him, in jest, the *arch poet*. After the death of Leo, learned men wrote in the *lingua volgare*, and the *improvvisatori* followed their example. We may suppose from this that their numbers increased. We will mention only a few of the most famous. The first is Silvio Antoniano, born at Rome in 1540, of an obscure family, and raised by his talents to the dignity of cardinal. He was well acquainted with the ancient languages, and skilled in all the sciences. On account of his power of improvisation,

he was surnamed *Poëtino*. On a fine evening in the spring, he once began to recite to a numerous circle, in a little grove in the country, when a nightingale, apparently attracted by his song, perched upon a neighboring tree, and, emulating him, as it were, began to sing with extraordinary vivacity. The astonishment of the hearers at this unexpected contest, gave a new impulse to the spirit of the poet, and, excited by these circumstances, he left his former subject, addressed the nightingale, and praised the melody of her voice and the beauty of her song, in verses so full of harmony and feeling, as to draw tears from those around him. One of the most celebrated of the *improvvisatori*, was Perfetti, born in 1680, at Sienna, died 1747, at Rome. We have from Fabroni a biography of this poet: two volumes of his extemporaneous poetry appeared in 1748. He could throw a peculiar charm over every subject, and possessed such a wonderful memory, that in his last verses he recapitulated all that he had said before. He had the appearance of an inspired man, and when he had finished, he was generally exhausted and overcome with fatigue. He recited his verses singing, that he might gain time to think, and might better follow the metre, and was very willing to be accompanied by the guitar. His favorite metre was the octo-syllabic. The most glorious day of his life was that upon which (during the papacy of Benedict XIII), he received, through the interest of the princess Violanta of Bavaria, the crown of laurel at the capitol—an honor which was then the more flattering, because it had not yet lost its value by being frequently given, since Petrarch and Tasso had alone been judged worthy of it. The rights of a Roman citizen, and the privilege of adding a laurel crown to his arms, were new honors given to him. Metastasio, also, at a very early period, showed an extraordinary talent for this kind of poetry; but the exercise of it cost him much effort. After having declaimed for some time, he felt all his strength exhausted; it was necessary to carry him to bed, and to revive him by medical means; but his strength did not return for 24 hours. He was obliged, therefore, from regard to his health, to give up so dangerous an art. Females, also, have been highly distinguished for this power. Quadrio mentions three celebrated *improvvisatrici*—Cecilia Micheli of Venice, Giovanna de' Santi, and a nun, Barbara of Correggio. No one of these obtained greater fame than Maddalena Morelli Fernandez, under Pius VI, among the Arcadians called *Corilla Olimpica*, who lived in Tuscany, and excited the admiration of all travellers. She was born at Pistoia, where her talents, carefully formed by diligent study, were early developed. The applause which she obtained in Italy, induced the emperor Francis I to invite her to Vienna, where she was received with distinction, and loaded with favors. The empress Catharine invited her to Petersburg, but the fear of a cold climate prevented her from going thither. The academy of the Arcadians chose her a member, and, in 1776, she was publicly crowned in Rome, and received from the Roman senate the title of *nobile cittadina*. She left Rome, and afterwards lived at Florence, where she died in 1800. Several females gifted with similar talents, have appeared in later times—Bandettini (q. v), Fantastici at Florence, Mazzei, by birth Lanti; the last of whom, perhaps, surpassed all the others by the fertility of her imagination, by the richness and the purity of her language, and by the harmony and regularity of her verse. She also attempted tragedies. In 1764, there died at Verona the celebrated *improvvisatore* Zucco, who left behind him a worthy scholar and successor, in the abbé Lorenzi. The advocate Bernardi also attained to some celebrity in Rome. Among the *improvvisatori* of our times, Francisco Gianni (q. v.), of whose extemporaneous poems a collection appeared in 1795, has obtained great reputation; and also Sestini. Tomasso Sgricci of Arezzo is still more famous, who, in 1816, produced, in Florence, an extemporaneous tragedy, of which the subject and the characters were given by the spectators. In Paris, he likewise produced, with great applause, the tragedy of Missolonghi, in 1826. In Turin, he declaimed, extempore, the tragedy of Hector, which the stenographer Delpino printed (Turin, 1823), and in Florence, a tragedy on the death of Mary Stuart. (See *Rome in the 19th Century.*) He received, in reward, letters of nobility. The printed works of the *improvvisatori* who have been most admired, have never passed mediocrity. Perfetti was therefore wise enough not to allow any thing of his to be printed, and it is probable we should not have had such beautiful poems from Metastasio, if he had not been obliged to renounce extemporaneous poetry. The cause is very evident, without its being necessary, however, for us to suspect the taste and penetration of its admirers. The real or apparent inspiration of the poet, his lively

feeling, his striking action, the sound of his instrument, and, in general, the whole effect of a living actor, cannot fail to produce powerful effects, and leave no time for criticism, even if the poetry is of an ordinary character. Bouterwek justly says, in his *Geschichte der Ital. Poesie* (History of Italian Poetry), "Among the poetical curiosities of modern Italy, the art of the *improvvisatori* has higher claims on our attention, than most printed collections of modern Italian poetry. Their art shows with what flexibility and power an Italian fancy, when once excited, can string together words and images in verse. It thus becomes manifest, how an Italian, even with a moderate cultivation of mind, is able to increase, by a little volume of pretty good verses, the number of those which he already finds, when he has once by heart the poetry of his predecessors. The artificial and yet happy enthusiasm of modern *improvvisatori*, is a living monument of the former achievements of Italian intellect." It is surprising that almost all the *improvvisatori* are born in Tuscany or Venice, principally at Sienna or at Verona, and that their art has been transmitted in uninterrupted succession. The German Karschin, daughter of a peasant, whose cows she tended, would have been much admired as an *improvvisatrice* in Italy. The first poet who made public exhibitions of this kind, among the Germans, was the talented Wolf of Altona, in 1824 (now professor of modern languages at the gymnasium of Weimar), who appeared with applause in several places. In France, in 1825, Eugène de Pradel gave several successful evening exhibitions of the same talent.

Ina; king of the West Saxons, in the seventh and eighth centuries. He succeeded Ceadwalla, about 689, and, after having obtained advantages over the people of Kent, in 694, he turned his arms against the Britons, from whom he wrested Somersetshire, and other parts of the west of England. He then made war on the Mercians; but the contest was terminated, without much advantage to either party, by a bloody battle, which was fought in 715. The latter part of the reign of Ina was spent in works of peace, and he closed his days in a monastery, having resigned his crown in 728. He is celebrated as the principal legislator of the Anglo-Saxons. His laws, some of which are yet extant, served as the foundation of the code formed by Alfred the Great. (See Turner's *History of the Anglo-Saxons.*)

Inachus; a son of Oceanus and Tethys, the founder of the first royal race of Argolis, which ruled 382 years (from B. C. 1800). When Juno and Neptune contended for the dominion of Argos, Inachus, who was the arbiter of the dispute, adjudged it to Juno. He is particularly famous on account of his daughter Io.

Inca, or Ynca; an appellation which the natives of Peru give to their kings and princes of the blood. The chronicle of Peru thus relates the origin of the incas: This country had been a long time the theatre of all sorts of wars, horrible crimes and dissensions, till at length there appeared two brothers, the one of whom was called Manco Capac. Of this person the Indians say he built the city of Cusco, settled laws and policy, and taught them to adore the sun, and he and his descendants took the name of *inca*, which, in the language of Peru, signifies *king*, or *great lord*. These incas grew so powerful, that they made themselves masters of the whole country from Chile to Quito, establishing in every province their peculiar policy and religious institutions, and held it till the dispute between the brothers Huascar and Atahualpa, of which the Spaniards, under Pizarro, availing themselves, obtained possession of Peru, and put an end to the empire of the incas, in 1533. They number only 12 of these incas. It is said that the most considerable among the nobles of the country still bear the name of *inca*.

Incarnation (from the Latin, the *becoming flesh*); a word used to express the descent of the Deity, or his manifestation in the flesh, under the human form; thus we speak of the *incarnation* of Christ. The Hindoos believe in innumerable incarnations of their deities. The most celebrated are the 9 incarnations of Vishnu. (See *Avatar.*)

Incest; a crime made such by positive laws, in compliance with the directions of religion. The law of nature does not recognise it: on this account, the Code Napoleon does not number it among the carnal crimes, on the ground that the punishment of such crimes leads only to their concealment, and that the punishment of public opinion is sufficient. Nature has, at all times and among all nations, forbidden matrimony and sexual intercourse between descendants and ascendants, not between brothers and sisters, who were allowed to marry among the Persians, Athenians, Egyptians, &c. The cultivation of the moral sentiment extended the forbidden degrees of relationship, and

moral and religious pedantry carried the prohibition even to spiritual relationship. Dispensations were, however, granted for money. It is desirable that the crime of incest should be limited to the commerce of parents and children, brothers and sisters.

Inchbald, Elizabeth; the daughter of a farmer, born in 1756. Having lost her father at the age of 16, she went to London with the view of obtaining an engagement for the stage, where she married Mr. Inchbald, then an actor of some celebrity, and accompanied him on several provincial tours, partaking in his engagements. He dying in 1779, she returned to London, and made her debut at Covent-garden, Oct. 3, 1780. She continued on the boards about eight years, and, from her great personal attractions, which she retained to a late period of her life, as well as from her natural talents, was a popular performer. After her retirement from the stage, in 1789, she depended principally on her literary labors for support, publishing several dramatic pieces, most of which had a temporary success, while some are even yet considered as what is technically termed *stock plays*. She wrote also a novel, called the Simple Story (4 vols., 1791), and edited a collection of dramas, entitled the British Theatre, with biographical and critical remarks (in 25 vols., 12mo.), during the period from 1806 to 1809; a similar collection of the most popular farces (in 7 vols., 12mo.); and the Modern Theatre (in 10 vols., 1809). Her death took place at Kensington, Aug. 1, 1821, in her 66th year. The Simple Story is a tale of much interest and pathos. This ingenious and able woman passed a life attended with many difficulties and temptations with unsullied reputation.

Incledon, Benjamin Charles; an English vocalist, born about 1764. When only eight years old, he was articled to Jackson of Exeter, under whose tuition he remained as a chorister in Exeter cathedral until his fifteenth year. In 1779, he entered the navy as a common sailor. His vocal abilities having attracted the notice of his officers, he was advised to try his fortune on the stage. In October, 1790, he made his debut on the London boards, at Covent-garden theatre, with great success, in the character of Dermot, in O'Keefe's musical farce of the Poor Soldier, and rose at once into a degree of popularity, which attended him till the infirmities consequent upon advancing years, and an irregular mode of life, compelled him to retire from the active duties of his profession. Of the diminution of his powers, however, he never could be persuaded, but constantly attributed his declining popularity to the caprice of the public. His voice—a rich tenor—combined uncommon power, sweetness and ductility, both in the natural and *falsetto*, and his intonation was singularly correct, taking his imperfect education into consideration. His articulation was, however, far from equal to his other qualities, being coarse, not to say vulgar. The better sort of the old English ballad, of which Stevens's Storm and Gay's Black-eyed Susan are, perhaps, among the finest specimens, was decidedly his forte: in this style of singing, he had no equal. Pecuniary embarrassments, arising from an utter carelessness of money and general improvidence, imbittered the latter part of his life, which was closed at Worcester, February, 1826.

Inclination, in mathematics, means the direction of a line, with regard to a certain point (according to the sense of the ancient mathematicians, Apollonius and Pappus particularly). In astronomy, this word signifies the angle which the orbits of the planets and comets make with the ecliptic or orbit of the earth. This angle is the smaller, the less the planet or comet is distant from the ecliptic. According to the latest observations of Lalande and Bode, this angle of inclination is, in the different planets, as follows:—Mercury 7°, Venus 3° 23′ 20″, Mars 1° 51′, Pallas about 30°, Ceres 10° 47″, Jupiter 1° 19′ 10″, Saturn 2° 30′ 20″, Uranus 0° 43′ 45″. More exact determinations with regard to Ceres, Pallas, Juno and Vesta may be expected at some future period. The comets make frequently very great angles with the ecliptic, for they traverse the heavens in all directions. The inclination of the moon's path is different, according as the sun affects it differently, but it is between 5° 1′ and 5° 17′. (For the inclination of the magnetic needle, see *Magnetic Needle*.)

Inclined Plane. The inclined plane is one of the three mechanical powers, or simple machines, formed, as its name imports, by a plane surface, supposed to be perfectly hard and inflexible, and which is always inclined obliquely to the weight or resistance to be overcome. The wedge is a modification of this machine, being formed of two inclined planes placed base to base. The screw is another modification, being, in fact, merely an inclined plane wound round a cylinder. This machine enables us to raise a given weight

along the inclined surface to a given elevation, with less expense of force than would be required to raise it perpendicularly to the same elevation. This perpendicular height is called the *elevation of the plane*, and the two lines enclosing the angle which it subtends, are called the *base*, and the *length* of the plane. (See *Mechanics.*)

In Cœna Domini (*Bulla in Cœna Domini*); the most remarkable of all the papal bulls, as it most strikingly shows the arrogance of the popes, and their pretensions as absolute rulers of the church, and the authority which they claimed over temporal princes. It is founded upon older papal decrees, which declared all heretics and favorers of heretics, without distinction, and those who imposed taxes upon the clergy, for the purpose of supplying the wants of the state, solemnly excommunicated. After the 14th century, it was extended and modified by several popes. Pope Pius V ordered that it should be read aloud in all the churches on Maundy Thursday, because many Catholic princes tolerated Protestants in their countries, and required contributions from the clergy. Philip II and the republic of Venice forbade the publication, for the exhausted state of their treasuries would not allow them to spare the clergy, and even the emperor Rodolph II and the archbishop of Mentz would not acknowledge a bull so prejudicial to the rights of sovereigns. Its authority was never admitted in France; but, in Naples in particular, from 1568, it excited great disturbances; for it was promulgated by the bishops and monks, without the permission of the king, and, according to the ordinance of the pope, the right of government to impose new taxes was denied. Notwithstanding this opposition, the bull received its latest form from pope Urban VIII, in 1627. This pope, in behalf of God, and by virtue of the power committed to the apostles Peter and Paul and himself, excommunicated and anathematized all Hussites, Wickliffites, Lutherans, Zwinglians, Calvinists, Huguenots, Anabaptists, Trinitarians; all who had fallen off from the Christian faith, all heretics, as well as all those who trusted, received, favored or defended them; all who read heretical books, without permission from the papal see; all who possessed and printed them, or defended them in any way whatever, whether public or private, or on any pretence whatever; and, finally, all schismatics who obstinately avoided communion with the Romish church. All who appealed from the decision of the pope to a council were threatened with the anathema; and if a university, college, or chapter, with the interdict. Pirates who disturbed the papal sea ("our sea"), from Argentaro to Terracina, and all those who robbed wrecked vessels of the goods of Christians, incurred this anathema. Moreover, those princes were anathematized, who imposed new taxes, or increased those already laid, except in those cases in which they were allowed by law or by the special permission of the papal see; also all forgers of papal letters; all who provided Saracens, Turks or heretics with horses, arms, money, implements of war, wood, hemp, cordage, or any thing which could be of service to them in making war on Christians and Catholics; all who should prevent the carrying of provisions to the papal court; all who robbed, injured or murdered travellers to the papal court; all who abused cardinals, papal ambassadors or bishops; all who appealed from the commands of the pope or his ambassadors to temporal courts of justice, or avoided the judicial decision of the pope in spiritual concerns, or compelled the clergy to appear before temporal judges, or made laws against the freedom of the church, or interrupted the bishops in the exercise of their judicial power; all who seized upon the revenue which the pope derived from churches and convents, or imposed taxes upon the clergy, without the consent of the pope, even though the offender were an emperor or king; all officers who interfered with the criminal jurisdiction of the clergy; and, finally, all who should attack or conquer the papal territory, of which Sicily, Sardinia and Corsica formed a part. None but the pope can remove this anathema, and he only in the hour of death, when the person excommunicated has satisfied the offended church. The bull was ordered to be publicly posted up at Rome, and once a year, or oftener, every bishop was to read it to the assembled people. This was done at Rome, till the middle of the 18th century, every Maundy Thursday, in the principal churches.

Incommensurable, in mathematics; a magnitude which cannot be measured by another, taken as unity. Of this kind are, for instance, all square roots which are not whole numbers, as the square root of $12 = 3{,}4641 \ldots\ldots$ and so on indefinitely.

Incubation. Birds, fishes, insects, worms and reptiles, as is well known, lay eggs, from which the young animals are produced by means of warmth. The four last named classes leave the fecunda-

tion of the eggs to the warmth of the sun; birds employ the warmth of their own bodies for this purpose. The process which they use is called *incubation*. All known birds, with the exception of the cuckoo, discharge this office themselves. The cuckoo deposits its eggs in the nest of the hedge-sparrow and other small birds. The ostrich, contrary to the common opinion, sits upon its eggs, the male in company with several females, day and night. Among many sorts of birds, as the common hen, ducks, geese, &c., the business of incubation is confined to the female; among others, especially those which live in pairs, as the dove, lark, sparrow, &c., the male takes part. The female usually leaves the eggs for some hours, about noon, to seek food and bathe herself. In other species of birds, the male remains near the female during the process, protects her from injury, brings her food, &c. This is the case with the canary bird, goldfinch, linnet, &c. The perseverance and devotion of the female during the period of incubation is admirable. She submits to the most inconvenient postures, to avoid injuring her eggs, and forgets her food and her companions. If she is compelled by hunger to quit her post, she covers her eggs with feathers, moss, wool, &c. Birds in general become comparatively tame during this period. Others defend their nests with the greatest courage. The domestic hen boldly encounters the largest dog. Only a few birds living in a state of freedom, allow their nests to be disturbed. Many desert them entirely, if a man has displaced the eggs during their absence; for instance, the canary bird. The gradual developement of the young bird in the egg has been observed, particularly in the case of the eggs of the domestic hen. The covering of the young bird, when it first leaves the egg, is a sort of down; this is gradually superseded by feathers. The little creature remains for some hours or longer, in the nest, under its mother, till it has become accustomed to the external air. The old birds, particularly the female, now manifest the greatest care for their young, in protecting them and providing for their wants. They bring them suitable food, which, when necessary, the mother softens first in her crop. The dirt of the young is thrown out of the nest by the old birds as long as the young remain blind. Water and marsh birds, soon after birth, leave the nest, and follow their mother into the water. The old birds teach them where to find their food. The mother protects them, takes them in stormy weather under her wings, and exposes herself to much inconvenience to save them from suffering. The time of incubation generally varies with the size of the birds. The linnet requires but fourteen days, the common hen twenty-one, and the swan forty-two days. In warm climates, the time of incubation is said to be somewhat shorter. In Africa, the hen is said to sit but thirteen days. With us, too, in very cold weather, geese and hens are known to sit much longer than in warm. The warmth required for fecundating the eggs is about 104° Fahr. The artificial hatching of eggs is practised in Egypt. In Naples, ovens for this purpose were constructed in the 14th century. But in Egypt, this art has been carried to a high degree of perfection. The ovens intended for this purpose are made of brick, and sunk some depth in the earth. They consist of two stories, connected with each other, and divided into several apartments. In a corner of the building is an oven, which is heated daily three to four hours, for ten days in succession, with cow and camel's dung, the usual fuel of the country. The heat is regulated by the feeling of the superintendent. The temperature to be produced is compared with the warmth of baths. When the heat is too great, some passages are opened for the air. The floors of the divisions or apartments are covered with mats, and a layer of straw thereupon, on which the eggs are laid, so, however, as not to touch each other. They are turned twice by day, and as often by night. After eight or ten days, the eggs are examined with a lamp, to ascertain the progress of the process of fecundation. Those which appear to be unfruitful are thrown away; the others, on the 14th day, are put in the upper story. On the 20th or 21st day, the young bird issues out. The owner of the oven receives a third part of the eggs for his trouble. The inhabitants of a village called Berme, in the Delta, are the persons who carry on this art throughout the country. In China, also, artificial hatching is practised. The eggs there are put in wooden boxes, which are filled with sand, and placed upon heated iron plates. Of late, a Frenchman has published a work on this subject, in which he seeks to introduce the Egyptian ovens on an improved plan. He heats his ovens with boiling water.

Incubus (Latin, *incubus*, one who lies upon); a spirit, to whom was ascribed the oppression known by the vulgar name of

nightmare, in Greek *ephialtes* (from ἐπί and ἅλλομαι, I leap upon). The English *nightmare* is from *mair*, an old woman or hag, in which form the spirit was generally supposed to appear, pressing upon the breast, and impeding the action of breathing. The French *cauchemare* or *cochemare* (*qui couche sur*) is of the same character and origin. These dæmons play an important part in the superstitions of the middle ages, having been, perhaps, not unfrequently employed, like the elder gods of Greece, to cloak the advances of earthly lovers. The nuns and other young ladies of the middle ages were not always safe from their violence or their persuasions, as numberless tales and grave histories abundantly prove. Augustin (*De Civit. Dei*) mentions the fact that *Sylvanos, Panes, et Faunos, quos vulgo* Incubos *vocant, improbos sæpe extitisse mulieribus, et earum appetisse ac peregisse concubitum.* The word is also used for the oppression or feeling of suffocation which sometimes comes on during sleep. The sufferer experiences a short period of intense anxiety, fear, horror, &c.; feels an enormous weight on his breast; is pursued by a phantom, monster or wild beast, whom he cannot escape; is on the brink of a precipice, from which he cannot remove, or is, perhaps, rolling down it without being able to make any exertion for his safety, and his limbs refuse to do their office, until he suddenly awakens himself by starting from his recumbent posture, or by a loud cry; he is then in a state of great terror, and the body is often covered with sweat. It is generally owing to repletion and indigestion, and is often superinduced by lying on the back. It is most common in those seasons of the year which most increase the volume of the fluids—in spring and autumn. Homer (*Il.* xxii. 200) and Virgil (*Æn.* xii. 908) have given striking pictures of its benumbing power, and Fuseli has represented its agonies. He is said to have eaten an immoderate supper of raw pork, for the purpose of obtaining a vivid conception of his subject.

Incunabula (from the Latin, signifying *cradle*) is a term applied to those editions of books which were printed previously to the year 1500. Peignot explains it as signifying editions, *qui touchent au berceau de l'imprimerie.* The term is most properly confined to the period above-mentioned, because the art of printing was completely formed, in all its principal parts, in that period. Panzer's work comes down, indeed, to 1536, and Mattaire's still later; but this forms no objection to our limitation, because these two writers had regard to the history of printing in general, rather than to the history of the incunabula in particular. A knowledge of them is important, as they are the best, and often the only sources, from which a minute history of the early progress of the art of printing can be drawn; but notwithstanding the investigations of bibliographers, much remains to be done in determining the particular characteristics and mutual relations of these works. Many of these works, too, are important and interesting, on account of the illustration which they afford of the history of art by their ornaments, and on account of the value of the first editions (*editiones principes*), of ancient and modern classics in a critical respect. We shall here treat of them in reference to their value to professed collectors.—1. The first beginnings and attempts at printing will naturally be objects of their search, among which are the xylographic specimens, and the earliest impressions bearing date, which begin with the indulgences of Nicolas V, 1454; although the oldest printed book, whose date is undoubted, is the Psalter of 1457.—2. Next to these are the first impressions of particular countries and places, which are generally not less rare than the preceding.—3. The first books printed in a particular language or with certain types. The oldest impressions are in the Gothic type, as it is called; the round or Roman character, which afterwards became the most common, particularly in Italy, came into use somewhat later. Single Greek words, cut in wood, were first used in 1465, in Cicero's *De Officiis*, and in the edition of Lactantius of the same year. The first book printed entirely in the Greek type, was Laskaris's Greek Grammar, which appeared at Milan, 1476. —4. Editions from those presses which did not do much, and, from the more fertile presses, those editions which are peculiarly rare; e. g., the Mentel editions of the *old* Roman classics.—5. Editions in which certain typographical improvements were first introduced; as J. Nideri *Præceptorium divinæ Legis* (Cologne, Koelhof, 1472, folio), the first book printed with signatures; *Sermo ad Populum prædicabilis* (Cologne, *ther Hœrnen*, 1470, 4to.), the first with the pages numbered; *Cicero De Officiis* (1465), the first in quarto; and the *Officium Beatæ Mariæ Virg.* (Venice, Jenson, 1473, 32mo.), the first in the smallest form. Title pages first appeared after the year 1485.—6. Editions with the

first, or with remarkable attempts to apply the arts to the ornamenting of books. The first printed book with copper-plates is Antonio da Siena's *Monte Santo di Dio* (Florence, 1477, fol.). The most remarkable wood-cuts, of which the Strasburg printer Grüninger was very fond, are to be found in German and Italian editions. In this division may also be included copies with excellent miniature engravings.—7. Single copies which are celebrated on account of some particular circumstances; e. g., those printed on parchment and with gold letters (of which we have some from the 15th century), &c. Of the impressions on parchment, on which whole editions were at first printed, and the greater part of the copies, even of later editions (e. g., of the Latin Bible of 1462), those are particularly sought after, which issued from presses that printed but little on parchment; e. g. Schweinheim and Pannarz at Rome, by whom only six parchment editions are known to have been published.—8. Finally, there are some particular collections or series, which collectors pride themselves particularly on possessing; e. g., the six Greek works (*Anthologia*, *Apollonius Rhodius*, *Euripides*, *Callimachus*, *Gnomæ*, *Musæus*), printed in capitals by Alopa at Florence (1494—96), or the Greek works printed at Milan with a very round type, of which Laskaris (1476) is the first, and Suidas (1499) the last. Editions from celebrated presses of the 15th century are also highly valued; e. g., those of Schweinheim and Pannarz, and the English printers Caxton, Pynson and Wynkyn. (For information concerning the incunabula, see Panzer's *Annales Typographici*, together with his *Annals of German Literature*, which together contain the most complete catalogue, to the year 1536.) Mattaire's Annals are far less complete, but they come lower down, and enter rather more into details. Serna Santander's *Dictionnaire Bibliographique choisi du 15 Siècle* (Brussels, 1805, 3 vols.) is a useful work on the most interesting incunabula. It contains much information on the incunabula of Spain and the Low Countries, which is wanting in Panzer. Besides these works, we may find accounts of particular incunabula, in the local histories of printing (especially in Audiffredi's works on Roman and Italian printing), in the accounts of some particular printers of the 15th century (Guttenberg, Jenson, Aldus, Giunti), and in the works which treat of the incunabula of some single libraries, as those of Fossi, Dibdin (*Bibliotheca Spenceriana*), &c.

Independence, in politics; the sovereignty of a people or country, as distinguished from a former dependence upon another country. When a successful attempt is made, by a portion of a people subject to a common government, to establish a separate government for itself, the struggle is generally closed by the acknowledgment of its independence on the part of the government from which it has seceded, though, in some cases, a complete separation is effected without any such acknowledgment, when the old government is too weak to undertake any thing effective against the revolted provinces or colonies, and yet will not formally renounce its authority over them. In such a case, it cannot be supposed that such an acknowledgment is necessary to entitle the new state to be treated by other powers as independent. This was the case with the United Provinces and Spain, the latter not acknowledging the former for a long series of years. The South American republics, too, have not yet been acknowledged by Spain, but no one can doubt their independence. The just rule would seem to be, that a colony or province is independent whenever it declares itself so, and is able to maintain its independence, or is left in undisturbed enjoyment of it. In a complicated political system, like that of Europe, the acknowledgment of independence on the part of the old government, is diplomatically important; and without it, other European states are averse to enter into political relations with the new state. The government of the U. States, on the other hand, considers only whether the revolted country is in fact independent; and in their own case, their diplomatic agents called upon foreign powers to acknowledge the independence of the revolted colonies, before any such acknowledgment was made by England. (See Lyman's *Diplomacy*, also the *Diplomatic Correspond. of the Am. Revolution.*) It hardly needs to be mentioned, that no sovereign power is obliged to wait for the acknowledging of independence by the mother country, because the idea of sovereignty excludes such an obligation. The political era of the U. States, in public documents, is the year of their independence (July 4), 1776; accordingly, the present is the 55th year of American independence.

Independents; a Protestant sect in England and Holland, which originated towards the end of the 16th century, during the reign of queen Elizabeth. The Independents declared the ceremonies of the Anglican church popish abuses, and hea-

thenish. They agreed only in this point, differing among themselves on many points of doctrine. The most zealous sect were the Brownists, whose founder, Robert Brown (q. v.), in 1580, attacked the discipline and ceremonial of the church of England, as unchristian. The name *Independents* is derived from the circumstance that each congregation formed an independent community, subject neither to bishops nor elders, nor any other ecclesiastical powers; the minister was elected and dismissed by the votes of the congregation, and every member had a right to preach. The principles of church government inculcated by the Independents, spread rapidly, and became a subject of alarm to the government; some were arrested, some executed, and many fled the country. The sect survived in England, under the name of *Congregationalists*; but the principles of Brown were modified. The name of *Brownists* they disclaimed, calling themselves *Congregationalists*, and consider John Robinson (q. v.) their founder. In the civil wars of England during the 17th century, the Independents formed a powerful party. (See *Cromwell*, *Great Britain*, and *Puritans*.) The English Independents now differ from other Protestant sects in rejecting any formula of faith, requiring only a profession of belief in the gospel; and their pastors are not ordained. Among them are several distinguished men.

Index. A scientific work becomes doubly valuable by a well arranged and complete index, made under the eyes of the author, which saves the reader an immense expense of time. A scientific work of value is a book of reference, and a book of reference without an index is like a chest with a troublesome lock, which tries our patience whenever we attempt to open it. The plan of some newspapers (for instance, the London Atlas and Niles's Register, in Baltimore), to issue a general index at the end of each year, deserves much commendation, and ought to be imitated by every editor who considers his journal worth preserving. By the Roman Catholic church, *index* is used absolutely, to designate the catalogues, or list of books prohibited by ecclesiastical authority, on account of the heretical opinions supposed to be contained in them, or maintained by the authors or editors of them. The catalogue, or list of books absolutely prohibited, is simply called the *Index*, or *Index Librorum prohibitorum*; but when the list, or catalogue, is of books allowed to be read, after correction or alteration, agreeably to the orders of the papal authorities, it is termed *Index expurgatorius*, and, in the later indexes, the words *donec corrigantur* are subjoined to certain works, in order to render a separate expurgatory index unnecessary. (Townley's *Essays on various Subjects of Ecclesiastical History*, page 133.) The beginning of the prohibitory index is to be found in Gratian's Collection, being a prohibition to read pagan books by the council of Carthage, held about 400. The emperors also prohibited the reading of certain books. Constantine, for instance, prohibited the reading of the works of Arius. The popes, too, used to order obnoxious books to be burnt. The books of whole sects are sometimes prohibited in a mass. The invention of printing, in the middle of the 15th century, caused a rapid multiplication of books, and induced the papal hierarchy to prevent, if possible, the circulation of any which might prove injurious to the interest of the Romish church. Hence originated imprimaturs (q. v.), or official permissions to print works; and the promulgation and diffusion of the doctrines of the reformation, in the following century, increased the determination of the powerful adherents of popery to suppress and to destroy all the books tinctured with Lutheranism, or maintaining any of the peculiar opinions held by the reformed churches. In 1546, in pursuance of an edict of the emperor Charles V, the university of Louvain published an index, or catalogue of books regarded as dangerous, of which a revised edition was published in 1550. Similar lists of interdicted books appeared, nearly at the same time, at Venice, Paris, Rome, Cologne, &c. (for an account of which, see Peignot's *Dictionnaire des Livres condamnés au feu, supprimés, ou censurés*, tom. i., p. 256—266; and Mendham's *Account of the Indices, both Prohibitory and Expurgatory, of the Church of Rome*, p. 17 et seq.) Philip II of Spain having caused a catalogue of all books prohibited by the inquisition to be printed (Venice, 1558), pope Paul IV followed the example, and ordered an *Index Librorum prohibitorum* to be published by the *Congregatio Sancti Officii* (see *Congregation*), in which not only all heretical books were noted down, but also all which tended to lower the Catholic hierarchy, many even written by Catholic clergymen. The first part contains the names of the authors whose works are altogether prohibited; the second, single prohibited works; the third, anonymous works. A particular part contains the names of 42 book-

sellers, whose publications are altogether prohibited. After this, the councils published a number of such *indexes*, and these were followed by some for single countries; for instance, by the Sorbonne for France. The indexes assumed their most systematic form at the council of Trent, which, at its 18th session, referred the consideration of works to be prohibited to a select committee; and, in the 25th session, what had been done by that committee was referred to the pope (*Conc. Trid. Canones*, 177, 362, Paris edit., 1824), that it might be completed and published with his authority. The work was accordingly published in 1564. Besides the catalogue of prohibited books, it contains general rules relative to such books, drawn up by certain persons deputed for that purpose by the council of Trent, and sanctioned by pope Pius IV. These rules, which are ten in number, are prefixed to the different indexes which have been published since that period. They are also contained in the Paris edition of the canons of the council of Trent, already cited (p. 433—440), and a translation of them will be found in Townley's Illustration of Biblical Literature (vol. ii, p. 478—485). The Congregation of the Index, which forms a branch of the inquisition, holds its sitting at Rome, and has the right of examining generally all books which concern faith, morals, ecclesiastical discipline, or civil society, on which it passes judgment for suppressing them absolutely, or directing them to be corrected, or allowing them to be read with precaution, and by certain persons. Pius V confirmed the establishment of this congregation. Persons specially deputed by it may give permission to Romanists throughout the world to read prohibited books, and the penalty denounced against those who read or keep any books suspected of heresy or false doctrine is the greater excommunication; and those who read or keep works interdicted on any other account, besides the mortal sin committed, are to be severely punished, at the will of the bishops. (Richard and Giraud, *Bibliothèque Sacrée*, tom. viii, p. 78). The latest *Index Librorum prohibitorum* appeared at Rome, in 1819. (For the preceding Indexes, published in Spain, Portugal, and at Rome, between the years 1564 and 1806, see Mendham's *Account of the Indices*, &c., p. 31—123.)

India; The Indies. This name has been very vaguely applied, at different periods, to different extents of country, and is still used in different applications. The name is derived by us from the Greeks, who seem to have borrowed it from the Persians, as it is unknown to the natives. It was at first used by the Grecian writers to signify an indefinite extent of country, lying beyond the Indus, with which they were acquainted only through meagre and vague accounts obtained from the Persians. Darius crossed the Indus (B. C. 520), and conquered Cashmere and a part of the Penjab. Alexander, 200 years later, pushed his conquests a little farther, and the narratives given by his officers supplied Eratosthenes, Strabo and Pliny with the materials which they arranged and abridged. Ptolemy, who flourished at a later period (A. D. 150), when commerce had made his countrymen acquainted with the southern parts of India, has given a more accurate account of it. He divides India into *India within* and *India beyond the Ganges*. The former was bounded on the west by the people of Paropamisus, Arachosia and Gedrosia; on the north by mount Imaus, the Sogdiæans and Sacæ; on the east by the Ganges, and on the south by the Indian ocean. Other writers, as Arrian and Pliny, make the Indus its western limit. Strabo calls the southern and eastern boundary the Atlantic ocean. Of the two great rivers, the Indus and Ganges, the latter was not reached by Alexander, and was seen by very few of his followers. The Indus and its five great tributaries were known to all of them. A more accurate acquaintance with Upper India, obtained within the last 30 years, has proved the general correctness of the ancient accounts, and settled many doubtful points. Of the Deccan they knew nothing but the coasts, and of India beyond the Ganges they knew very little. The decline of the Roman empire, the rise of the Parthian empire, and particularly the extension of the Mohammedan power over Western Asia, broke off all direct intercourse between Europe and India. Religious hatred and commercial jealousy contributed to shut up the road to India against Europeans. Caravans were then the medium of Indian commerce, and through them the productions of the East were brought to the Mediterranean shores. Not until the Portuguese had doubled the cape of Good Hope (1498) were the Europeans able to visit that region of wealth. The islands of Java, Sumatra, Borneo, Celebes, the Philippines, the Moluccas, &c., were discovered, and have often been included under the general name of *India*, which comprised, on the continent, all that vast tract of country lying south of China,

Thibet and Persia. These regions have been divided by modern geographers into three parts—the islands, or the Indian Archipelago; India this side the Ganges, or Hindoostan; and India beyond the Ganges, or, as some writers call it, Chin-India, or Indo-China, including the Birman empire, Cambodia, Tonquin, Cochin-China, Laos, Siam, and the peninsula of Malacca. (*See the separate articles.*) The islands above-mentioned are Ceylon, the Laccadives, the Maldives, Andaman, the Nicobar isles, the Sunda isles, including Borneo, Sumatra, Celebes, Java, &c., the Moluccas, the Philippines. (*See the articles.*) When America was discovered, it is well known that Columbus supposed it to be the eastern coast of Asia, of which he was in search. These regions were, therefore, at first called *India*, and when the error was discovered, the name was retained, with the distinctive appellation of *West*, the proper India being called the *East Indies*. The Spanish kings assumed the title of *king of the Indies*, and the council for the colonies was styled the *supreme council of the Indies*. The name of West Indies was afterwards restricted to the islands, now so called, lying between North and South America.

European Commercial Colonies in India. In ancient times, India was the principal source of the commerce of the Phœnicians, Carthaginians and Egyptians. (See Heeren's *Ideas*, 1st vol., 3d part, 4th edition, 1824.) Until the end of the 15th century, the Europeans obtained the precious merchandise of India only second hand, partly through Egypt, where it came by the way of the Arabian sea, and partly from the long journeys of the caravans through the interior of Asia. This commerce was in the hands of the Venetians and Genoese, who furnished the European markets with the productions of Asia, and thereby became rich and powerful.

Portuguese India. The doubling the cape of Good Hope, which, in 1498, showed the way by sea to the riches of India, led the Portuguese to the possession of a kingdom in Asia. A few years after Vasco de Gama (q. v.) had landed on the coast of India, they were already the most favored merchants upon the whole coast, and, in spite of the active jealousy of the Mohammedans, who had hitherto monopolized the lucrative commerce of India, they formed settlements, and made commercial treaties with the Indian princes, in which the latter acknowledged the king of Portugal for their lord. Francis of Almeida, the first Portuguese viceroy in India (from 1505 to 1509), increased the fame of his nation in the Indian seas. Wherever he landed, he formed commercial establishments, and even took possession of Ceylon in 1506. His more famous successor, Alphonso of Albuquerque, who held the chief command between 1510 and 1515, confirmed the proud edifice of Portuguese power in the Indies. He built fortresses for the protection of the factories, and conquered Malacca, to which merchant ships from Japan, China, the Moluccas, the Philippines, Bengal, Persia, Arabia and Africa, resorted; and the terror of his arms, which this conquest inspired, induced the most powerful princes of Farther India to seek the alliance of the Portuguese. He afterwards acquired possession of the Moluccas, and with them of the rich spice commerce, and ended his triumphant career by the conquest of Ormuz, the richest and most powerful city on the Persian gulf, the possession of which he secured by a castle. Soon after his death, the Portuguese ruled from the Arabian to the Persian gulf; nearly all the ports and islands on the coasts of Persia and India soon fell into their power; they possessed the whole coast of Malabar to cape Comorin, and had settlements on the coast of Coromandel and the bay of Bengal; Ceylon was tributary to them; they had factories in China; and the ports of Japan, to which a tempest had shown them the way, were open to their merchant ships. Their power had attained this extent in 1542; and, for 60 years, they carried on their lucrative commerce without any considerable rivals. They determined the price of merchandise in all the European and Asiatic markets. No foreign vessel could take a cargo in the Indian ports, before the Portuguese ships were freighted; no ship was safe in the Indian seas without Portuguese passports; and even those which carried on commerce by their permission, could not trade in cinnamon, ginger, pepper, steel, iron, lead and arms, because these articles were included in their monopolies. The central point of the Portuguese dominion, after the time of Albuquerque, was Goa, where the royal Portuguese governor, under the title of *viceroy* or *governor*, had his seat. By bold and often revolting acts of power, they secured their dominion in Asia. They bombarded the most powerful cities on the Indian coasts; they burnt the ships of their enemies in their own harbors; they instigated the inferior native princes to rebel against their sovereigns, that they might take advantage of internal

dissensions to extend their own power; and they granted peace and their alliance to no prince who did not do homage to the king of Portugal, and confirm his submission by permission to build a castle in his capital. Even on the coasts where they merely trafficked without governing, and where the natives were subject to the native princes, they ruled indirectly by the terror of their name. Portugal owed this power to a few able men, whose adventurous spirit led them to this distant scene of action. The inclination to knightly adventures, which, after the overthrow of the Moors, had no object of enterprise at home, found here a field for action. But the successors of the men who established the commercial greatness of their nation, were not endowed with the same talents. Avarice and love of plunder soon became the only motives of enterprise; the honor of the Portuguese name was sullied; a revolting abuse of power excited the resistance of the natives, who had been before armed against each other by the artful policy of the strangers, but now became united by the sight of their common danger. After the powerful John II, and the magnanimous Emanuel, weak princes succeeded to the throne of Portugal; under Sebastian, the disciple of the Jesuits, when the kingdom was fast approaching to its ruin, the Portuguese dominion in Asia was also lost. The union of Portugal with Spain, in 1580, decided the fall of their commercial power in India. The Spanish kings neglected the Asiatic settlements. Robbery, pillage and insubordination prevailed there. Some commanders in India made themselves independent; others joined the Indian princes; and others became pirates. The Portuguese were treated as Spaniards by the Dutch and English.

Dutch India. The Dutch had previously gone to the great commercial market of Lisbon for Indian merchandise, but Philip II closed the harbor of the Portuguese capital to the Dutch ships, on account of the revolt of the United Provinces, and thus obliged that industrious people to go to the sources of this commerce. They were engaged in fruitless attempts to find a passage to India by the Northern seas, where they might avoid their enemies, when Cornelius Houtmann (q. v.), a Dutchman who had made several voyages to India in Portuguese ships, offered his services to his countrymen. In 1595, he was sent, with four ships, to India, to explore the coasts and gain information concerning the inhabitants and the commercial relations in that place, and he returned with favorable accounts; for, in this very first voyage, treaties of commerce were made with the princes of the island of Java. The company of merchants who had begun the undertaking, sent out admiral Van Steck, with orders to enter into treaties with the native princes, and to establish factories on the island, which was at a distance from the centre of the Portuguese commerce, but was near enough to the Spice islands to favor a contraband trade, and was very well situated for trade with China and Japan. The hatred of the natives against the Portuguese, who had at times landed here, assisted in the accomplishment of this enterprise. Several societies were now formed in Holland to prosecute the commerce with India; but the markets, both of India and of Europe, were soon overstocked. To avoid this inconvenience, and to be able to oppose a firmer resistance to the jealous Portuguese than they could do separately, the small commercial societies united in 1602, and formed the great East India company, which had power to make peace or war with the princes of Asia, to build forts, to maintain garrisons, and to choose a governor. Now, that they had formed settlements at Java and upon other points, and had made commercial treaties with several princes of Bengal, began the long struggle between the rivals. The Portuguese had the advantage of a better knowledge of the Indian sea, but the Dutch could rely on more powerful support from Europe; for Philip II and his successors often left their Asiatic settlements unprotected. Time and experience gave the advantage of knowledge to the Dutch, and their stronger and better served navy enabled them to take one place after another from the Portuguese. In 1621, the latter were stripped, by their victorious rivals, of the Moluccas; in 1633, of Japan; in 1641, of Malacca; in 1658, of Ceylon; in 1660, of Celebes, where the Portuguese had settled after the loss of the Moluccas, to retain by smuggling some part of the spice trade: and, after 1663, the most important places on the coast of Malabar, where they had longest maintained themselves, fell into the power of the Dutch. At the same time that the Portuguese were contending with the Dutch, the English also entered the lists.

English India. In 1600, queen Elizabeth gave to the merchants of London an exclusive right to the commerce of India for 15 years; and, soon after, the four first

merchant ships of the East India company sailed from Lancaster to the Moluccas. The profits upon this first voyage induced the associated merchants to use every exertion to overcome the obstacles which the new settlements of the Dutch, and those of the Portuguese, upon the Indian coast, placed in their way; and they soon succeeded in forming establishments and building forts in Java, Amboyna and Banda, and shared the spice trade with the Dutch. This privilege, indeed, was soon after lost, the Dutch having obtained sole possession of the Moluccas; but the English were more successful in their settlements on the coasts of Malabar and Coromandel, and always repelled the attacks of the Portuguese. They obtained yet more important advantages in 1623, when the Persians requested their assistance to drive the Portuguese from Ormuz; for, independently of their share of the rich booty of merchandise which they gained, they formed a settlement at the entrance of the Persian gulf (Gambroon), and obtained possession of the commerce in silks, carpets, gold stuffs, and other Persian commodities. Thus, in the middle of the 17th century, the commercial power of the Dutch and British rose upon the ruins of the Portuguese. But the friendly reception which the natives had given to the Dutch, when they freed them from the hated power of the Portuguese, was soon followed by discontents. They saw that they had exchanged a hard yoke for one still harder; that avarice and a commercial spirit produced, under their new masters, the same effects, which, ever since the first arrival of the Europeans, had disturbed their peace and destroyed their freedom. The Dutch, as well as the Portuguese, were almost continually at war with the natives on the islands and on the continent, wherever they formed settlements. After the expulsion of the Portuguese from the Spice islands, the Dutch government became so oppressive as to compel the destruction of the spice trees upon all the islands except Amboyna. At Banda, the natives were massacred because they would not submit to become slaves, and the whole island was divided among the whites, who used slaves from the neighboring islands to cultivate their lands. The magnificent city of Batavia, upon the northern coast of Java, became, after 1619, the seat of the Dutch government in India, and the principal seat of the Asiatic trade of the East India company. From this place the governor-general, during the five years of his power, ruled with regal sway over the princes of the interior. Until modern times, when the whole European colonial system was shaken, and almost all the commercial establishments in Asia fell into the hands of the British, who ruled the sea, the Dutch, notwithstanding the struggles of the natives, remained in possession of their settlements, among the most important of which were Surat, on the coast of Hindoostan; the government of Malabar, with Cochin, its fortress; that of Coromandel, with the fortified Negapatam; Chinsura, in Bengal; the government of Malacca, the farthest Dutch settlement at the southern point of the peninsula beyond the Ganges; Celebes, the only place where they formally ruled after disarming and subduing the native princes; Java; the Moluccas; and the southern coast of Borneo, their latest settlement.

Danish India. Before we return to the English colonies in India, we must cast a glance at the other commercial establishments, those of the Danes and the French, likewise formed in the 17th century. A Dutch factor, Boschower, who had obtained from the king of Ceylon, as a mark of high favor, the title of *prince*, being coldly received when he returned home, from resentment offered his services to king Christian IV for forming a colony in Ceylon. An East India company was immediately established in Copenhagen, and, in 1618, Boschower sailed for India with six ships, of which half belonged to the king, and the others to the company. He died on the way. The Danish mariner who commanded the ships was ill received at Ceylon, and immediately turned to the coasts of Coromandel, the nearest part of the Indian main. The native prince of Tanjore granted him, for a yearly rent, a fertile strip of land, where were laid the foundations of the city of Tranquebar, and where, soon after, the fortress of Dansburg was built for the protection of the new settlements. The other Europeans, who had established themselves in India, at first placed no obstacles in the way of the Danes, who thus were enabled to carry on an extensive trade. But when the Dutch became more powerful and more arrogant, they excluded their new rivals from all the markets. The affairs of the Danish company declined; it ceded its possessions to the government, and, in 1634, was dissolved. After 1643, the Danes ceased to navigate the Indian seas. In 1670, Christian V formed a new society, which he so generously supplied with ships, that nearly

half of their capital came from his hand. This company had the right of making peace and war. It was soon involved in new quarrels with the Dutch and the princes of Tanjore, whom the latter had excited against it. It continued its feeble existence until 1729, when it was given up, as it could no longer maintain its small possessions. Two years after, it was again restored by Christian VI. It received a charter for 40 years, with the right of carrying on an exclusive trade from the cape of Good Hope to China. It was so successful that, after the charter had expired, it was renewed for 20 years, but with a proviso taking the exclusive right to trade from the company, and allowing access to India to every Danish subject, on condition of the payment of a tax to the company. In the mean while, several settlements were made on the coasts of Malabar and Coromandel, in Bengal, in Behar, in Orissa, on the straits of Malacca, and they became so important to the navy and the commerce of Denmark, that the king, in 1770, bought them from the company, and took their officers into his service. The commerce to India and to China has, since then, been free to all Danish subjects.

French India. The East India companies of England and Holland were already rich, when the French had made only a few unsuccessful attempts, and had no immediate commerce with India. But the French minister of commerce, Colbert, was so loudly called upon to favor the enterprise of the nation, that he resolved, in 1665, to form a company, and to give to it, for 60 years, all the rights and privileges which those of Holland and of England enjoyed. The company was to have a capital of 15,000,000 of livres. The island of Madagascar, at the entrance of the Indian sea and near the African coast, favorably situated for trade with Africa, Persia, Arabia and India, was chosen for the central point of their new establishments. But, in five years, the company was so reduced by bad management, and by the faithlessness of agents, that it ceded its possessions to the government. Things went on no better, and, in two years, all the French who had remained at Madagascar were massacred. In the mean while, instead of Surat in Guzerat, where the French had first deposited their goods, they chose the then unimportant village of Pondicherry, which soon after became a considerable city. During the 17th century, the commerce of the French did not flourish in India. The defects of the system of administration, military disasters, and the encroachments of the government, prevented the extension of the colonies, and some but just begun were immediately abandoned. The company finally gave up its privileges (which had been renewed in 1714), to the merchants of St. Malo. Under the administration of cardinal Fleury, order and activity were first introduced into these commercial enterprises, when the brothers Orri and Fulvy took the direction of them. Pondicherry soon recovered from its decline, and the Isle de France, which the French had possessed since 1720, admirably situated as a station for Indian commerce, soon became flourishing (1735) under the wise government of Bourdonnaye. The colony of Chandernagore, on the Ganges, prospered under the management of Dupleix. French ships navigated all the Eastern seas, where a lucrative commerce could be expected. In the naval war between the English and French (1745—47), the latter maintained their possessions in India with great valor, although they received but little support from Europe; but, after the peace of 1748, their power rose to its height by their influence on the wars of the Indian princes. They obtained large possessions on the coasts of Golconda, Orissa and Coromandel, which were, however, too much separated to give each other mutual support. During the war with England (1755—63), the French gradually lost every thing in India. The peace restored to them only Pondicherry and Mahé, and gave them three small factories in Bengal, with weak garrisons. Since this time, they have lost and regained Pondicherry several times, and hold it by the peace of Paris, of May 30, 1814. The British are now the ruling commercial nation in India. Upon the foundation laid there, as we have related, in the 17th century, has arisen the proud edifice of their power; and, since 1702, the funds of all the smaller companies which had before been formed, were united with those of the East India company. (See *East India Companies.*)

Indian Languages. If the religious systems of the natives of India, and the high antiquity of their traditions, were not a sufficient proof that India is truly *Medyama*, *Medhya-Dehsa* (the central land), and its inhabitants a primitive people, a survey of the languages of the country would render it evident. Although the missionary Henry Roth, in 1644, and the Jesuit Hanzleben, in 1699, engaged in this study, it is only since 1790 that it has

been more thoroughly investigated by Paolino, sir W. Jones, Wilkins, Forster, Carey, Marshman, Wilson, Colebrooke, Ward, Marsden, Bopp and others. According to an Indian treatise on rhetoric, given by Colebrooke, there are four leading languages: Sanscrit, Pracrit, Paisachi or Apadhransa and Mágadhi or Misra. As those double appellations are founded on different passages of that treatise, Colebrooke considers the Apadhransa the same as the Magadhi, and the Paisachi and Misra as one; so that, in reality, the Sanscrit, the Pracrit and the Magadhi are the only leading languages. But, as even English critics have remarked, the passage quoted does not seem to have justice done it, because Apadhransa, like Misra, must be, even according to his explanation, a kind of mixed language or jargon.—I. The Sanscrit, called also *Gronthon*, from *Grandha*, book, is the holy language of the Bramins and of books. It is a dead language, but was probably once spoken; it is wonderfully perfect in its construction, and extremely copious. Its alphabet is called *Devanagari*, divine alphabet, because it is said to have had its origin from the gods, whose language it is; it consists of 50 letters. It has three genders, a dual like the Greek, conjugations numbered according to the vowel or consonant endings, seven cases, instead of pronouns, after-nouns, and abundance of particles. Its flourishing period was at the court of Vicramaditya, rajah of Benares, in the last century before the Christian era, where the celebrated poet Calydas lived, the author of *Sacontala*, or the Fatal Ring, and of the *Megha Duta*, or the Cloud of Message. In this language are also written the old sacred books, the Vedas. The father of Sanscrit grammar is Panini, whose name occurs in the Indian theogony, and to whom are attributed the *Sutras*, or short grammatical precepts; although he himself refers to predecessors, as Samkyn, Gargyn, Casyapa, Galava, Sacatayana, &c. But his system is very artificial. His work was improved by another ancient philosopher, Catugayana, in his Varticas, explained by Patanjali, a mythological personage in the form of a serpent, in a work entitled *Mahabhashia*, which again received additions from Caiyata, and from an unknown person in the work entitled *Casica Vritti*. This last work is highly esteemed, and gave rise to the commentary *Padamanjari*, by Haradatta Misra. A second grammar is Ramachandra's *Pracriyacaumudi*. Modern ones have been written by Wilkins and Colebrooke. The *Amara cosha*, or the Treasure of Amara Singa, who lived before the Christian era, is a dictionary of the Sanscrit. A supplement has been given by Medinicar, in his work *Medini*. *Viswapracasa* by Maheswara, is a second dictionary, *Haravali*, by Purushottama, a third. There are many others, as by Ilelagudhu, *Vachespati* the *Dharanicosha*, Bhattoji's *Siddhanta caumudi*, *Praeriga caumudi*. A Sanscrit press was established at Calcutta in 1808. Sir William Jones, the learned president at Calcutta, to whom the cultivation of Oriental literature is so much indebted, was well acquainted with the Sanscrit. It may be called the fundamental language, as it contáins the original and fundamental sounds of all the European languages, and not merely in a superficial resemblance; so that by means of it are manifested that great fellowship and affinity, by virtue of which all languages form one great growth of the mind.—II. The Pracrit, as the common language, comprehends the various dialects used in writing and social intercourse. Ten are named by Colebrooke, to which, however, should be added the Penjabi and Brija Bhasha. They are spoken in the fertile provinces of Hindoostan and Deccan, by the—1. Sáreswata, a people on the banks of the river of this name, which flows through Penjab. This dialect is especially used in dramas and poems. 2. The Kanyacubjas, whose capital was Canoge. It seems to be the present Hindi or Hindoostanee, except that the latter contains Persian and Arabic words. These two dialects are written with the Devanagari alphabet. 3. The Gauras of Bengal, whose capital was Gaur. This is the Bengalee or Bengal dialect, which is spoken chiefly in the eastern parts of Hindoostan. Many Sanscrit poems have been translated into this dialect; the learned Hindoos speak it almost exclusively. Its characters are the Devanagari, somewhat altered, for convenience. 4. The Mitilaw, or Tirhoot, is the prevalent dialect in Mitilaw, or the Circar (Circle) of Tirhoot and some neighboring districts, bounded by the rivers Cusi and Gandhac and the Nepaul mountains. It is not adapted to poetry. 5. The dialect of Utcala or Odradesa (Orissa) is called *Uriya*, and has Sanscrit words. The five above-named dialects are the languages of the five Gaurs, or of Northern Hindoostan. The five following are those of the five Dravirs, and are called *Tamul*. They are—6. the Dravida, the southern extremity of the Deccan, where the Tamul, called also by the Europeans *Mala-*

bar (though the former is rather the eastern dialect, the latter the western) is spoken; the former is spoken from cape Comorin under the Eastern Ghauts northwardly as far as Pullicate, the latter from cape Comorin, as far as Goa; they meet at the cape of Coimbetore. The gospel is preached by Christian missionaries at Madras, Tranquebar and Tanjore, in the Tamul. Ziegenbalg translated the Bible into it. The name *Tamul*, as the natives pronounce it, is probably connected with the river *Tamraparni*. 7. The Maharashtra, or Mahratta, is spoken on the northern part of the plateau of the Deccan, eastward of the highlands of Omercuntuk. *Muru*, as this country, situated between the Nerbudda and the Krishna, was formerly called, was the centre of the Dravirs, whose capital, Dwara Summadra, was destroyed in 1326. This dialect is written with the Devanagari, and has, likewise, many Sanscrit words. A grammar and dictionary were published by Carey, in 1809. 8. Carnata, or Carnara, by corruption Canara, in the middle of the plateau of Mysore, consequently in the middle of the Deccan. It is still spoken in the mountainous regions, but on the eastern coast has been supplanted by other dialects. 9. Tailanga, Telinga or Tilanga, also the Andray, the language of a people in the north-east of the peninsula, between the Krishna river and Godavery, as far as the northern Circars, and reaching southward to Pullicate. It has much resemblance to the Sanscrit, and has a separate alphabet, called *Calanga*. 10. The dialect of Gurjara or Guzerat, Gezira, a peninsula in the west, is the last dialect of the Pracrit. A dictionary of it has been compiled by Drummond.—III. The Paisachi, or Apadhransa, probably the language of the mountaineers, in dramatic poetry is the language of demons, a jargon mixed with Sanscrit, and therefore the language of ridicule.—IV. The Magadhi, or Misra, probably the Pali and Magadhi of the island of Ceylon, used by the priests of Buddha. It is called *Misra*, because it is intermingled with Sanscrit words. It also generally designates the foreign languages, introduced by the conquerors of the countries on the Indus and Ganges, especially those of the Indo-Chinese. Doctor Leyden thought to have discovered in it many original languages, which might, indeed, have had a common foundation (according to Vater, the Chinese). The foundation of this system of languages is monosyllabic, and, as in the Chinese, the different intonations determine the meaning. Those of the islanders are polysyllabic, those of the main land monosyllabic. The monosyllabic disappears near Bengal. To the east, it is more common, and prevails exclusively in Cochin-China and Tonquin. They are given in the following order:—1. Polysyllabic; *a.* Malay; *b.* Javanese; *c.* Bugis; *d.* Bima; *e.* Batta; *f.* Gala, or Tagala. 2. The monosyllabic; *g.* Rukheng; *h.* Barma; *i.* Mon; *k.* Thay; *l.* Khohmen; *m.* Law; *n.* Aman. Sir W. Jones first perceived the Sanscrit in the language of the Malays, though it is not the only basis, but is joined with a foreign element. In it are written the tales of the Pandus, taken from the old Sanscrit epic Mahabharat. A grammar and dictionary of it were published by W. Marsden. There is another dictionary by James Howson. The Javanese resembles the Malay very much. Doctor Leyden considered the Pali or Bali a dialect of it, which may be, perhaps, a language common to all the countries between the eastern and western boundaries, the language of their holy books, of their priests, scholars and poets. The Rukheng in Arracan, to the west, is said to bear much resemblance to the Devanagari in its characters, and to the Sanscrit in its structure and mythology. The Barma is softer but less articulate than the Rukheng, but it is very perfect, and has a rich literature. The Mon is still prevalent among the inhabitants of Pegu, who style themselves *Mon*, but are called by the Barambs, *Taleing*, and by the Siamese, *Ming-Mon*. Their alphabet is the Barma-Bali alphabet, a little altered. Thay is the language of the Siamese. The Barmas call the country *Syan*, whence, probably, the Portuguese Siam. The Khohmen is the language of a nation on the Mecon or the Cambodia, which is regarded as very learned, and was formerly subjected by the Siamese tribe. The Law is the language of the people called by the Portuguese *Laos*. According to Leyden, it stands in the same relation to the Thay, that the Barma does to the Rukheng, though it bears a closer affinity to the common Bali. In this central country of Laos are the most remarkable monuments of Buddaism; and probably it will hereafter afford, on this point, much information. As the Sanscrit is the common centre of the Hindoo languages, so is the Bali of the Indo-Chinese. In the country between India and China, it is the language of religion, of the law, of science and literature, and appears in all the languages of the people. It is also called *Lankabasa*, i. e. the language (in

Greek βαξις) of Lanka, or Ceylon and Megata, or Mungata, perhaps analogous to the Sanscrit Magadhi. The Bali alphabet had its rise in the Devanagari, but differs essentially from it. The form of the Bali character among the Barmas, is quadrangular, very much as in Lanka, but different from the Siamese, which is called *Nungsu-Khom*. It has all the Sanscrit inflexions of verbs and nouns, though it more rarely uses them in connexion, and more frequently uses the past participle and impersonal verbs. Thus the Pracrit, Bali and Zend, as sir W. Jones very acutely observed, again come into affinity, as three dialects of the Sanscrit. They have had very much the same fate. Pracrit is the language of most of the holy books of the Jaina sect; Bali is the sacred language of the Buddhists; Zend of the Parsees, or fire worshippers. A wide and deep survey of the whole variety of Indian language, primitive, mother and mixed, would afford the most interesting information respecting the philosophy of language and religion.

Indian Literature. Europe still lay in the deepest slumber, when Hindoostan was already in possession of art and science. A thousand years before Christ, a tender and imaginative poetry existed there, and the immense rock on which her mythology is sculptured, is a work, in comparison with which the pyramids of Egypt seem young. The astronomical knowledge of India, existing before the period to which history extends, the antiquity ascribed to the alphabet, the language, the religious traditions, handed down by means of pictures and writings—all point to a developement of the human intellect from its first germ. Mental culture begins before literature. The latter, in India, appears first in theology: afterwards, when the occupations of life became more distinct, it became also a profane art, a vehicle for historical or natural knowledge, down to the time when poetry was written, which naturally returned to mythology. This general division into sacred and profane literature we intend to observe. We first remark, in respect to the arts of writing among the Hindoos, that they are acquainted with paper, though it is not made of cotton, but from the bark of a shrub whose fibres are carefully separated. The former discovery is of later date, being first made after the invasion of the country by the Mongols. When this coarse paper cannot be had, a white crayon is used, with black tablets. The usual material, however, is the leaf of the fan-palm, which, being about three fingers broad and two feet long, contains seven or eight lines; and, as it is thicker, stronger and stiffer than double paper, it admits of writing on both sides. This is done with an iron style, six inches in length, and sharpened at the upper end to make the leaves very smooth. The leaf rests on the middle finger of the left hand, and is held between the thumb and forefinger. The right hand does not move over the leaf, but, after writing a word or two, the writer presses the style deeper into the last letter, and moves the leaf from the right to the left. The Hindoos are so accustomed to this method, that they write while walking. As these marks are very fine, the leaf is rubbed with fresh cow-dung, in such a manner that only the finest particles of it adhere to the lines, and it is then done over with black. The Hindoos do not write on paper with a quill, but with a reed (*calamus*), which is split like our pen, but is stronger. To form a number of palm-leaves into a book, a hole is made through both ends of the leaves, and they are fastened together by a small thread. Two thin pieces of wood, of the size of the leaves, are then placed above and below; a hole is made at each end, and pegs of wood or iron are passed through the whole, to fasten all the parts together. A long string is fastened to the peg, which is wound round the book a number of times. We now proceed to the literature of the Hindoos.

1. *Sacred Literature.* We possess this under the general names of *Shastra*, *Shaster*, *Sistra*, *Shasta* (the different forms of this word are unquestionably merely differences of dialect); i. e., holy, ordinances given by God. They can be read only by the three first, or regenerated castes. The Hindoo has received the sacred writings as religious documents, as the word of God, from God, from Vishnu, the metamorphosed Vyasa, and the books themselves are called *Vedas*. Both these words, *vyasa* and *veda*, belong to the same family, the members of which signify *knowledge*, *wit*, *law*, *ordinance*, and are derived from a root whose original signification is *light* and *fire*. Vyasa, however, found the word of God already existing, and was consequently only a collector of the Vedas, which he reduced to four divisions, called *Rigor Ritsch*, *Jayush*, *Saman* and *Atharvana*. The first division is metrical, the second in prose, and the third consists of prayers, designed to be sung. The last are prayers to be used with purifications, expiatory sacrifices and maledictions, and differ materially from the others, on which

account their genuineness has been doubted. These *Vedas* are properly the original text, which has given rise to several expositions: the latter, in turn, are esteemed holy, like the Talmud among the Jews. Each *Veda* consists of two parts—the *Mantras*, or prayers, and the *Brahmanas*, or commandments. The whole body of hymns, prayers and invocations in one *Veda* is called *Sanhita*. The commandments inculcate religious duties, moral maxims, and theological doctrines. The proper Hindoo theology is contained in the part which unfolds Upnaishada's revelations (of the same family as the Low German *open*, the Greek ὀπη, an opening), and consists of explanations of mysteries. Anquetil du Perron has published these, under the name of *Oupnekhat*, in a Latin translation of a Persian abstract, which was itself corrupted, and which he also misunderstood (Strasburg, 1801, 2 vols., 4to.). The *Vedas* are in Sanscrit, in the Devanagari. (See *Indian Languages*.) A British officer, who lived a long time in India, enriched the British museum with a complete copy of the *Vedas*, in 11 volumes. A second class of sacred books are the *Upavedas*, in four parts (*Ayush*, *Gandharva*, *Dhanush* and *Sthapatya*), treatises on surgery, medicine, music, dancing, war, architecture, and many mechanical arts. The third class are the *Angas*, or *Bedangas*, in six parts (*Sicsha*, *Calpa*, *Vyacarana*, *Ch' handes*, *Iyotish* and *Niructi*), treating of language and grammar, prosody, poetry, astronomy, the ritual, and difficult words in the *Vedas*. The fourth class are the *Upangas*. They are divided into three classes—the *Puranas*, *Dhermashastras* and *Dersanas*. The *Puranas*, to the number of 18, with as many *Upapuranas*, supplements and explanations, treat of mythical philosophical subjects, viz., cosmogony, theogony, &c., a more extensive series of legends, which sometimes, of course, represent the great relations of the world and time, under a contracted view, but cannot be rashly rejected. We will merely enumerate the *Puranas*:—1. *Kalika Purana*, a history of the goddess Kalika Parvadi, Bhavani, the wife of Siva; 2. *Abhiatma Ramayana*, a fragment of the *Brahmanda Purana*, a history of Ramatshandra; 3. *Brahma Vaivartika Purana*, the origin of the gods, and the history of Ganesa, Crishna, Durga; 4. *Pedma Purana*, in praise of the lotus (*pedma*), and a history of Lakshmi, the wife of Vishnu, in 55,000 stanzas; 5. *Agru Purana*, a sketch of all Indian science, in 15,500 stanzas; 6. *Vishnu Purana*, in 23,000 stanzas; 7. *Siva Purana*, in 24,000 stanzas; 8. *Linga Purana*, in 11,000 stanzas; 9. *Scanda Purana*, of the god Scanda, the son of Siva and Bhavani; 10. *Haritalika* and *Savriti Bata* relate to religious customs; 11. *Ontkal Khanda* and *Kasi Khanda*, the former a description of Orissa and the old religious rites of the Vishnu worship at Juggernaut, here *Poursatim*; the latter a history of the city of Kasi or Varanasi, now *Benares*, the principal city of the Sivaites; 12. *Nuradeya Purana*, the history of Nareda, god of music, in 25,000 stanzas; 13. *Markandeya Purana*; 14. *Bhawisia Purana*; 15. *Vayu Purana*, the history of Vayu, god of the winds; 16. *Matsya Purana*, the history of Vishnu, as the fish in the first deluge, in 14,000 stanzas; 17. *Narasingha Purana*, Vishnu as a man-lion; 18. *Vhagavata Purana*, the work of Vyasa, the history of Crishna, or rather of Vishnu, in 12 books, containing 18,000 stanzas, which have been published in French and German. The two oldest and most important epic poems are—19. *Ramayana*, the history of Ramatshandra, king of Ayodyia, the seventh great incarnation of Vishnu—a work of Valmiki; 20. *Mahabharata*, the war of the Pandus and Kurus, two lines of descendants of the old Indian king Bharata, in 18 books, and more than 100,000 stanzas. Wilkins, Parraud, Proben, Herder, Schlegel and Majer have translated an episode from this work, called *Bhagavat Gita*. Another, entitled *Nalus* (published at Paris and Strasburg, in the original, with a Latin translation), has been translated into German by Bopp and Kosegarten (Jena, 1820). To the *Dherma Shastras*, as the second division of the *Upangas*, belongs the *Munava Dharmasastra*, or the ordinances of Menou (English, by sir William Jones)—a complete code of laws and customs, containing a poetical account of God and the spirits, of the creation of the world and of men (Schlegel's *History of Ancient and Modern Literature*, I. 171). The *Dersana*—the third class of the *Upangas*—are philosophical works, and are of three classes—*Nyaya* (connected with the Greek Νοῦς, understanding, mind), which explains the sense of separate passages of the *Veda*, and is divided into two parts—the work of Gotama and Cadana; *Sankhya*, which is two-fold, either with or without *Iswara*, and *Sankhya*; the first is also called *Patanjala*; lastly, *Mimansa*, which is again attributed to *Dwapajana*, surnamed *Vyasa*, or the Compiler. Dow has published parts of the *Dersanas*.

2. *Profane Literature.* We shall only touch upon some of the principal works.

Mugdhabodha, or the Beauty of Knowledge, by Goswami, surnamed *Vopadeva*, is considered the best Sanscrit grammar. There is another, by Kalapa, called *Katantra Vriti*, with an etymological commentary, called *Katantra Vriti Tika*. Such commentaries are also *Dourga Singha*, *Tritatshandrasa*. Another grammar, with the title *Sankhipta Sara*, by Radjah Djoumoura Randi, has been commented on by Gopi Tchandra. The best dictionary, *Amarasinha*, has been already mentioned; besides this, there are 17 others, of great reputation. The Hindoo poetry has, throughout, an elegiac earnestness and sweetness, which owes its origin to their oldest poet, Valmiki, who sang in plaintive strains of the murder of a youth, who lived happily with his mistress in a beautiful wilderness, and was mourned by her in heart-rending lamentations. We have already spoken of Valmiki as the author of the epic *Ramayana*, with which Vyasa's *Mahabharat* alone can be compared. Another poet is Djana Radjah, who has described the meeting of Arjoun with Siva. Bhattu Bana, a third poet, is the author of Kadambari. Bhartri Hera Pandita wrote a popular epic *Bhatti:* Djaga Deva wrote the *Gita Govinda*—a hymn to Govinda (translated by Jones). The dramas, called *Nataks* by the Indians, are numerous. Among the dramatic poets, Calidas, a poet at the court of Vicramaditya, about a century B. C., is mentioned as a star of the first magnitude. He has been called the *Indian Shakspeare*. His best drama is *Sacontala*, or the Fatal Ring, an English translation of which has been made by Jones, and a German by Forster, and of which Herder says—"All the scenes are connected by flowery bands; each grows out of the subject as naturally as a beautiful plant. A multitude of sublime as well as tender ideas are found in it, which we should look for in vain in a Grecian drama." *Koumava Samblava* (the Birth of Kumara, the Physician of the Gods) is one of the productions of this poet, as likewise *Ourvasi Vikrama* (the Heroism of Urvasi), in five acts, and *Megha Duta*, or the Cloud of Message, published by Wilkins. Among other Hindoo dramas are *Ketriabali* (the Pearl Necklace), by Ilersadeva; *Prabodha Tchandra Oudaya* (or the Rising Moon of Knowledge), in six acts, by Krishna Misra; *Hasiarnava* (or the Sea of Ridicule)—a satirical drama, in Sanscrit and Pracrit, by Djayadeswara Bhaltatcharia; *Maha Nataka*, the great drama, also in Sanscrit and Pracrit, by Madhusanada Misra Murari, in seven acts. *Mudra Rakyasa*, and *Malati*, and *Malheva*, dramas in 10 acts, are by unknown authors. (See Wilson's *Hindoo Drama*, Calcutta, 1827). The poetical treasures of the literature have been not a little increased by the English, who have established a printing press at Calcutta, for the purpose of publishing Oriental works. The Hindoos have two kinds of feet (*padam* or *charanam*) in their verses—the simple *ganam* and the *upaganam*. Of the former, there are eight, called, in general, *majabasanarayala*. They are the following: *maganam* (molossus), *baganam* (dactyle), *iaganam* (amphibrachys), *saganam* (anapest), *naganam* (tribrachys), *raganam* (creticus), *yaganam* (palimbacchius), and *laganam* (bacchius). The *upaganams*, called *yarahanagamanala*, are *gaganam* (spondee), *haganam* (trochee), *vaganam* (iambus), *nalam* (proceleusmaticus), *galam* (pyrrichius), *malagu* (epitritus quartus), *nagam* (pæon quartus), *latam* (ionicus minor). The Hindoos have also two kinds of rhyme: the one falls on the first letter or first syllable of the verse, and is called *yety*, or *vadi;* for example, *ki* in *kirti* and *kirtana* makes a rhyme. The other falls on the second letter or the second syllable from the commencement, and is called *prasam;* for example, *pa* in *Capaguy* and *Dipantram*. Of the verse, the *schlocken*, a stanza or strophe, has already been mentioned. But there are also other kinds of verse (*padyams*), as the *cawdapadyam*. There are five writers on prosody, which is very difficult. The oldest philosophical sect is considered to be that of Capila. The philosophy called *nyaya* (*see above*) is a kind of logic containing the doctrine of syllogisms, which, according to a Persian account of Mohsani Fani, is the foundation of that of Aristotle. A third system is the *mimansa* (which reminds us of the monkey and serpent god), invented by Vyasa (*see above*), and improved by his scholar, Jaimini. Vyasa's doctrine is called *vedanta* (the aim of the Vedas). It teaches the dependence of matter on mind. The disciples of Buddha, on the contrary, are materialists. Thus we have three systems, the *Vedanta*, the *Nyaya* and the *Mimansa*, mythologically developed, as pantheism, in its noblest sense, with the corresponding views of idealism and realism. The Sankhyas, Jainas, and other sects, are unquestionably later followers of one or the other of these systems. We will only name some of the philosophical works. Among them are *Gangheswara Fatwa Schirtamani*—a treatise on metaphysics; *Pratikhya Tippani*—a commentary on

visible objects, by Gadadhera, who also wrote on moral cases and moral power; *Gouna Bhasia*, or concerning qualities of things; *Anumaka Didhiti*, or a treatise on memory, by Siromini Battatcharia; *Smriti Tatwa*, or an Abstract from the Laws, collected by Ragunandaka Bhattatcharia (translated into German by Raspe); *Hitopadesa*, Friendly Instructions—a Hindoo book of fables (published by Wilkins), called also the *Fables of Pilpay*. Hindoo literature first began to be extensively cultivated in Europe, at the commencement of the present century, and the study of it can as yet be considered only in its infancy. The first great work published in Europe, in the ancient Indian language, was *Hitopatesa* (1810). In 1808 appeared Wilkins's grammar, published with the types which have been used by Bopp. (See the papers of Jones, Wilkins, Wilson, Ellis, Colebrooke and others, in the *Asiatic Researches* (15 vols., Calcutta, 1788—1828), and in the *Trans. of the Royal Asiatic Society*, London.

Indian Mythology. Divine rest, immersion or absorption in the Godhead, is considered by the Hindoos the highest perfection; and the way which leads to it is the sacrifice of the individual self. The religious doctrines of the Hindoos are contained in the four Vedas, of which the six Angas are commentaries, by the Brahmins; the second commentary, called the *Augutorrah Bhade Schusta*, in eight books, containing fables and allegories, and a ritual, makes the number of holy books 18; there are four Upavedas and four Upangas, which include the 18 Puranas, Nyaya, Mimansa and Dermashastra. (See *Indian Literature*.) Thus the Vedas are the Bible, the Puranas, the Mythology, the historical poetry, Dherma Shastra, the ethics, and the other two the orthodox philosophy. These paraphrases introduced dissension, and new religious writings appeared, according to Görres, probably the Bali writings, the books of Buddha, in Malabar and Coromandel. These books, rejected by the orthodox Brahmins on the Ganges, are the basis of six systems of philosophy, viz. Jogachara, Sandhanta, Vaibaschica, Madyjamica, Digambara and Charvæ. Although a continual change may be thus perceived, and a world of fables, continually growing more and more variegated, was opened, yet the foundations always remained the same, and Bramaism and Buddhism remained essentially unchanged. The Hindoo religion is, therefore, Pantheism, understanding by that word a religion which inculcates the belief in One existing in all things, and all things existing in One—God in the universe, and the universe in God, and regards nature as a revelation of the divine intelligence. Every thing is thus the continual transformation (metamorphosis) of God. This fundamental doctrine is inculcated in various ways by all their writings on religious subjects; and upon this doctrine rests the idea of the reciprocal influence of worlds upon each other, and their central light, and the conception of the universe as a perpetual creation, as does, likewise, the belief in metempsychosis, or the transmigrations of souls after death. The sins of the parents are considered as to be visited on their children, because the son is the father regenerated. Beginning and end are mingled, and mind and matter are continually striving for predominance in the universe, which therefore exhibits a never-ending struggle between good and evil, light and darkness. The original Hindoo conception of God, the omnipresent Being, in all his purity, eternity, and spirituality, and beatitude, is pure and elevated; he is called *Brahm*, *Atma* (the breathing soul), *Bramatma*. Before the creation, he reposed in silence, and absorbed in himself. This world, says Menou, was all darkness undiscernible, undistinguishable altogether, as in profound sleep, till the self-evident invisible God, making it manifest with five elements and other glorious forms, perfectly dispelled the gloom. He, desiring to raise up various creatures by an emanation from his own glory, first created the waters, and impressed them with the power of motion; by that power was produced a golden egg, blazing like a thousand suns, in which was born Brahma, self-existing, the great parent of all rational beings. The Hindoos, says sir W. Jones, worship the Supreme Being under three forms—Vishnu, Siva, Brahma; for that is the order in which the three are expressed by the letters A, U, M, which coalesce and form the mystical word *O'm*, which never escapes the lips of a pious Hindoo, but is meditated on in silence. The learned Indians, as they are instructed by their own books, in truth acknowledge but one Supreme Being, whom they call *Brahm* or the Great One, in the neuter gender; they suppose his essence to be infinitely removed from the comprehension of any mind but his own, and they suppose him to manifest his power by the operation of his Divine Spirit, whom they name *Vishnu*, the Pervader, and *Nayaran*, or Moving on the Waters, both in the masculine gender,

whence he is often denominated the first male; and by this power they believe that the whole order of nature is preserved and supported; but the Vedantis, unable to form a distinct idea of brute matter independent of mind, or to conceive that the work of Supreme Goodness was left a moment to itself, imagine that the Deity is ever present to his work, and constantly supports a series of perceptions, which, in one sense, they call illusions, though they cannot but admit the reality of all created forms, as far as the happiness of creatures can be affected by them. When they consider the divine power exerted in creating, they call him *Brahma*, in the masculine gender also; and when they view him as the destroyer, or rather changer of forms, they give him a thousand names—Siva, Iswara, Mahadeva, &c. The first operations of these three powers are described in the Puranas, by a number of allegories, and from them we may deduce the Ionian philosophy of primeval water, the doctrine of the mundane egg, and the veneration paid to the nymphæ or lotos, which was anciently revered in Egypt, as it is at present in Hindoostan, Thibet and Nepaul. The fundamental idea of the Hindoo religion, that of metamorphoses, or transformations, is exemplified in the Avatars. The Avatars are transformations of Vishnu, and are interesting as an extremely rich cycle of mythology. These transformations fill up the Indian Yugs, which compose a certain series of periods intended to effect a junction with God, and comprising 4,320,000 years. The Yugs have been considered as an allegorical description of the year, divided by the solstices and equinoxes, and of the precession of the equinoxes. The Avatars are generally considered as ten, though others give more, which, however, are of inferior importance. The five first are these:—1. Matya-avatara, the transformation into a fish, the deceptive Maya-fish. Brama one day fell asleep; the giant Hayagriva (the rebellious, faithless human mind) stole the four Vedas (the universal law, given by Brama), swallowed them, and concealed himself in the sea; Vishnu recovered them, in the shape of a fish, and thus annihilated the empire of the evil one; for that incarnation had for its object and consequence the salvation of the world from the power of evil. 2. Kurma-avatara is Vishnu's transformation into a tortoise, sustaining the universe, which had been convulsed by the assaults of demons, while the gods churned the sea with the mountain Mandar, to force it to disgorge the sacred things and animals, together with the water of life, which it had swallowed. 3. Varaha-avatar, the transformation into a boar. The giant Hirany-akshana (the giant of the earth) had coiled up the earth like a cable, and concealed it in the Patalas, seven subterraneous worlds. Vishnu, as a boar, rooted up the earth with his tusks of fire. 4. Narasingha-avatara, the transformation into the man-lion. In a contest with the giant Hirany-akasha (also Eruniakassiaben), Vishnu appeared as a man-lion from Siva's pillars of fire, and saved the son of the giant, who, pursued by his father, had taken refuge behind the pillar. This is another version of the earth-forming conflict of water and fire, as the name of the metamorphosis (*Narasingha*), and of the festival of this incarnation (*Neriosengh*), denotes; for *nar* is, in Indian, water; *narasayana*, the movement in water; and the words *seng*, *zenga* (to scorch), imply the idea of fire. 5. Vamana-avatara, transformation into the Bramen, or Lingam dwarf. In the shape of a dwarf, Vishnu visited the giant Bali, who had done the gods much harm, and requested of him as much land as he could cover with three paces, whereon to sacrifice. The giant having promised it, Vishnu immediately resumed his divine form, with one step covered the whole earth, and with another the whole space between heaven and earth, upon which the giant submitted, adored him, and was sent to govern in Padalon (the infernal regions). It is unnecessary to describe the remainder of this series of transformations. Among a people of such exuberant fancy as the Hindoos, it is natural that every thing should receive form and life. But it is remarkable to what a degree their works of imagination are pervaded by the idea of sexuality. Sir William Jones remarks, that "it never seems to have entered into the heads of the Hindoo legislators, or people, that any thing natural could be offensively obscene—a singularity which pervades all their writings and conversation, but is no proof of the depravity of their morals." Thence the worship of the Lingam by the Sivanites, of the Yoni by the Vishnuvites. Lingam is the symbol of the male nature. The worship is thus historically derived. Siva, by his voluptuousness, gave offence to seven penitents, and by their maledictions lost his virility; but, the punishment having been subsequently deemed out of proportion to the transgression, the penitents resolved to worship what they had previously cursed. It is worshipped in

temples, roads, &c. Yoni is the feminine with the masculine, in a figure, which is also written with cow-dung on the forehead. Moreover, like the eye, plants were, in this mythology, symbols of perception and regeneration; and plants and the eye, forming a triangle, were united in the flower called *lotos*. In language, lotos is the flower of concealment, of night, of silence. In natural history, it is the *nymphæa nilufer* (Lin.), in India called by various names—*pedma*, *panceruha*, *tamarasa*, *nalina*, *aravinda*, *maholpala*, *camala*, *cuseshaya*, *sahasrapatra*, *sarasa*, *sarasiruha*, *rajiva*, *visaprasuna*, *pushcara*, *ambhanika*, *satrapa*. Its seed is abundant, small and round; it is either blue or red; the flowers of the former are a beautiful blue, but, if entirely unfolded, somewhat less fragrant than the red rose-colored species, though of a very fine odor. The leaves spring directly from the roots, deeply indented; on one side dark purple, reticulated; on the other, green and soft; the petals very soft, long, and reed-shaped. There is also a variety with the leaves purple on both sides; dark crimson flowers; the chalice leaves richly colored within, and broad anthers; less acute and broader than the blue, with little odor. The worship of the lotos is still practised, as devoutly as ever, in Hindoostan, Thibet and Nepaul. Temples are decked with it, as are also deities; for a god, immediately after his birth, always floats in the water on a lotos. The Hindoos adore it because it is a water-plant, and water is the vehicle of creation. It is also sacred among the Egyptians. As every thing in India appears in the glow of life, and is endowed with form, the moon, and sun and stars have also their gods. All the starry worlds are considered as freeborn spirits and gods, which have become alienated and separated from the original light, the central sun of spirit, the Persian light-water, *Arduisir;* and from this light-water the milky-way has poured forth in streams of stars (*vars*). The adoration of fire, stars, or the sun, is therefore an ancient worship, as is that of water, too, in the above-mentioned idea. For that reason, Ganga (the river Ganges) is sacred to the Indians. It had its origin, according to one fable, from the sweat of Siva's wife, Paroadi, or, according to another, in the water in which the universe swims. The earth also has its goddess, Prithivi; the air its god, Indra, Dewandra, one of the eight placed as guardians of the earth by Vishnu, on his incarnation as a boar, which eight are Indra, Aghni (fire), Padurbati (judge of the infernal world), Nirurdi (king of the infernal world), Varuna (water), Maril (wind), Cubera (riches), and Eswara, who in the east is Indra, in the south Aghni. The number of the Devetas (gods) is immense, and by some is rated at 333 millions. Of the inferior gods, or demons, we shall only mention the *Ginarers*, the genii of musical instruments, and the Ganduwers, or Gandharvas, musicians of the air, who sing on the northern mountain of Haimakutha (the cold, the dark), the spirits of singing stars. These are good demons. The bad are called *Asoora*, or *Asors*, at whose head stand Moisasoor and Rhadoon, and they generally appear in a terrible, gigantic form; they inhabit the Patala, or Padalon (the infernal regions). The universe is divided into 15 districts, or circles, seven above the earth, called *Swega-Surgs*, and seven below, called *Patala*. The Patala are lighted by eight carbuncles, on the heads of eight serpents. In the midst, between the two divisions, is Mirtlok. The ceremonies of Hindoo worship consist of visits to the pagodas, ablutions and purifications, penance and mortifications, good works, sacrifices, &c. Some of their pagodas are of high antiquity and gigantic conception, majestic appearance and tasteful architecture. The entrance is always made in a huge pyramid, which gradually grows narrow as it approaches the top, where it runs out into a half moon. The pyramid faces the east. In large pagodas, there is always a spacious court, and at its end a gate corresponding to the first, excepting that the pyramid is not so high. Opposite the door, in the middle of the second court, is placed on a pedestal, or in a cavity of the wall, between four pillars, a cow, lying down; sometimes a lingam, Hanuman, serpent, or some other object of adoration. *Sahstangam* is the name of the custom of falling on the face; *namaskaram*, of the folding and raising of the hands to the forehead. The edifice is divided into two or three parts, of which the one is large, the other, for the sacrifices, smaller; the whole is formed of tiles, or unhewn stone. On the Coromandel coast, there are more splendid temples than in Bengal; on the Malabar coast, the style of construction is different. The most celebrated pagodas are those of Elephanta and Salsette; those of Illura, or Elora (q. v.); the temples of Vishnu at Tirupadi, Schirangam, Kangiwaram, and the temples of Siva at Tirunamalay, Tirvatur and Shalembron, Kandschipuram, Ramonathampuram, Ramischwaram and Caschi. The pagoda at Elephanta, or

Kalpuri, is considered as the oldest, and derives the first name from an elephant hewn in black stone, at the foot of a mountain, on the side of Bombay. Several pagodas are there collected together. The cisterns now used for watering cattle were formerly appropriated to purifications. The temples at Elora are hewn out of a chain of hills, in the shape of a horse-shoe, and form a kind of Indian pantheon. All the deities have there a temple, great or small, and some of them a number. Two of the largest are consecrated to the Trimurti. It is a colossal hieroglyph, and, like the pyramids, bears witness to the absorbing influence of religion in ancient times. Jagrenat's or Krishna's three pagodas, at Jagrenat, whose towers are seen from the sea at 20 miles distance, and to reach which it is necessary to go through a multitude of small pagodas, with consecrated groves and ponds, are surrounded by an immense, thick, square wall of black stone. The image of the god is placed on the summit. It derives great revenues from pilgrims. For the ablutions previous to every act of worship, any water is good, provided it be running, and especially that of the Ganges. There are, therefore, ponds at all the temples, unless these are situated on a river. Cow-dung may be substituted for water, in the performance of the ceremony. Passages from the Vedas, Vedangas, etc., are first read. The idols are also washed with water and with milk, and anointed with butter and costly oils. Penance is either of the *contemplative* kind, in which the penitent must mortify the appetites, in order to devote himself wholly to the contemplation of the divine nature, and be united with God, or of the *expiatory* kind. The penitent form, in some degree, monastic orders; and Fakirs, Jogueys, Atits, Vairagis and Tapis, up to Vanaprashtas and Sanyasi, are the living images of penance. Good works consist in donations of cattle, or other things, on festivals and solemn occasions. The principal offerings are the following:—the Jaga, or Jagum, consecrated to the sun and the nine planets, is a burnt-offering, in order to obtain the holy fire, with which the funeral piles of departed Bramins may be kindled, in order to exempt them from further penance after death, and translate them from the ashes to the courts of Brama. It requires great preparations. A hundred learned Bramins select a place, which must be consecrated by prayer and holy water; a large tent is then erected in the middle, and around it several small ones; in the large one is a square floor, from the centre of which rises a wooden pillar, with a cord fastened at the top, the two ends of the cord hanging down; around lie nine kinds of wood, particularly holy, of which also the priests hold each a piece in their hands. Pieces of arasa wood are then rubbed together till they take fire; after which a he-goat, or ram, without blemish, is brought into the circle, and various magic words whispered in his ear; after which he is strangled; his liver is taken out, washed with milk, besmeared with butter, and roasted by the sun and fire, but the animal itself is burned; the liver is divided among the Bramins, and eaten; the high priest takes the sacred fire home with him. Homa, or Homan, is a sacrifice made to Aghni, the god of fire; it is called, in distinction, *Dewajagna* (the divine sacrifice), and is offered on the occasion of all important undertakings. A purified Bramin, clothed in white, takes a seat on a wooden stool, and repeats some *schloken* (stanzas); before him are placed a bell, a burning torch, and a vessel of liquid butter, or cocoa-nut oil; at his sides large banana leaves, on which the things to be sacrificed are deposited round the altar, e. g. eagle-wood, branches of the camphor tree, red sandal, nutmeg, &c. This wood is set on fire, the bells rung over it, butter is poured into the fire, and then rice, plants, &c., are thrown in and burned, while prayers are repeated; several cocks are killed, and, reeking with blood, thrown into the air; an iron hook is then thrust through the back of some pious man, on which he is swung, and borne about, amid acclamations, shouts and benedictions. Pidrajagna is an expiatory offering for the deceased. Bhudagagna is an offering rendered to the spirits of evil. Adithipugia is the offering of united friends; in this rite, the image of the common deity is placed in the court of the house, strewed with flowers, amid the prayers of the two friends, and the feet of the stranger are washed. Arkja is an offering of flowers for the happiness of souls. The *Mahabharata* (translated by Wilkins) is said to contain all the great mysteries of the religion of the Bramins. (See the work of William von Humboldt, *Uber die unt. d. N. Bhagavad-Gita bekannte Episode des Mahabharata* (Berlin, 1826.) Polier's *Mythologie des Indous* (1809) has too little credibility to be used as an authority. We refer the reader to the *Mœurs, Institutions et Cérémonies des Peuples de l'Inde*, by the abbé Dubois, who lived upwards of 30 years among the Indian castes

(Paris, 1825, 2 vols.). There is a sect among the Hindoos, which styles itself *Sauder* (worshippers of God), rejects the worship of idols, and offers nothing but religious hymns to the Divine Being. These Indian Quakers are required to abstain from luxury, from dancing, wine, tobacco, and are forbidden to offer violence to man or beast; they are enjoined to practise industry, alms-giving in secret, and prayer; they are regular and obedient citizens, and mostly merchants.

INDIAN CHRONOLOGY. (See *Epoch.*)

INDIAN CORN. (See *Maize.*)

INDIAN OCEAN; that great body of water, which has Asia on the north, the Sunda isles and New Holland on the east, Africa on the west, and the Antarctic ocean on the south. The cape of Good Hope, in 21° 27′ E. lon., and the southern extremity of Van Diemen's Land, 147° 20′ E. lon., may be considered its extreme limits from east to west. Its length, from north to south, is about 2400 leagues; its breadth varies from 2200 to 1200 leagues. Its principal gulfs are the Red sea, the Arabian sea, and the bay of Bengal. Its islands are Ceylon, Madagascar, the Laccadives, Maldives, Socotra, Andaman, Nicobar, the Isles of France and of Bourbon, Kerguelen's Land, &c. Numerous rocks, and coral reefs, render the navigation dangerous. The Ganges, Burrampooter, Irawaddy, Indus, Euphrates, empty the accumulated waters of Southern Asia into the Indian ocean. The trade-winds prevail here between the tropic of Capricorn and the 10th degree of south latitude; to the north of this region the monsoons are felt.

INDIAN RUBBER. (See *Caoutchouc.*)

INDIANS; a name common to the aborigines of the new continent. We can give no opinion respecting their origin. The only hypothesis on this subject, founded on any better evidence than conjecture, is that America was peopled by the way of Beering's strait. It is certain that an easy communication has existed between the two continents at this point for several centuries. However, arguing merely from this fact, it is as easy to prove that the old world received its inhabitants from the new, as the contrary. With the exception, perhaps, of the Esquimaux, all the Indians have the same physical characteristics. The bronze or copper color, the straight, coarse, black hair, the hazel eyes, the high cheek bones and erect form, are common to them all. There is, indeed, some difference in the stature of different tribes. The Osages are very tall, and the Shoshonees are below the middle stature. Each race, and, indeed, each tribe, has its peculiar physiognomy. To a European or Anglo-American, all Indians look alike; but one accustomed to them can distinguish the tribes with almost unerring certainty. Thus a Dahcotah is as readily distinguished from a Chippeway or a Winnebago by his features as his dress. Yet the difference is not so great as to induce a belief that all the tribes are not descended from the same stock. The Esquimaux of Greenland and the eastern part of the continent differ from the red Indians in complexion, stature, and in the position of the eyes, which are set obliquely in their orbits. As we go eastward, along the northern shore of America, we find the Esquimaux as tall as other races of men. After passing the mouth of Mackenzie's river, they are found to blend with the Indians in every particular, so that it is hard to say where the Esquimaux become Indians, or where the Indians become Esquimaux. As low on the coast of the Pacific as Nootka sound, the natives have some characteristics of the Esquimaux race. Whether these people be of the same stock as the Indians or not, it is almost certain they have a common origin with the savages of the northern shores of the old continent. Perhaps the diminutive stature of the eastern Esquimaux is owing to their mode of living, which continually exposes them to every hardship and privation. There is yet another point of difference between this people and other Indians: from cape Farewell to Beering's strait, the Esquimaux speak one language, and derive almost their whole subsistence from the sea; whereas the red Indians never resort to fishing where they can do otherwise, and speak a great variety of dialects, even when the language of the several tribes is radically the same. Considering the Esquimaux as Indians, a brief description of them will not be amiss. The average height of those in Greenland and the eastern part of America is beneath five feet. They are deficient in physical strength, and the muscle of even the young and strong men is not prominent or well developed. The necks of the men are small and shrivelled; those of the women are well proportioned. Distended abdomen is universal among them, but corpulence is not common. Both sexes dress alike. Their dress consists of a jacket, with a hood, a pair of breeches which reach below the knee, and an enormous pair of boots, all of seal skin. The jacket has one flap before and another behind, both

of which hang nearly to the ground. These habiliments, doubled, or even trebled, are their protection in winter and summer. Sometimes these garments are made of other materials. The clothing of the children does not differ from that of adults. Their principal articles of food are train oil and the flesh of seals and walruses. These animals are watched for hours on the ice, and finally despatched with spears. In summer, the Esquimaux kill a few reindeer, and, in districts where they are found, musk oxen. They also attack and destroy the polar bear. Their only arms are spears and bows and arrows, all or most of which weapons are rudely constructed of pieces of bone and fragments of wood, fastened together and tipped with ivory. As their country produces no wood, they are compelled to resort to such means. In winter, they reside in huts made of snow, which are lighted and warmed by lamps. Their summer habitations are tents of skins, which are supported by the bones of marine animals and reindeer's horns. When they travel in winter, they transport their effects on sledges made of bone and drawn by dogs. Procuring food is the sole duty of the men, but all other labors devolve on the women. Both sexes are equally expert in the management of canoes, which are made of seal skins stretched on a frame of wood or bones. One tribe of Esquimaux, discovered by captain Ross in the north-eastern part of Baffin's bay, have no canoes, or any means of floating excepting on pieces of ice. The Esquimaux have the same rambling propensity which distinguishes other Indians, with this difference; they prefer the most desolate and inhospitable regions. They have no settlements or fixed places of habitation, but there are several mustering points, at which they assemble at certain stated times: Igloolik, the mouth of the Coppermine, and the mouth of the Mackenzie, are some of them. There is no marriage ceremony among the Esquimaux. Children are betrothed in infancy. Bigamy is common, but a man seldom has more than one wife at a time. Sometimes they select wives for themselves. Divorces depend on the pleasure of the parties, and are very common. Children are also adopted, and the connexion binds the parties as firmly as the ties of blood. Like other Indians, they are very fond of their children, whom they never chastise or correct. This kindness is not reciprocated by the children, who abandon their parents whenever they become burthensome. The Esquimaux are superstitious, and have priests who pretend to hold intercourse with the invisible world. The gods of their worship are many. Where they have had little or no intercourse with the whites, the Esquimaux are scrupulously honest. They never touch each other's property without permission. Yet they are envious to a degree scarcely credible. The possession of any article draws on a man the ill will of all his neighbors. Gratitude is absolutely unknown to them. In sickness or danger, the husband cares not for the wife, nor the wife for the husband. Parents receive no attention in their old age, and parents deny their children the rites of sepulture. Selfishness is the ruling principle of the Esquimaux. Their hospitality, like that of other savages, is universal. Strangers are received in the kindest manner; every want is removed, every accommodation supplied. This good quality is balanced by a proneness to falsehood. Their lies are chiefly confined to calumnies against each other and false accusations. This mostly prevails among the women. They are not quarrelsome nor ferocious, nor are they cowardly. In pain, cold, starvation, disappointment, or when ill treated, their equanimity is admirable. They seldom dispute or quarrel, and revenge is scarcely known among them. Yet they venture to sea on loose cakes of ice, and attack the polar bear without the least hesitation.—The Indians in the northern part of North America are divided into several great families. The Algonquin or Chippeway race is one of the two most numerous now in existence. All the tribes of New England were Algonquins, if we may take identity of language, manners and customs as a proof of the fact. The vocabulary of the Narraganset tongue, recorded by Roger Williams, proves them to have been a branch of the Algonquin stock. The Mohegans, considered the progenitors of the other tribes in New England, spoke the same tongue. The tribes in Maine claimed the same origin. The Delaware, or Lenni Lenape, were of the same family, and their language has been pronounced, by competent judges, the most perfect existing. The Iroquois, or Six Nations, once dreaded from the Atlantic to the Mississippi, are Algonquins. This tribe did and still does extend from the mouth of the St. Lawrence to the Mississippi, and thence northward to Great Slave lake; for so far do the Nayheeowawk or Knisteneaux extend their rambles. On the western side of the Mississippi is another great Indian family,

viz., the Sioux or Dahcotah. The Dahcotah proper inhabit the country on the west side of the Mississippi, north of the Wisconsin, to the sources of the Mississippi. Their territory extends westward to the Missouri. This tribe speak a language radically distinct from that of the Algonquin race. Their origin is unknown, and their own traditions are at variance on this point one with another. One account, and the most probable, represents them as having been driven from the confines of Mexico by the Spaniards. The branches of this tribe are the Winnebagoes, the Otoes, the Ioways, the Missouries, the Assinniboins, the Omahaws, the Kansas and the Osages. All these tribes speak dialects of the Dahcotah tongue. The Assinniboins are known also by the names of Ossinneboins, Ossinnepoilles, Stone Indians, and Hohays. This last is the name they give themselves. Their secession from the Dahcotah stock is recent, and its cause is as follows: One Dahcotah had eloped with the wife of another, and taken refuge in the tents of his kindred. The husband, going to reclaim his spouse, was slain by the adulterer. His father and uncles, demanding blood for blood, according to the laws of the tribe, were slain also. The quarrel of the dead was taken up by their relatives, and the kindred of the guilty persons were defeated with loss. A series of bloody encounters ensued, till at last the party of the original aggressor were worsted and separated from the tribe. They were called Hohays, and have been at war with the Dahcotahs till within a few years. They now roam over the plains, from the Saskashawin to the Missouri, where they live by hunting the buffalo. Their principal resort is about Devil lake. As well as the Indians farther north-west, they have few guns or other articles, the manufacture of the whites. Their number cannot be ascertained, but it is certain they exceed a thousand fighting men. A tradition of the Winnebagoes says they were driven from the frontier of Mexico by the Spaniards, towards whom they entertain a hereditary hatred to this day. Within two centuries, they were united with the Otoes, Ioways and Missouries. They are a fierce, warlike people, and have more national spirit than any other Indians on the frontier. The Otoes and Missouries, now united, are renowned among the tribes of the Missouries for their bravery. They can muster about 300 men. The Ioways still dwell on the Mississippi. They have from 100 to 200 men. The Osages are divided into three tribes, and can boast over 1000 warriors. The Kansas inhabit the plains about the heads of the Arkansas and Red rivers. Their number is unknown. The Omahaws live high up the Missouri. Besides these tribes, there dwell on the Mississippi, between the river Des Moines, the Wisconsin and the Missouri, the Sacs and Foxes, a branch of the Chippeway tribe. They speak the Chippeway tongue, and number above 1000 men. On the Missouri are the Pawnees, divided into three tribes, of which the Arikarees are a branch. They live by hunting the buffalo, and are said to have a language of their own. The Mintarees or Bigbellies, the Mandans, the Crows and the Blackfeet, also live on the Missouri, and each is said to have a language of its own. Their numbers are unknown. The Shoshonees live between the head waters of the Missouri and Columbia rivers. They are almost constantly on horseback, and are at war with the lower tribes of the Missouri. On the Columbia river are the Chohunnish, the Skilloots, Echeloots, Multnomahs, Clatrops and other tribes, Their haunts and numbers are unknown. They live by fishing as well as hunting, and differ in manners and customs from the tribes east of the Rocky mountains. They are neither so well fed or clad. Most of these tribes have the practice of flattening the heads of infants between boards, whence the general name of Flatheads. They have some commerce with ships on the north-west coast. Nothing is known of the languages of any of these people. In the south of the U. States, we have four tribes, viz., the Chickasaws, Choctaws, Cherokees and Creeks.* All these have made some progress in civilization. The Cherokees have a written and printed language, said to be radically different from all others. They number about 15,000 souls. (For more information on the Cherokees, see *Tsullakees.*) The Choctaws and Chickasaws are each more numerous. North of Great Slave lake is another family of Indians, among which are the Chippewyans, the Copper Indians, the Hare Indians, and the Dog Ribs. Of these, the Chippewyans, the

* The Seminoles are a division of Creek Indians, which inhabit the flat country on the rivers Apalachicola and Flint, and about St. Rose's bay in Florida. The name *Seminole* (i. e., *wild*) is applied by the Creeks to all vagabonds of that nation. The Seminoles, a few years since, consisted of about 6000. Their towns were burnt by general Jackson, their chiefs slain, and the people that escaped were dispersed.

Copper Indians, and the Dog Ribs, speak the same language. They all wage war with the Esquimaux. The Dog Ribs are also oppressed and persecuted by the Copper Indians, who rob them, and take from them their women, whenever an opportunity occurs. These tribes live by hunting the reindeer chiefly, and by fishing in the winter. Their morals and manners are below the standard of their southern neighbors, and their number is very small. There are also the remnants of some tribes residing within the limits of the U. States, viz., the Mohegans, the Delawares, the Shawanoes, the Senecas, the Oneidas, the Piankashaws, and some others. Most of these live by agriculture, as well as the chase. Intercourse with the whites has not been advantageous to them. They have learned all the vices of the civilized state without its virtues. Besides all these, there is a tribe in the interior of Newfoundland, who have shunned all intercourse with the whites. The Indians have uniformly resisted all attempts to civilize them where they could support themselves by the chase. Some few tribes, such as the Southern Indians and the remnants of the Six Nations, having been hemmed in by the whites, and circumscribed in their limits, so as to be unable to live by hunting, have turned to agriculture for subsistence. But such a departure from the habits of savage life is not to be found where there has been a possibility of supporting life by other means. The hospitality of Indians is among their most striking qualities. In any of the tribes, a stranger is received with the utmost respect and attention. On his arrival, he is served with the best in the wigwam, seated on the best seat, and treated with the utmost respect and attention. His person and property are considered sacred. He may remain as long as he pleases in a wigwam, without any questions being asked, and retire unopposed. Feasts are made for him, and, though his appetite may be satisfied, to refuse any thing set before him gives great offence. With all, or almost all, the Indian tribes, the sole care of the men is to provide food. The labor is the exclusive lot of the women. The use of the axe or hoe is considered beneath the dignity of the male sex. It belongs to the females to plant corn, to make and mend garments and moccasins, to build, to pitch tents, cut wood, bring water, to tend horses and dogs, and, on a march, to carry the baggage. The women do not murmur at this, but consider it a natural and equitable distribution of family cares. But they are regarded as an inferior race, and often transferred as property. Polygamy is general. Every man has as many wives as he can support, and, in marriages, the will of the bride is seldom or never consulted. A man addresses himself, indirectly, to the parents of his intended wife, and her fate depends on their will. The custom of dowry is reversed among Indians. The man makes certain presents to the parents of his wife, instead of receiving a portion with her. The marriage ceremony is always very simple, and, in most tribes, there is none at all. Adultery is punished by cutting off the nose, or otherwise mutilating the offending female; sometimes, though rarely, with death. In some tribes, this crime is regarded as a venial fault, and, in very many, the husband lends his wife to a friend without opposition on her part. Divorces are frequent, and at the pleasure of the contracting parties. In such cases, the wife is usually left to provide for the children as she may. It is no uncommon thing to see an Indian woman who has been five or six times repudiated before she finally settles in life. In some tribes, especially those of Dahcotah origin, it is held the duty of each man to marry all the sisters of a family, and to have as many wives as he can support. In most tribes, and we believe in all, incest is held in abhorrence. Instances of devoted attachment are not uncommon. All Indians, of whom we have any knowledge, believe in one Supreme God and the immortality of the soul. They attribute all good and all power to the Supreme Being. Many tribes also believe in the existence of an intelligent evil principle, whose ill offices they endeavor to avert by prayer and sacrifice. They never ask the Supreme for any thing, but merely return thanks for benefits received, saying that he is the best judge of what is for their advantage. They believe in many subordinate deities, two of whom reside in the sun and moon. They attribute supernatural powers to all serpents, especially rattlesnakes, and will kill no animal of the genus. Even the eel escapes on account of his resemblance. They pay religious honors to rocks and venerable objects. They believe that brutes have immortal souls as well as men, and, in short, that all animated nature teems with spirits. In their belief, sorcery is blended with the healing art, and their priests are also physicians and jugglers. These priests practise feats of sleight of hand with all their religious ceremonies; but, with

a few exceptions, they have no power or influence over the multitude. The future state of the Indians is a material paradise, where they will follow the same occupations, and enjoy the same delights, they have experienced in this world. They have also a vague idea of future punishment for sins committed in the body. Among the superstitions of the Algonquin and Dahcotah tribes, is a very singular one: A man is sometimes devoted, by his parents or himself, to a life of ignominy. In this case, he dresses like a woman, and performs all female avocations. He associates with women only, and sometimes takes a husband. He is held in utter contempt by all, though his condition be not of his own choice. This condition is frequently owing to a dream of his parents, while he is yet unborn. In many tribes, men have what they call their *medicine bags*. These are filled with bones, feathers, and other rubbish. To the preservation of their medicine bags they attach much importance. Besides this, each holds some particular animal in reverence, which he calls his *medicine*, and can by no means be induced to kill, or eat when killed, for fear of some terrible misfortune. Moreover, the Indians leave tobacco, worn out clothing, and other articles, on rocks, as sacrifices to invisible spirits. The above is nearly the sum of their religion. It is, we believe, impossible to estimate the number of the North American Indians with any degree of accuracy. It is, however, very small throughout, in proportion to the extent of territory; for a hunting people cannot be very numerous. Their wars, of which we have heard so much, do not materially affect them. They are carried on in detail, by small parties, and, consequently, are not very destructive. They very seldom give quarter, but when a prisoner is spared, he is sure of being adopted by the conquering tribe. The tribes who inhabit the prairies go to war on horseback, and their weapons are spears and bows and arrows. Those who inhabit the forests are generally armed with guns. Their courage is moral and passive rather than active. They think it cowardice to be affected by calamity, or to give way to passion or feeling. To be always ready and willing to die, and to suffer whatever may befall with constancy, is their idea of the perfection of courage. As to government among them, there is none. They have no laws; but there are customs, which every individual scrupulously observes. In cases of murder, for instance, the rule is, blood for blood, and the homicide rarely shuns the penalty of his deed. They have chiefs, but the power of these is limited to persuasion, and they can command no one. Sometimes a chief becomes such in virtue of his achievements in war, or his wisdom. In some tribes, there is something like hereditary rank; but even then, authority does not descend in a direct line. The son of a chief is often set aside, to make room for one more worthy. But in war, implicit obedience is given to the commands of the leader. The tribes that inhabit the prairies all live by hunting the buffalo, mostly on horseback. Those who dwell in wooded countries hunt deer and smaller animals. The more primitive savages are the poorest, but at the same time the least dependent, for they have few wants, and can supply those few without assistance. Those who live nearer the whites have more of the comforts of life, but are no whit more civilized or happier, for their enjoyments are not multiplied. We may say that, if the Indian trade of the Mississippi were interrupted for five years, all the aborigines of that quarter would be in danger of perishing, as they depend on the whites for clothing and weapons. The Indians can never be dangerous, as there is no union among them. They have no letters, unless we count a few rude hieroglyphics as such. On the whole, we may speak of them as a brave, reckless, generous and unfortunate people. The Indians in the southern part of North America have been subject to the Spaniards, and are now dependent on the republics of Mexico and Guatimala, if we except some tribes, such as the Apaches, the Nabajoas and the Mosquitos. The independent tribes of the north of Mexico resemble those of the U. States in manners and customs. Living by the chase and plunder, and provided with fleet horses, they harass the frontiers and hunters. On the coasts of Yucatan, the Indians live by hunting, fishing, and the trade in dye-wood. The extensive ruins of cities in Mexico prove the former extent of its population. The natives possess great muscular force, are well formed, and live to a great age. It is difficult to form an opinion of the character of a people which has been so long subjected to the most cruel oppression. At the time of the conquest, the rich inhabitants of Mexico fell a prey to the rapacity of the Spaniards, and the Azteck priests, who were the depositaries of all the historical knowledge of the country, became the victims of fanaticism. The Mexican In-

dians are grave, melancholy and silent; their music and dances display the same character. The Indians of South America do not differ materially, in their physical characteristics, from those of the northern half of the continent, and, except those of Peru and Chile, are without civilization. In the extensive regions formerly belonging to Spain, they may be divided into two classes,—the independent Indians, or *Indios bravos*, and those who have been reduced to submission. The former are entirely strangers to agriculture; support themselves by the chase, and fishing; some of them eat ants, lizards, and even a kind of mud. The natives of Peru, descendants of the ancient inhabitants of the empire of the Incas, have, as well as those of Colombia, been emancipated, since those countries have delivered themselves from the Spanish yoke. Their services were important during the war of the colonies against the mother country. They are, in general, well made and healthy. They are superstitious, wearing amulets on different parts of their bodies. They make bitter, intoxicating drink from a certain plant, and use poisoned arrows. Their villages are fortified, and, in case of necessity, they retire into the mountains. The Indians of Chile are mostly independent. Their features are regular, and their complexion is not very dark. Their principal wealth consists in herds of oxen, horses and guanacos. They pay little attention to agriculture, being nomadic in their habits. They worship the stars, and recognise a Great First Cause. Astronomy is not unknown to them. (See *Araucanians*.) In Buenos Ayres, the missions of the Jesuits succeeded, in some degree, in civilizing the natives. The tribes of Brazil are numerous; many of them are entirely savage, and both sexes go naked. Their manners and habits are very similar to those of the North American tribes. They live by the chase, which, with war, is the only occupation of the men; the women are the laborers, beasts of burden, servants, &c., of these warlike tribes. Their mutual wars are very sanguinary, and many of them are constantly at war with the Portuguese, while others have entered into friendly connexions with them. Some of them have adopted fixed habitations, and practise a rude kind of agriculture; some of them make vases of clay, gather cotton, and make cloth. At the southern extremity of South America are the Patagonians (q. v.), who have large, nervous frames, a dark complexion, a flat nose, high cheek bones, and a large mouth. The stories of their gigantic size have not been confirmed by the later voyagers. (See *Patagonians*.) The principal tribes of South America are the Galibis, Maynas, Omaguas, Maypuras, Yarures, Guajiros, Guajaribes, Caraibs, Macas, Ottomacs, Quixos, Tamanacs, Chunchos, Piros, Chirenes, Moxos, Chiquitos, Abiponians, Guaranis, Puelches, Guaicouros, Araucanians, Toupis, Toupinambas, Marjats, Puris, Patagonians, &c.

Indian Languages of America. (See *Appendix* to this volume.)

Indiana; one of the U. States, bounded N. by lake Michigan and the Michigan Territory, E. by Ohio, S. by Kentucky, from which it is separated by the Ohio river, and W. by Illinois; lat. 37° 50′ to 41° 45′ N.; lon. 84° 45′ to 88° W.; length from north to south 270 miles, breadth 220; square miles, 36,000: population in 1800, 4651; in 1810, 24,520; in 1820, 147,178; and, in 1830, 341,582, of whom, at the last period, 3562 were free blacks. There are, besides, about 4000 Indians of the Miami, Eel river, Pottawatamie and Chippeway tribes. These Indians receive annuities from the U. States, by virtue of treaties for the cession of lands, amounting to about $40,000. The state is divided into 59 counties. The seat of government is at Indianopolis, a town situated near the centre of the state, the settlement of which was begun in 1821. The largest town is Vincennes, which is situated on the river Wabash, and was originally settled by French emigrants from Canada. The other chief towns are Madison, Corydon, Jeffersonville and Vevay. The principal rivers are the Ohio, which forms the southern boundary; the Wabash, which, after passing through the whole width of the state, forms part of its western boundary; the White river, the Whitewater, the Maumee and the Petohra. A canal for uniting the navigable parts of the Wabash river with lake Erie, is proposed, and a grant of land for effecting the object has been made by congress, but the work is not begun. There are no mountains in Indiana; the country, however, is more hilly than Illinois, particularly towards the Ohio river. A range of hills, called the *Knobs*, extends from the falls of the Ohio to the Wabash, in a south-west direction, which, in many places, produces a broken and uneven surface. North of these hills lie the *flat woods*, 70 miles wide. Bordering on all the principal streams, except the Ohio, there are strips of bottom and prairie land; both together from three to six miles in width. Between the Wabash

and lake Michigan, the country is mostly champaign, abounding alternately with wood-lands, prairies, lakes and swamps. A range of hills runs parallel with the Ohio, from the mouth of the Great Miami to Blue river, alternately approaching to within a few rods, and receding to the distance of two miles. Immediately below Blue river, the hills disappear, and there is presented to view an immense tract of level land, covered with a heavy growth of timber. North of the Wabash, between Tippecanoe and Ouitanan, the banks of the streams are high, abrupt and broken, and the land, except the prairies, is well timbered. Between the Plein and Theakiki, the country is flat, wet and swampy, interspersed with prairies of an inferior soil. The sources of rivers are generally in swamps or lakes, and the country around them is low, and too wet for cultivation. There are two kinds of prairies,—the river and the upland prairies. The former are bottoms, destitute of timber, and are said to exhibit vestiges of former cultivation; the latter are from 30 to 100 feet more elevated, and are far more numerous and extensive. Some of them are not larger than a common field, while others extend farther than the eye can reach. They are usually bounded by heavy-timbered forests, and not unfrequently adorned with copses of small trees. In spring and summer, they are covered with a luxuriant growth of grass and fragrant flowers, from six to eight feet high. The soil of these plains is often as deep and fertile as the best bottoms. The prairies bordering on the Wabash are particularly rich. Wells have been dug in them, where the vegetable soil was 22 feet deep, under which was a stratum of fine white sand. The ordinary depth is from two to five feet. The principal productions of this state are wheat, Indian corn, rye, oats, barley, buck-wheat, potatoes, pulse, beef, pork, butter, whiskey and peach brandy. Not far from Big Blue river, there is a large cave, the entrance of which is on the side of a hill, that is about 400 feet high. Here are found great quantities of sulphate of magnesia or Epsom salt, and of nitre, &c. The climate is generally healthy and pleasant, resembling that of Ohio. The Wabash is frozen over in the winter, so that it may be safely crossed on the ice. With the exception of the French settlement at Vincennes, which formed a solitary village for near a century, there were no civilized inhabitants within the present limits of the state, until near the commencement of the present century. From that period, the population has increased rapidly, chiefly by emigration from the other states. A territorial government was formed in 1800, and, in 1816, the state was admitted into the Union, and the present state constitution was formed. Under this constitution, a governor and lieutenant-governor are chosen by the people once in three years. There is a general assembly, consisting of a senate, the members of which are chosen for periods of three years, a third part being elected annually; and of a house of representatives, the members of which are elected annually. The present number of senators is 23, and of representatives 62. The number of representatives may be increased to 100, and of senators to half the number of representatives. The judges of the supreme court are appointed by the governor, with the consent of the senate; the presidents of the circuit courts by the legislature; and the associate judges are elected by the people. Justices of the peace are elected by the people. A 36th part of the land, in each township, is reserved, by a compact between the state and the U. States, for the support of education, and reservations of land have been made for the support of a college, which is established at Bloomington, but which is not yet in operation. The national road, which commences at Cumberland in Maryland, and passes through Pennsylvania, Virginia and Ohio, will run through the centre of this state, from east to west. The construction of the road in this state is yet but little advanced.

Indianopolis; a town in Indiana, and the seat of government of the state. It is situated in Marion county, on the west fork of White river. It was laid out in 1821, and in the following year had 40 houses. It has increased rapidly from that period, and became the seat of government in 1825.

Indicative; that mode of the verb in which something is said positively; hence it has also been called *modus positivus*, as distinguished from the subjunctive.

Indicator (*cuculus indicator*, Linn.). This bird, which is a native of Africa, in its external appearance does not differ much from the common sparrow, except that it is somewhat larger. It is peculiar for its faculty of discovering and indicating to man the nests of wild bees. Being itself extremely fond both of honey and the larvæ, knowing that when a nest is plundered, some will fall to its share, it is always willing to act as a guide in the search

for them. The morning and evening are its usual times of taking food, at least it then appears most solicitous to engage the aid of man in satisfying its appetite. A grating cry of *cherr, cherr*, may then be heard, which generally brings somebody to the spot where it is perched, when the bird, incessantly repeating its cry, flies slowly towards the quarter where the swarm of bees is to be found. When the nest is at some distance, the bird makes long flights, waiting for its coadjutor between them, and calling him to advance; but in proportion as it approaches, its flights are shorter and its cry more earnest. When it arrives at the nest, it hovers over the spot for the space of a few seconds, after which it retires to some adjoining bush, and patiently awaits its reward in silence. Its followers, having plundered the nest, leave it a considerable portion of that part of the comb containing the young bees, this being its most favorite morsel. This account, which is condensed from Sparmann, was severely animadverted upon by Bruce and other writers; but Barrow, who visited the southern extremity of Africa at a subsequent period, fully confirms its truth. He says, that every one there is too well acquainted with this bird to entertain any doubts of the fidelity of Sparmann's narrative. It is also confirmed by Le Vaillant, who states that, on account of the important services which it renders to the Hottentots, they were very unwilling that he should destroy one of them.

Indiction, in chronology; a period of 15 years, reckoned in succession, and used by the Romans for appointing the time for the payment of certain taxes. Three sorts of indiction are mentioned; 1. the Cæsarean, which fell on the 8th of the calends of October, or the 24th of September; 2. the indiction of Constantinople, which was instituted by Constantine, A. D. 312, and began on the 1st of September; and 3. the pontifical or Roman, which begins on the calends of January. It has no connexion with the motions of the heavenly bodies. We find ancient charters in England also dated by indictions.

Indictment. An indictment is a written accusation of one or more persons for a crime or misdemeanor, preferred to, and presented upon oath by a grand jury, to a court. In determining whether there is a reasonable cause to put the accused upon his trial, the grand jury hear evidence in support only of the charge; and if twelve of them are satisfied of the truth of the charge, the indictment is then said to be found, and is publicly delivered into court. If the grand jury think the accusation groundless, the accused is discharged; but a new bill of indictment may be preferred to a subsequent grand jury. By the constitution of the U. States, no person is held to answer for a capital or otherwise infamous crime, unless on a presentment or indictment by a grand jury, except in cases arising in the land or naval forces; and the same principle is adopted in several of the states.

Indies, West. (See *West Indies.*)

Indigestion. (See *Dyspepsia.*)

Indigo. The knowledge of this most valuable vegetable substance, which forms an important part of East and West Indian commerce, and is beginning to receive considerable attention as a domestic production, is alike interesting to the chemist and to the dyer. The ancients were acquainted with it under the name of *indicum*. Pliny knew that it was a preparation of a vegetable substance, though he was ignorant of the plant which furnished it, and of the process by which it was prepared. From its color, and the country from which it was imported, some authors call it *atramentum indicum*, and *indicum nigrum*. The American name is *nil*, or *anil*, from which the Portuguese have adopted their *anileira*, the other European nations generally call it *indigo*. The Arabian name is *nile*, and the Chinese, *tien laam*, or *sky blue*. In treating of indigo, it will be the most convenient to explain, in the first place, its physical and chemical properties, and afterwards to allude to the sources from whence it is derived, and the method by which it is manufactured. As it is found in commerce, it presents the form of little square or oblong cakes, of an intense blue color, approaching to black; is brittle and friable; rather light, and without taste or odor. It is volatile, with a disagreeable odor, subliming at 550° F.,—a degree of heat near that at which it is decomposed. Its vapor is of a rich violet-red color, and condenses by cold into delicate acicular crystals, which consist of perfectly pure indigo. Water, by being boiled on indigo, dissolves only about a ninth or a twelfth its weight; the solution is of a reddish-brown color, and contains what may be called the *extractive* part of the substance; but the coloring matter remains unaltered, except in having assumed a brighter hue. Alcohol and ether, when digested upon it, also are attended with similar effects. Sulphuric acid is the only single agent that dissolves indigo

without destroying its color. When it is put into this acid, a yellow solution is at first formed, which, after a few hours, acquires a deep blue color. From the solution, diluted with water, potash and its sulphate throw down a deep dark-blue precipitate, capable of imparting to water, containing only $\frac{1}{5000}$ of its weight, a distinctly blue tinge. It is no longer subject to vaporization, however; from which circumstance, and its property of solubility in water, it is inferred to be a different substance from indigo, and has received the name of *cerulin*. Its composition is believed to be one equivalent of indigo and four of water. When properly diluted with water, it forms the *liquid blue*, or *Saxon blue*, of the dyers. Another compound of indigo and water, under the name of *phenecin* (from φοινιξ, purple), is obtained when water is added to a solution of indigo in sulphuric acid, which has been suffered to stand for several hours, till it has lost its yellow color, and become blue. It appears to consist of one equivalent of indigo and two of water. In the formation of these substances, indigo is conceived to combine with water; but whether the water is afforded by the sulphuric acid, or whether the sulphuric acid operates merely to prepare the indigo for combining with water afterwards, is not yet fully determined. When indigo, suspended in water, is brought into contact with certain deoxidizing agents, it is deprived of a part of its oxygen, becomes green, and is rendered soluble in water, and still more so in the alkalies. It recovers its former color, however, on exposure to the air, by again absorbing oxygen of $\frac{1}{4}$ or $\frac{1}{8}$ of the whole weight of the resulting indigo. Its deoxidizement is effected either by allowing it to ferment along with bran, or other vegetable matter, or by decomposing in contact with it the protosulphate of iron, by the addition of lime. Substances dyed by deoxidized indigo receive a green tint at first, which becomes blue by exposure to the air. This is the usual method of coloring cloths by means of indigo, which, when fully oxidized, affords a permanent dye, not removable by soap or by acids. Chlorine, whose power in extinguishing vegetable colors is universal, destroys the color of indigo; and, from the known fact that the same quantity of free chlorine discolors always the same quantity of pure indigo, a solution of indigo in sulphuric acid has been employed for measuring the strength of solutions of chlorine and of chloride of lime, in order to regulate their application to the art of bleaching; and, reciprocally, a solution containing a known quantity of chloride of lime may be employed as a test of the strength or value of indigo. Indigo, purified by sublimation, is composed of 73.26 carbon, 13.81 nitrogen, 10.43 oxygen, and 2.50 hydrogen. Indigo may be said to be a rare production of the vegetable kingdom, it hitherto having been found only in a small number of species belonging to the genera *indigofera*, *isatis*, and *nerium*; but it is almost exclusively from the first of these that the indigo of commerce is extracted. The species of *indigofera* are leguminous plants, herbaceous or shrubby, with alternate and generally pinnate leaves, and small blue, purple or white flowers, ordinarily disposed in axillary racemes. They are very numerous in the equatorial regions of the globe, and one (*I. Caroliniana*) inhabits the southern parts of the U. States. The species most commonly cultivated are the *I. anil*, a native of tropical America, according to the latest authority, but now cultivated even in the East Indies; the *I. tinctoria*, also cultivated in both Indies; and the *I. argentea*, which is the species employed in Barbary and Egypt. The *I. tinctoria* is the species most abundantly cultivated. In describing the culture of the indigo plant, and the mode of manufacturing the indigo, we shall draw our particulars mainly from the methods pursued in the East Indies, where, through the well directed efforts of the English, this article is prepared in its greatest perfection. The plant requires a rich, light soil, and a warm exposure. It succeeds best on newly cleared lands, on account of their moisture; it requires protection against high winds, and needs irrigation in times of drought. The ground, after being properly prepared for the reception of the seed by ploughing, is sown pretty thickly, the time of sowing being so chosen that rain may fall upon the plant as soon as it shows itself above the ground, by which it is not only greatly invigorated, but cleansed from those innumerable insects which otherwise are liable to destroy it. From this time, comparatively little rain is needed; for the dews are so copious as to supply nearly all the moisture required; and, besides, its spindle-shaped root, which descends into the ground perpendicularly, to the depth of nearly three feet, enables it to endure temporary droughts. The prevalence of cloudy weather and much moisture, however, cause the indigo plant to thrive more luxuriantly, but occasion a great deficiency in the coloring matter, which, as it con-

tains an extraordinary quantity of carbon, requires the plant to decompose carbonic acid gas very abundantly,—an operation which it is unable to perform when deprived of the direct influence of the sun's rays. As the young shoots furnish larger and more numerous leaves, it is usual to plant every year; but the Egyptians, who seem to cultivate it most successfully, plant only every third or fourth year. As the plant approaches to maturity, the leaves undergo a sudden change in color, from a light to a dark green. As soon as this change is observed, the branches are severed from the parent stem early in the morning, and spread out in the sun till the afternoon, by which time they become sufficiently dry to be beaten from the branches by a stick. The leaves, so separated, are housed in warehouses, closely packed and well trodden down by natives. The plants, from which the leaves have been severed, send forth a new crop, which is gathered, when mature, like the first. Rain, however, is necessary after the cutting, to enable the plant to shoot again in a thrifty manner. The cuttings, in a favorable season, are repeated three or four times, after which the ground is ploughed up for another sowing; but each successive growth of the branches produces an increased deterioration of the qualities of the leaves, so that one part of the leaves of the first cutting yields as much indigo as two parts of the third crop. The dried leaves are not immediately used, but are kept packed for one month, during which time they suffer a material change, which is indicated by their having passed to a light lead color. By additional keeping, the lead color gradually darkens, until it becomes black. The maximum quantity of indigo is to be obtained when the lead color is effected; and any delay in extracting it, after it has reached this point, is attended with a loss in the quantity of the indigo. The lead color, however, does not appear in a month after the leaves are gathered, unless, from fear of rain, or any other cause, they were cut before being ripe; and, on the other hand, if the cutting was deferred till after the plant was fully ripe, the leaves will not require to be kept so long. The dried leaves, after having suffered the change of color alluded to, are transferred to the steeping-vat (an uncovered reservoir, 30 feet square and 26 inches deep, constructed of brick, and lined with stucco), where they are mingled with water, in the proportion of about one volume of leaves to six of water, and allowed to remain two hours. The great affinity of indigo for oxygen is here very manifest, in the quick change of the color of the leaves which float on the surface, and are exposed to the action of the atmosphere, to a blackish-blue, when contrasted with those below, which remain unchanged. On this account, the vat is frequently stirred, so that the floating leaves may be immersed. After two hours' infusion, the water, which, from the solution of imperfectly oxygenized indigo, has acquired a fine green color, is allowed to run off from the leaves, through strainers, into the beating-vat, where it is agitated by the paddles of ten or twelve natives for about two hours, during which time the fine green liquor gradually darkens to a blackish-blue. This part of the process requires a longer or a shorter time, depending on the former preparation of the leaf, and the immediate influence of the sun. The criteria for judging when it is completed are derived from the incipient separation of the particles of indigo, which become visible by pouring a small quantity of the fluid into a white earthen dish. At this time, lime-water is thrown into the vat, and thoroughly agitated with the whole mass of fluid. The mass is then left to subside for the space of three hours, when the supernatant liquid, which is of a fine bright Madeira color, is withdrawn, by orifices in the vat, at different heights. The indigo is then removed to the covered part of the manufactory, where it is put on a straining-cloth, and allowed to drain throughout the night. On the following morning, it is transferred to a copper boiler, where it is mingled with a quantity of water, and raised to ebullition. As the mass is gradually heating, a quantity of scum rises, which is immediately removed, and, as soon as the whole is brought to the boiling point, the fire is withdrawn. The contents of the copper are retaken to the strainers, and the drained indigo is then divided into small portions, and each portion well worked by the hands of the natives, in order to free it from air bubbles. It is then carried to the pressing-boxes, which are usually square, and of sufficient depth to leave the cake about two inches and a quarter in thickness. By means of a powerful screw, the water is separated from the indigo; the cakes are gradually dried in the shade, and thus rendered fit for exportation. In the West Indies and America, the old process, formerly employed in India, of fermenting the leaves as soon as cut, instead of drying them, and obtaining the indigo by simple infusion, is still in

use. The plant is allowed to stand until it is fully in blossom, when it is cut down with rape-hooks, tied in loads, and carried to the works, where it is deposited in strata in the steeping-vat. As soon as the vat is filled with the green plant, water is admitted sufficient to cover it, and the whole is left to digest and ferment, until the greatest part of the pulp is extracted, without letting the tender tops run to putrefaction; and it is the management of this point which occasions the planter the greatest difficulty; for, if he draws off the water but two hours too soon, he inevitably loses the greatest part of the pulp, and if the fermentation runs but two hours too long, the whole is spoiled. Nine tenths of the indigo of the U. States, it is asserted, are more or less injured by an excessive fermentation. To ascertain the due degree of fermentation, the workman draws out, from time to time, a handful of the plant, and, when he finds the tops grow very tender and pale, and observes the stronger leaves change their color to a less lively pale, he draws the liquor off without delay. An experienced manufacturer will also form a tolerable estimate of the degree of fermentation by the grain of the infusion, of which he frequently beats a little in a silver cup. When the pulp is believed to be extracted, the infusion is drawn off into the beating-vat, after which it is treated in a manner similar to that above described. It is, at present, a great desideratum that the improved method of extracting this substance practised in India should be transferred to the U. States, as it is believed that it would immediately result in the production of a better article, and a much greater quantity of it, than is at present manufactured. The value of the indigo consumed in the U. States in 1829, has been estimated to be $2,000,000. (*American Journal of Science*, vol. xviii, p. 237.) Of this, about one tenth part only, or 200,000 pounds, was raised in the country. The average price of the imported indigo has been $1,15 per pound, while the American article has sold for 50 cents the pound; and yet it is not doubted that the American indigo can be made to equal the foreign, with proper care and attention. The average product of indigo, per acre, in South Carolina, is stated to be 50 pounds, though, in some instances, nearly 200 pounds have been obtained to the acre. It is computed that British India supplies three fourths of all the indigo brought into European markets. (For an account of the indigo obtained from the *Isatis tinctoria*, see *Woad*.)

Indirect Taxes; those which fall in reality on other persons than the immediate subjects of them. They are therefore taxes upon those who finally pay them, and not upon those upon whom they are directly laid. Thus the state exacts custom and excise duties from merchants, upon merchandise, but the consumer, in the price he pays for his articles, refunds this tax to the merchant, so that the last buyer is the one who really pays the tax. There are taxes which appear to be direct, but yet fall indirectly upon others; for instance, the poll tax upon the serfs in Russia. As they are obliged to give every thing, except what they need for their subsistence, to their masters, the latter, of course, obtain so much the less as the poll tax is greater, and thus the tax upon the peasants appears to be an indirect tax upon their masters. Thus almost all direct taxes upon servants are paid by their masters, and therefore a direct tax upon the former is an indirect tax upon the latter. Respecting the opinion that every tax affects those only who derive their income from the soil, see *Physiocratic System*.

Indorsement of Negotiable Paper. (See *Bills of Exchange*.)

Indostan. (See *Hindoostan*.)

Indre; a river in France, which rises about 4 miles N. N. W. Boussac, in the department of the Creuse; passes by St. Sever, La Châtre, Châteauroux, Châtillon (where it becomes navigable), Loches, Cormery, Azay le Rideau, &c., and joins the Loire at Rigny, between Saumur and Tours.

Indre; a department of France, named from the river Indre. (q. v.) (See *Department*.)

Indre-and-Loire; a department of France, so called from the rivers Indre (q. v.) and Loire (q. v.). (See *Department*.)

APPENDIX.

INDIAN LANGUAGES OF AMERICA.* The aboriginal languages of the continent of America exhibit various phenomena, a knowledge of which will be found indispensable to a just theory of speech. It is true, that we have long had our systems of universal grammar, or, in other words, our theories of language, as deduced from the small number of European and Asiatic tongues, which have been hitherto studied by the learned; but from the rapid advances made, during our own age, in comparative philology, particularly by means of the unwritten dialects of barbarous nations, there is reason to believe that some important modifications are yet to be made in our theories. Of the various unwritten languages, those of the American continent present us with many new and striking facts. We are informed by that distinguished scholar of our country, Mr. Du Ponceau, from whose writings we derive nearly all that is known of the general characteristics of these dialects, that there appears to be "a wonderful organization, which distinguishes the languages of the aborigines of this country from all the other idioms of the known world."† That eminent philologist was the first to discover, and make known to the world, the remarkable character, which pervades, as far as yet known, the aboriginal languages of America, from Greenland to cape Horn. In the period which has elapsed since the publication of his Report, by the American Philosophical Society at Philadelphia, in 1819, all the observations which have been made on Indian languages, at that time unknown, have confirmed his theory; or, as he expresses it, his general result of a multitude of facts collected with care. This result has shown, that the astonishing variety of forms of human speech, which exists in the Eastern hemisphere, is not to be found in the Western. Here we find no monosyllabic language, like the Chinese and its cognate idioms; no analytical language, like those of the North of Europe, with their numerous expletive and auxiliary monosyllables; no such contrast is exhibited as that which is so striking to the most superficial observer, between the complication of the forms of the Basque language and the comparative simplicity of its neighbors, the French and Spanish; but a uniform system, with such differences only as constitute varieties in natural objects, seems to pervade them all; and this genus of human languages has been called (by Mr. Du Ponceau) *polysynthetic*, from the numerous combinations of ideas which it presents in the form of words. It is also a fact, says the same learned writer, that the American languages are rich in words, and regular in their forms, and that they do not yield, in those respects, to any other idiom. These facts have attracted the attention of the learned in Europe as well as in this country; but they have not been able entirely to remove the prejudices that have been so long entertained against the languages of savage nations. The pride of civilization is reluctant to admit facts like these, because they show how little philosophy and science have to do with the formation of language. A vague idea still prevails, that the idioms of barbarous tribes must be greatly inferior to those of civilized na-

* The subject of this article is so interesting, in regard to general and comparative philology, and so little is generally known respecting it, that it has been thought proper to allow it a space more than proportionate to the usual length of philological articles in this work.

† Report of the historical and literary committee to the American Philosophical Society at Philadelphia, drawn up by Mr. Du Ponceau, 1819.

tions, and reasons are industriously sought for, not only to prove that inferiority in point of cultivation, which would readily be admitted, but also to show that their organization is comparatively imperfect. Thus a learned member of the Berlin academy of sciences—baron William von Humboldt—in an ingenious and profound Dissertation on the Forms of Languages (*Ueber das Entstehen der grammatischen Formen und ihren Einfluss auf die Ideen-Entwicklung*, Berlin, 1822), while he admits that those of the American Indians are rich, methodical and artificial in their structure, yet would not allow them to possess what he there called genuine grammatical forms (*ächte formen*), because, says he, their words are not inflected, like those of the Greek, Latin and Sanscrit, but are formed by a different process, which he calls *agglutination*; and, on that supposition, he assigned to them an inferior rank in the scale of languages, considered in the point of view of their capacity to aid the developement of ideas. We have understood, however, that this very learned writer has, upon further examination, yielded, in a great degree, if not entirely, to the opinions of Mr. Du Ponceau. He certainly must have found, in the Delaware Grammar of Mr. Zeisberger, since translated and published by the Philosophical Society, under the editorial care of Mr. Du Ponceau, those inflected forms which he justly admires, and that the process, which he is pleased to call *agglutination*, is not the only one which our Indians employ in the combination of their ideas and the formation of their words. This peculiar process of compounding words, as Mr. Du Ponceau observes, in his preface to Zeisberger's Delaware Grammar, is undoubtedly the most curious thing to be found in the Indian languages. It was first observed by Egede, in his account of Greenland; and Mr. Heckewelder explains it at large, in the 18th letter of his Correspondence with Mr. Du Ponceau (*Transactions of the Historical and Literary Committee of the American Philosophical Society*). By this means, says governor Colden, speaking of the Iroquois, these nations can increase the number of their words to any extent. None of the languages of the old world, that we know of, appear to possess this prerogative; a multitude of ideas are combined together by a process, which may be termed *agglutination*, if the term be found agreeable, but which, whatever name it may receive, is not the less a subject of real wonder to the inquiring philologist. One example, from the Delaware language, will convey a clear idea of this process of compounding; "and I have chosen," says Mr. Du Ponceau, "this word for the sake of its euphony, to which even the most delicate Italian ear will not object. When a Delaware woman is playing with a little dog or cat, or some other young animal, she will often say to it, *Kuligatschis*, which I would translate into English—*Give me your pretty little paw*, or, *What a pretty little paw you have!* This word is compounded thus: *k* is the inseparable pronoun of the second person, and may be rendered *thou* or *thy*, according to the context; *uli* (pronounced *oolee*) is part of the word *wulit*, which signifies *handsome* or *pretty*; it has also other meanings, which need not be here specified; *gat* is part of the word *wichgat*, which signifies a *leg*, or *paw*; *schis* (pronounced *sheess*) is a diminutive termination, and conveys the idea of *littleness*: thus, in one word, the Indian woman says, *thy pretty little paw!* and, according to the gesture which she makes, either calls upon it to present its foot, or simply expresses her fondling admiration. In the same manner, *pilápe* (a youth) is formed from *pilsit* (chaste, innocent,) and *lenápe* (a man). It is difficult to find a more elegant combination of ideas, in a single word, of any existing idiom. I do not know of any language, out of this part of the world, in which words are compounded in this manner. The process consists in putting together portions of different words, so as to awaken, at the same time, in the mind of the hearer, the various ideas which they separately express. But this is not the only manner in which the American Indians combine their ideas into words. They have also many of the forms of the languages which we so much admire—the Latin, Greek, Sanscrit, Slavonic, &c.—mixed with others peculiarly their own. Indeed, the multitude of ideas, which in their languages are combined with their verbs, has justly attracted the attention of the learned in all parts of the world. It is not their transitive conjugations, expressing, at the same time, the idea of the person acting and that acted upon, that have excited so much astonishment. These are found also, though not with the same rich variety of forms, in the Hebrew and other Oriental languages. But, when two verbs, with intermediate ideas, are combined together into one, as in the Delaware *n'schingiwipoma* (I do not like to eat with him), which the abbé Molina also declares to exist in the idiom of Chile—*iduanctoclavin* (I do not

wish to eat with him)—there is sufficient cause to wonder, particularly when we compare the complication of these languages with the simplicity of the Chinese and its kindred dialects in the ancient world. Whence can have arisen such a marked diversity in the forms of human speech? Nor is it only with the verbs that accessary ideas are so curiously combined in the Indian languages; it is so likewise with the other parts of speech. Take the adverb, for instance. The abstract idea of time is frequently annexed to it. Thus, if the Delawares mean to say—*if you do not return*—they will express it by *mattatsch gluppiweque*, which may be thus construed: *matta* is the negative adverb *no*; *tsch* (or *tsh*) is the sign of the future, with which the adverb is inflected; *gluppiweque* is the second person plural, present tense, subjunctive mood, of the verb *gluppiechton*, to turn about, or return. In this manner, every idea meant to be conveyed by this sentence, is clearly understood. The subjunctive mood shows the uncertainty of the action; and the sign of the future tense, coupled with the adverb, points to a time not yet come, when it may or may not take place. The Latin phrase *nisi veneris* expresses all these meanings; but the English *if you do not come*, and the French *si vous ne venez pas*, have by no means the same elegant precision. The idea which, in Delaware and Latin, the subjunctive form directly conveys, is left to be gathered in the English and French, from the words *if* and *si*, and there is nothing else to point out the futurity of the action. And, where the two former languages express every thing with two words, each of the latter requires five, which yet represent a smaller number of ideas." Mr. Du Ponceau, then, justly asks, To which of all these grammatical forms is the epithet *barbarous* to be applied? This very cursory view of the general structure of the Indian languages, exemplified by the Delaware, will at least convince us, that a considerable degree of art and method has presided over their formation. Mr. Du Ponceau has summed up the general results of his laborious and extensive investigations of the American languages, including the whole continent, from Greenland to cape Horn, in three propositions—"1. that the American languages in general are rich in words and in grammatical forms, and that, in their complicated construction, the greatest order, method and regularity prevail; 2. that these complicated forms, which I call *polysynthetic*, appear to exist in all those languages, from Greenland to cape Horn; 3. that these forms appear to differ essentially from those of the ancient and modern languages of the old hemisphere." In North America, he selected for investigation the three principal mother tongues, namely, the Karalit (or language of Greenland and the Esquimaux), the Delaware, and the Iroquois; in Middle America, the Poconchi (spoken in Guatemala,) the Mexican proper, and the Tarascan dialect; in South America, the Caribbee and Araucanian languages. For the purpose of obtaining general results like those above stated, it was not necessary or useful, in the first instance, to go into minute details, nor to confound the reader by an extensive display of numerous idioms; but to take the widest possible range, so as to adduce examples from quarters the most remote from each other. In this manner, we can take a commanding position, assume our general rule, and call for exceptions. These and other results, when first announced, appeared so extraordinary in the languages of "savages," that superficial theorists, who relied upon their own visionary speculations, and mere practical men, who trusted implicitly to the loose information of illiterate Indian interpreters, boldly and arrogantly called in question the correctness of them. The learned author and his venerable friend, the reverend Mr. Heckewelder, who first drew the public attention to this subject, were most unceremoniously treated, the former as an enthusiast, whose feelings had outrun his judgment, and the latter, as at best an innocent ignoramus, and very near, if not quite, a downright impostor, in regard to a language which he had studied 40 years. Mr. Du Ponceau, like a real philosopher, a lover of true knowledge, repelled the unworthy insinuations by an appeal to facts, with a forbearance and dignity, and, we may add, a knowledge of his subject, which must have been felt by his adversaries as the severest of reproofs. The learned author, denying that he was an enthusiastic or exclusive admirer of the Indian languages, founded his arguments, in reply, upon incontrovertible facts, stated by missionaries and other writers of our own time; but, if he had thought it worth the pains, he was well aware, that proofs of the same kind might have been found in very ancient writers, whom even his adversaries would not have suspected of enthusiasm in philology; and these proofs ought to have been well known to those adversaries, and ought, in candid minds, to have repressed

the undeserved insinuations to which we allude. We shall give an example or two from the earlier writers. The extraordinary capacity of compounding words, which is so remarkable in the Indian languages, was remarked upon so long ago as the time of the celebrated New England missionary, called *apostle Eliot;* who, in his Grammar of the Massachusetts Indian Language (first published at Cambridge, New England, in 1666, and republished at Boston, in 1822), thus speaks of it: "This language doth greatly delight in compounding of words for abbreviation, to speak much in few words, though they be sometimes long, which is chiefly caused by the many syllables which the grammar rule requires, and suppletive syllables, which are of no signification, and curious care of euphonie." Again; speaking of that very remarkable feature of these languages, the want of the verb *to be*, Eliot says: "We have no compleat distinct word for the verb substantive, as the learned languages and our English tongue have, but it is under a regular composition, whereby many words are made verb substantive;" of which he gives an example, corresponding to the modes of formation existing in these languages at the present day: "The first sort of verb substantives is made by adding any of these terminations to the word—*yeuoo*, *aoo*, *ooo* (i. e., *yeu-oo*, *a-oo*, *o-oo*)—with due euphonie; and this is so, be the word a noun, as *wosketomp-o-oo* (he is a man), or adnoun, as *wompiyeu-oo* (it is white), or be the word an adverb, or the like." As to the copiousness of these languages, Mr. Du Ponceau observes, that it has been said, and will be said again, "that savages, having but few ideas, can want but few words, and therefore that their languages must necessarily be poor:" to which opinion he replies by this appeal: "Whether savages have or have not many ideas, it is not my province to determine: all I can say is, that, if it is true, that their ideas are few, it is not less certain that they have many words to express them. I might even say, that they have an innumerable quantity of words; for, as Colden justly observes, they have the power of compounding them without end." As a further proof, he adds the fact, that Mr. Zeisberger's dictionary of one of the Iroquois languages—the Onondago (in German and Indian)—consists of seven quarto manuscript volumes, equal to 1775 full pages of writing, consisting of German words and phrases, with their translation into Indian; upon which he justly remarks, "that there are not many dictionaries of this size; and, if this is filled, as there is no reason to doubt, with genuine Iroquois, it is in vain to speak of the poverty of that language." We add one more testimony, of an ancient date, respecting the North American dialects. It is that of the celebrated Roger Williams, who was distinguished for his knowledge of the Indian languages. So long ago as 1648, he published his valuable little work (reprinted by the Rhode Island Historical Society, 1827) called "A Key into the Language of America," that is, of New England; and, in describing his work, he says, "The English for every Indian word or phrase stands in a straight line directly against the Indian; yet sometimes there are two words for the same thing, for their language is exceeding copious, and they have five or six words sometimes for one thing." The same copiousness is found to exist in the languages of Middle America, as was made known to the European world, long ago, by Clavigero, in his History of Mexico; and also in the languages of the southern part of our continent, as will be found in the valuable History of Chile, by the abbé Molina. We must content ourselves with barely referring to these works on the present occasion, as our principal object is the languages of *North* America; but, in regard to those of Middle and South America, the reader will find, in the works here cited, and in some others, a thorough refutation of the strange opinions of speculative writers, who have presumptuously passed judgment upon a subject, before they had the means of becoming acquainted with it, and decried what they could not comprehend. We are not yet possessed of sufficient data for determining how many principal stocks, or families of languages, there are in North America. Mr. Jefferson, in his Notes on Virginia, upon information which is admitted to be very imperfect, has hazarded an opinion, that they are very numerous; and then he proceeds, from this assumed state of facts, to draw an inference in contradiction of the received opinion of the Christian world as to the age of the earth. His reasoning, which has been too hastily adopted into some popular works in general use, is as follows: "But, imperfect as is our knowledge of the tongues spoken in America, it suffices to discover the following remarkable fact. Arranging them under the radical ones to which they may be palpably traced, and doing the same

by those of the red men of Asia, there will be found, probably, 20 in America for one in Asia of those *radical languages*, so called; because, if they were ever the same, they have lost all resemblance to one another. A separation into dialects may be the work of a few ages only; but for two dialects to recede from one another till they have lost all vestiges of their common origin, must require an immense course of time, perhaps not less than many people give to the age of the earth. A greater number of those radical changes of language having taken place among the red men of America, proves them of greater antiquity than those of Asia." This celebrated writer, however, was in a great error as to what he assumes to be a "remarkable fact." The "radical" languages of this continent, instead of being so numerous as he supposes, will be found, so far as we may judge from the actual, not assumed, facts of which we are now possessed, to be very few in number. The various dialects of North America, for example, eastward of the course of the river Mississippi, appear to be all reducible to three, or, at most, four principal stocks, namely—1. the Karalit, or language of Greenland and the Esquimaux; 2. the Iroquois; 3. the Lenápe, or Delaware; and 4. the Floridian stock. With the Esquimaux begin those comprehensive grammatical forms, which characterize the American languages, and form a striking contrast with those of the opposite European shores, in Iceland, Denmark, Sweden, and other countries, indicating strongly, that the population of America did not originally proceed from that part of the old continent. The Iroquois dialects are spoken by the Six Nations, the Wyandots or Hurons, and other tribes towards the north. The Lenápe, or Delaware stock, is the most widely extended of any of the languages spoken eastward of the Mississippi. It is found, in different dialects, through the extensive regions of Canada, from the coast of Labrador to the mouth of Albany river, which falls into Hudson's bay, and from thence to the Lake of the Woods; and it appears to be the language of all the people of that country, except the Iroquois, who are by far the least numerous. Out of Canada, few of the Iroquois are found. All the rest of the Indians, who now inhabit this country, to the Mississippi, speak dialects of the Lenápe stock. When the Europeans arrived here, these Indians were in possession of all the sea-coast from Nova Scotia to Virginia. Hence, as we are told, they were called *Wapanachki*, or *Abenakis* (men of the East), and, by La Hontan, and some other writers, *Algonkins*. In the interior of this range of the sea-coast, also, we find dialects of the Lenápe. The Floridian stock, as its name indicates, comprehends the languages spoken on the southern frontier of the U. States. Of all these languages, the Delaware, in the north, and the Cherokee, in the south (the latter being at present classed under the Floridian stock), are the best known to us—the former, by means of Mr. Du Ponceau's correspondence with Mr. Heckewelder, and by his edition of Mr. Zeisberger's Delaware Grammar; and the latter, by means of the missionary establishment in the Cherokee country, as well as from the newspaper printed by the natives themselves, who have made greater advances in civilization than any other Indian nation of the north. We shall accordingly illustrate the general subject of this article by examples from these languages, which, being of two entirely different stocks, will give as much information on this subject as the general reader will desire, and as will be consistent with the plan of our work. We shall follow the order of our own grammars. 1. The *Article*. In Eliot's ancient Grammar of the Massachusetts dialect, and in Zeisberger's Grammar of the Delaware, before cited, no mention is made of the article as a part of speech; but Mr. Du Ponceau's investigations led him to the conclusion that they possessed one, as he particularly stated, in his notes on the new edition of Eliot's Grammar; and this was confirmed by Mr. Heckewelder, whose letter on the subject is there published. The article, which is *mo*, or *m'*, is used for the English *a* and *the*; but it is not frequently employed, because the words are sufficiently understood without it. In the Cherokee, we do not find that any distinct word is used for our *a* and *the*; but, where required, they use a word equivalent to the numeral *one*, and the demonstrative pronouns *this*, *that*, agreeably to the original use and nature of the words which we now call *articles*.—2. *Nouns*.—(*a*) *Cases*. The Indians have no declensions, generally speaking; that is, the nouns are not declined by inflections, as in Latin and Greek. In the Delaware, however, according to Mr. Zeisberger, in two cases, the vocative and ablative (which last Mr. Du Ponceau calls the *local* case), there is an inflection. The

nominative case is simply the name of the thing, as in English; *lenno* (man), *sipu* (river).* The genitive is expressed by placing the noun so employed immediately before that which is used in the nominative, and sometimes by prefixing the inseparable pronoun of the third person, *w*; as we say in English, *John his book* (to be explained under the head of *Pronouns*), for *John's book*; *Getannitowit quisall* (God's son); *Nihillalquonk wtanglowagan* (the Lord's death), in which last example, *anglowagan* signifies *death*, *w* is the inseparable pronoun *his*, and the *t* is inserted for the sake of euphony. The dative case is expressed by inflections in the verbs, and by prefixes and suffixes, as will be explained hereafter; as, *nemilan* (I give [to] him); *milup* (he gave [to] him); *ndellup* (I said [to] him). The accusative is likewise expressed in a similar manner; *n'dahoala* (I love him); *Getannittowit n'quitayala* (I fear God); literally, God I fear him. The vocative is expressed (in the Delaware) by the termination *an*, and by *enk*, when coupled with the pronoun *our*; as, *Nihillalan* (O Lord); *wetochemellenk* (O, our father);—the ablative or local case, by the suffixes *ink* and *unk*, and expresses *in, in the, on, out of*; as, *utenink n'da* (I am going to, or into, town); *utenink noom* (I am coming from, or out of, town); *wachtschunk noom* (I come from the hill); *ochunk* (at his father's.)—(*b*) *Numbers.* The singular, in general, has no particular inflections to distinguish it from the plural, except in the third person, where it ends in *l*, but most commonly in *wall* (in the Delaware). The plural is variously inflected; there is a singular number combined with the plural, as in *our father, my fathers*, and also a double plural, as in *our fathers*. Substantives are generally combined with the inseparable possessive pronoun, which, in the singular, is *n* for the first person, *k* for the second, and *w* or *o* for the third. Example: singular, *nooch* (my father); singular with plural, *noochena* (our father); double plural, *noochenana* (our fathers). The duplication of a syllable, as *nana* in the first person, *wawa* in the second, and *wawawall* in the third, indicates the double plural. So in the second person, *kooch* (thy father); *koochuwa* (your father); *koochewawa* (your fathers), &c. In speaking of deceased persons, the plural form *naninga* is used, as *nochena* (our father); *nochenaninga* (our deceased fathers). But the subject of the numbers of nouns requires a further remark to explain a striking feature in these languages. Some of them, as the Guaranese, in South America, have only a singular number, and are destitute of a distinct form for the plural, to express which they use either the word *hetà* (many), or the numerals themselves. On the other hand, some, as, for example, the Cherokee, have not only the singular and plural, but a dual also, like the Greek and other languages of the Eastern continent; while a third class, as the one last mentioned, have not only the singular, dual and common unlimited, or indefinite plural of the European languages, but also an additional plural, which some writers have denominated the *exclusive* plural, some the *particular*, and some the *limited* plural. We shall illustrate this by some examples. In the Delaware, our plural *we* is expressed by *niluna* and *kiluna*; and, in verbs, the initial *n* or *k* prefixed denotes them respectively; as, *k'pendameneen* means, generally, *we have heard*, or *we all have heard*, without intending to allude to a particular number of persons; but *n'pendameneen* (the *n* from *n-iluna*) means *we*, in particular (we who constitute our family, nation, select company, &c.); but when no discrimination is intended, the form *kiluna*, or its abbreviation *k'*, is used; as *k'iluna e-lenape-wit* (we the Indians), meaning *all* Indians. We shall have occasion to recur to this subject in our remarks on the verbs.—(*c*) *Genders.* There are no inflections to denote the masculine, feminine, or neuter genders; but by a very curious and abstract classification, nouns are ranked under two very general classes, *animate* and *inanimate*. To the former belong animals, trees, and all plants of a large growth, while annual plants and grasses belong to the latter class. The masculine and feminine, when it becomes necessary, are distinguished, generally, by words equivalent to *male* and *female*, or *he* and *she*, in English.—(*d*) *Diminutives.* In the Delaware, these are formed by the suffix *tit* in the class of animate nouns, but by *es* in the inanimate: *lenno* (a man), *lennotit* (a small man); *wikwam* (a house), *wikwames* (a small house): and, in speaking of a pretty little animal, the termination *is* or *shis* is used; *mamalis* (a fawn, or little deer); *kuligatshis* (thy pretty little paw), which last example we have before employed to illustrate the mode of compounding words.—3. *Adjectives.* There are not many of these; for those words

* The reader will, in all these examples, give the vowels the foreign sounds: thus *lenni* is to be pronounced *lénnee*; *sipu, seepoo*, &c. The *ch* is guttural, as in German.

which, in English, are adjectives, are, in these languages, verbs; and, although not inflected through all the persons, yet they have tenses; and it is, doubtless, in this qualified sense that doctor Edwards is to be understood, when he says, of one of the Delaware dialects, "The Mohegans have no adjectives in all their language, unless we reckon numerals, and such words as *all*, *many*, &c., adjectives." We have noticed this remark of Edwards, because it has often been quoted in European publications, and erroneous inferences have been drawn from it respecting the philosophy of language. The same remarks may be applied to the Cherokee language. Degrees of comparison are generally, but not universally, expressed by some word equivalent to *more* or *most*. Numerals may also be classed among adjectives. Few Indians are accustomed to calculate to any great extent; but their languages afford the means of so doing, as well as ours, and since the intercourse of Europeans with them, they have got more into the habit.—4. *Pronouns.*—(*a*) *Personal Pronouns* are *Separable* or *Inseparable*, but are more frequently used in the latter form, examples of which are above given, under the head of the *Nouns*. When two pronouns are employed in verbs, the last, or the pronoun governed, is expressed (in Delaware) by an inflection, as will be seen under the head of *Conjugations of the Verbs*. The personal pronoun, moreover, combines itself with other parts of speech, as, with the conjunction *also; nepe* (I also); *kepe* (thou also), &c. One further peculiarity in the separable pronouns deserves notice. In conformity, as it should seem, with the general classification of Indian words into *animate* and *inanimate*, the personal pronoun has only two *modes*, as they may be called, the one applicable to the animate, and the other to the inanimate class; thus the separable pronoun of the third person, *nekama*, answers both to *he* and *she* in English. If we wish to distinguish between the sexes, we must add to it the word *man* or *woman*; thus, in Delaware, *nekama lenno* means *he*, or *this man*, and *nekama ochqueu* means *she*, or *this woman*. —(*b*) *Demonstrative* and *Relative Pronouns*. The modes of expressing these by various forms and combinations are numerous. Doctor Edwards, it is true, says the Mohegan dialect has no relative corresponding to our *who* and *which*; but Eliot, in the Massachusetts language, and Zeisberger, in the Delaware, give this relative as a distinct, independent part of speech.—5. *Verbs*. The Indian languages exhibit almost an endless variety in their verbs. Every part of speech may be compounded with the verb in various ways. Its fundamental idea, as Mr. Du Ponceau observes, in his notes to Eliot's Grammar, is that of existence, *I am*, *sum*. This abstract sentiment receives shape and body from its combination with the various modifications of being, by action, passion and situation, or manner of existing; *I am loving*, *loved*, *sleeping*, *awake*, *sorry*, *sick*, which the Latin tongue more synthetically expresses by one word, *amo*, *amor*, *dormio*, *vigilo*, *contristor*, *ægroto*. Next come the accessary circumstances of person, number, time, and the relations of its periods to each other; *I am*, *we are*, *I was*, *I shall be*, *I had been*, *I shall have been*. Here the Latin again combines these various ideas in one word with the former ones; *sum*, *es*, *sumus*, *eram*, *ero*, *fueram*, *fuero*. Sometimes it goes further, and combines the negative idea in the same locution, as in *nolo*. This, however, happens but rarely; and here seem to end the verbal powers of this idiom. Not so with those of the Indian nations. While the Latin combines but few adjectives under its verbal forms, the Indians subject this whole class of words to the same process, and every possible mode of existence becomes the subject of a verb. The gender or genus—not, as with us, a mere division of the human species by their sex, but of the whole creation, by the obvious distinction of animate and inanimate—enters also into the composition of this part of speech, and the object of the active or transitive verb is combined with it by means of those forms which the Spanish-Mexican grammarians call *transitions*, by which one single word designates the person who acts, and that which is acted upon. The substantive is incorporated with the verb in a similar manner; thus, in the Delaware, *n'matshi* (I am going to the house); *nihilla pewi* (I am my own master, I am free); *tpisquihilleu* (the time approaches [*properat hora*]). The adverb likewise: *nachpiki* (I am so naturally); *nipahwi* (to travel by night [*noctanter*]); *pachsenummen* (to divide [something] equally), &c. What shall we say, then, of the reflected, compulsive, meditative, communicative, reverential, frequentative, and other circumstantial verbs, which are to be found in the idioms of New Spain and other American Indian languages? The mind is lost in the contemplation of the multitude of ideas thus expressed at once, by means of

a single word, varied through moods, tenses, persons, affirmation, negation, transitions, &c., by regular forms and cadences, in which the strictest analogy is preserved.—(*a*) *Substantive Verb.* It has been already observed, that the Indian languages are generally destitute of the verb *to be*. In the Delaware, according to Zeisberger's Grammar, the verbs *to have* and *to be* do not exist, either as auxiliaries, or in the abstract substantive sense, which they present to an European mind. The verb *to have* always conveys the idea of *possession*, and *to be*, that of a *particular situation* of the body or mind; and they may each be combined, like other verbs, with other accessary ideas. Thus the verb *to have*, or *possess*, is combined with the substantive or thing possessed, as follows: *n'damochol** (I have a canoe); *nowikin* (I have a house). The idea conveyed by the substantive verb *to be*, is expressed by various combinations with other parts of speech; as, *ni n'damochol* (it is my canoe). It is also combined with the relative pronoun *auwen* (who); thus, *ewenikia* (who I am), *ewenikit* (who he is), &c.—(*b*) *Animate and Inanimate Verbs.* We have already alluded to this distinction of the verbs; but this requires illustration by examples. The two verbal forms, *nolhatton* and *nolhalla*, in the Delaware, both mean *I possess;* but the former can only be used in speaking of the possession of things inanimate, and the latter of living creatures; as, *nolhatton achquiwanissal* (I have or possess blankets); *cheeli kæcu n'nolhattowi* (many things I am possessed of; or, I possess many things); *wak nechenaunges nolhallau* (and I possess a horse). The letter *u*, at the end of the verb *nolhallau*, conveys the idea of the pronoun *him;* so that it is the same as if we said, *and a horse I possess him.* Again, in the verb *to see*, the same distinction is made; as, *lenno newau* (I see a man); *tsholens newau* (I see a bird); but, in the case of an inanimate object, they say, for example, *wikwam nemen* (I see a house); *amochol nemen* (I see a canoe), &c. It is the same with other verbs, such, for example, as we call *neuters*: thus they say, *icka shingiesh-in n'dallemous* (there lies my beast); but, on the other hand, *icka shingiesh-en n'tamahican* (yonder lies my hatchet or tomahawk). The *i* or *e*, in the last syllable of the verb, as here used in the third person, constitutes the difference which indicates, that the thing spoken of has or has not life.—(*c*) *Adjective Verbs.* This name is given by Mr. Zeisberger to a description of words, respecting whose proper classification, he had much doubt. On the one hand, he found that there were in the Delaware language, pure adjectives, which receive different forms when employed in the verbal sense; such as *wulit*, *wulik*, *wulisso* (good, handsome, pretty); *wulilissu* (he, she or it, is good, pretty or handsome), and several others. But these are not very numerous. A great number of them are impersonal verbs, in the third person singular of the present tense; while others are conjugated through various persons, moods and tenses. He decided, at last, to include them all in a list, which Mr. Du Ponceau has called *adjective verbs*, in analogy with the name of another class, denominated *adverbial verbs*, which are formed by, or derived from adverbs. Examples: *guneu*, long (it is); *guneep*, it was long; *machkeu*, red (it is); *machkeep*, it was red, &c.—(*d*) *Adverbial verbs.* These are formed from adverbs; as, from *shingi* (unwillingly), they form the verb *shingilendam* (to dislike, to be against the will or inclination); from *shacki* (so far, so long) is formed *shackoochen* (to go so far off and no farther).—(*e*) *Irregular Verbs.* These are chiefly of the class which we call *impersonal;* but they do not all belong to it. Of those which are called *irregular*, in the ancient and modern languages of Europe, that is, verbs whose different tenses and moods appear to have sprung from different roots—as in Latin, *sum*, *eram*, *fui;* in French, *aller*, *je vais*, *j'irai;* and in English, *I go*, *I went*—there are no examples in Zeisberger's Grammar of the Delaware, and probably there are none in that language. Mr. Heckewelder, after giving an example of a Delaware verb, adds this remark: "In this manner, verbs are conjugated through all their moods and tenses, and through all their negative, causative, and various other forms, *with fewer irregularities than any other language* that I know of." The same regularity exists in the languages of South America. Molina says of that of Chile, "What is truly surprising in this language, is, that it contains *no irregular noun or verb.* Every thing in it may be said to be regulated with a geometrical precision, and displays much art with great simplicity, and a connexion of well ordered and unvarying grammatical rules, which always make the subsequent so much depend upon the antecedent, that

* The apostrophe in the word *n'damochol* indicates a *sheva* or mute vowel. Eliot, in his Massachusetts Grammar, denotes it by the English short *u*: *nüttappin* for *n'dappin*. (*Du Ponceau.*)

the theory of the language is easy, and may be learned in a few days." This fact, as Mr. Du Ponceau justly observes, is worthy of attention. Mr. Zeisberger, in his list of irregular verbs, gives one example, *aski* (must), which has neither persons nor tenses, used thus: *aski n'witshema* (I must help him); *aski nayunap* (I was forced to carry him), &c.—(*f*) *Specific or concrete Character of the Indian Verbs.* It is a remark of Mr. Heckewelder, that the Indians are more in the habit of using particular or specific, than generic terms. Their verbs, accordingly, partake of this character, and have numerous forms to express the particular or specific thing, which is the object of the action denoted by the verb. Thus, in the Delaware, *n'mitzi* (I eat), in a general sense; *n'mamitzi* (I am in the act of eating at this moment); the one is used in the indefinite, and the other in the definite sense; and a good speaker will never employ the one for the other. Again; *n'mitzihump* (I have eaten), *metshi n'gischi mitzi* (I am come from eating), *n'dappi mitzi* (I am returned from eating). These three expressions are all past tenses of the verb *I eat*, and mean *I have eaten;* but a person just risen from table will not say, *n'dappi mitzi;* this can only be used after leaving the place where he has been eating, in answer to a person who asks him where he comes from. The word *n'dappi* is connected with the verb *apatshin* (to return). And here, in passing, another distinction is to be noticed; if the place from which the person comes is near, he says, *n'dappi;* but if distant, *n'dappa*. A more full illustration of this peculiarity of Indian words, was given some years ago by an example from the Cherokee language, published in the Massachusetts Historical Collections, vol. x. p. 121, of the second series, which we here extract. In that language, says one of the missionaries (the reverend Mr. Buthrick), thirteen different verbs are used to express the action of washing; thus (pronouncing the words as in English)—

Kŭtŭwo,	I am washing	myself, as in a river.
Kŭlĕstŭlâ,	"	my head.
Tsĕstŭlâ,	"	another person's head.
Kŭkŭsquō,	"	my face.
Tsĕkŭsquō,	"	another's face.
Tâkàsûlâ,	"	my hands.
Tâtseyàsula,	"	another's hands.
Tâkōsûlâ,	"	my feet.
Tâtseyâsûla,	"	another's feet.
Tâkŭngkâlâ,	"	my clothes.
Tâtseyŭngkĕlâ,	'	another's clothes.
Tâkŭtĕyâ,	I am washing	dishes, etc.
Tsĕyŭwâ,	"	a child.
Kŏwĕlâ,	"	meat.

This difference of words prevents the necessity of mentioning the object washed. So it is with the verbs *love, take, have, leave, die, weigh*, &c. The same thing is found in the languages of South and Middle America. Gilij informs us, that "to express *I wash my face*, requires a different word from that which would express washing *my feet, my hands*, &c.; and the old age of a man, woman, and of a garment, the heat of the body, of a fire, of the sun and of the climate, have each a particular word. Again; in our language, and in many others (European), there is but one word, *mangiare*, for *to eat;* but in the Tamanacan, there are several, according to the thing eaten; *jacurù* is, to eat bread, or the cassava; *jemerì* (to eat fruit, honey); *janeri* (to eat meat)," &c. We add an example from the Delaware, which is suggested by the above remark of Gilij, on the word *old*. This word, as Mr. Heckewelder observes, is used by us in the most general sense; we say, an *old man, old horse, old house, old basket*, &c. The Indians, on the contrary, vary their expressions, when speaking of a thing that has life, and of one that has not; for the latter, instead of the word *old*, they use terms which convey the idea, that the thing has lasted long, that it has been used, worn out, &c. Examples: *kikey* (old, advanced in years), applied to things animate; *chowiey* or *chowiyey* (old by use, wearing), &c.; *kikeyilenno* (an old man, advanced in years); *kikéchum* (an old one, of the brute kind); *chowigáwan* (an old house), from *wikwam* or *wigwam;* *chowaxen* (old shoes), from *maxen* (moccasons or shoes); they say also, *pigihillĕu* (torn by long use or wearing); *lógihillĕu* (fallen to pieces), &c. The same remarks may be made on the word *young;* for instance, their general term for *the young*, the immediate offspring, is *mitshan;* *w'nitschanall* (his or her young or offspring, that have been born alive and suckled), and this applies to man, and beasts of the genus *mammalia;* but when they speak of the feathered kind, or when the young is produced from the egg by hatching, they say *aninshihillĕu*, plural *aninshihilleisak*, barely implying that the animals are *young feathered creatures*. We return to the verbs.—(*g*) *The positive, negative, reciprocal and other Forms of the Verbs.* All the verbs in these languages may be conjugated throughout, in the positive or affirm-

ative, and the negative forms; as, in the Delaware, *n'dappi* (I am there), *matta n'dappi* (I am not there); and, in an example given by Mr. Zeisberger, we have a curious instance of the care taken to preserve precision in some cases: on the verb *nihillapewi* (I am free), he observes, that as this verb has the syllable *wi*, which, in general, indicates a negative form, its negative has *wiwi*. In the Massachusetts language, the negative form was made by interposing *oo* or *u* in the affirmative; as, *noowadchanumun* (I keep it), a tool, garment, &c.; negative, *noowadchanum-oo-un* (I keep it not); *noowaantam* (I am wise); *noowaantam-ooh* (I am not wise). The *reciprocal* form, in the Delaware, may be thus exemplified: Infinitive mood, *ahoalan* (to love); *n'dahoala* (I love him); reciprocal, infinitive, *ahoaltin* (to love one another); *n'dahoaltineen* (we love one another); and, negatively, *matta n'dahoaltinwuneen* (we do not love one another), &c. *Reflected* form, *n'dahowala n'hakey* (I love myself); *k'dahowala k'hakey* (thou lovest thyself), &c. *Relative* form, *elowe-ya* (as or what I say), from *n'dellowe* (I say). *Social* form, *witeen* or *wideen* (to go with), from *n'da* or *n'ta* (I go). *Causative* form, *pommauchsoheen* (to make to live), from *pommauchsin* (to live); *nihillapucheen* (to make free), from *nihillapewin* (to be free). *Continuous* or *habitual* form, *n'wawulamallsi* (I am always well or happy), from *nulamallsi* (I am well or happy). *Adverbial* form, *epia* (where I am), from *n'dappin* (I am there); infinitive, *achpin* (to be there). To these we add one other form, which, in the Massachusetts language, Eliot called the *instead form*, or *form advocate*; as, *koowadchanumwanshun* (I keep it for thee, I act in thy stead), from *koowadchansh* (I keep thee). He adds, that this form is of great use in theology, to express what Christ hath done for us; as, *n'nuppoowonuk* (he died for me); *k'nuppoowonuk* (he died for thee), &c.—(*i*) *Personal Forms or Transitions* are, in fact, the manner of conjugating and declining all the verbs of each of the preceding classes. The remarkable method of effecting this has been already alluded to; but it requires a further developement, in order to make it plain and intelligible to those who are accustomed merely to the structure of the European languages. Mr. Heckewelder, in his correspondence with Mr. Du Ponceau, explains it, in the Delaware language, in the following manner; which, we may add, is conformable with the views given of it, a century and a half ago, by Eliot, in his Grammar of the Massachusetts dialect: "I do not mean," says Mr. H., "to speak here of the positive, negative, causative, and a variety of other forms, but of those which Mr. Zeisberger calls *personal*, in which the two pronouns, governing and governed, are, by means of affixes, suffixes, terminations and inflexions, included in the same word. Of this I shall give you an instance from the Delaware language. I take the verb *ahoalan* (to love), belonging to the fifth of the eight conjugations, into which Mr. Zeisberger has very properly divided this part of speech:

INDICATIVE, PRESENT, POSITIVE.

Singular.	*Plural.*
N'dahoala, I love	N'dahoalaneen, we love
K'dahoala, thou lovest	K'dahoalohhimo,* ye love
W'dahoala, *or* Ahoaleu, } he loves	Ahoalewak, they love.

Now for the personal forms, in the same tense:

First Personal Form.†

I, *Singular.*	*Plural.*
K'dahoatell, I love thee	K'dahoalohhumo, I love you
N'dahoala, I love him *or* her	N'dahoalawak, I love them.

Second Personal Form.

THOU, *Singular.*	*Plural.*
K'dahoali, thou lovest me	K'dahoalineen, thou lovest us
K'dahoala, thou lovest him *or* her	K'dahoalawak, thou lovest them.

* The reader should be apprized, that, in these and other examples from the Delaware, the double consonants are used only to indicate that the preceding vowel is short, as in the German *immer*; and that the consonant is not to be articulated twice.

† Mr. Du Ponceau, following the Spanish-American grammarians, calls these personal forms *transitions*. Eliot called them the *suffix forms*, in contradistinction to the *simple forms*, in which the act related to *inanimate* objects.

Third Personal Form.

HE *or* SHE. *Singular.*	*Plural.*
N'dahoaluk, he loves me	W'dahoalguna, he loves us
K'dahoaluk, he loves thee	W'dahoalguwa, he loves you
W'dahoalawall, he loves him	W'dahoalawak, he loves them.

Fourth Personal Form.

WE. *Singular.*	*Plural.*
K'dahoalenneen, we love thee	K'dahoalohummena, we love you
N'dahoalawuna, we love him	N'dahoalowawuna, we love them.

Fifth Personal Form.

YE. *Singular.*	*Plural.*
K'dahoalihhimo, ye love me	K'dahoalihhena, ye love us
K'dahoalanewo, ye love him	K'dahoalawawak, ye love them.

Sixth Personal Form.

THEY. *Singular.*	*Plural.*
N'dahoalgenewo, they love me	N'dahoalgehhena, they love us
K'dahoalgenewo, they love thee	K'dahoalgehhimo, they love you
W'dahoalanewo, they love him	W'dahoalawawak, they love them.

In this manner, verbs are conjugated through all their moods and tenses, and through all their negative, causative, and various other forms, with fewer irregularities than any other language that I know of." We add an example from the Massachusetts language, as given by Eliot, who has used the English verb *to pay*, with the Indian inflections, in order, as he expresses it, that "any may distinguish betwixt what is grammar, and what belongs to the word. And remember (says he), ever to pronounce *pay*, because else you will be ready to reade it *pau*. Also remember that *paum* is the radical word, and all the rest is grammar." The Indians, we believe, adopted the word *pay* into their language, as we adopt French and other foreign words into English.

AFFIRMATIVE FORM.

INDICATIVE MOOD.

PRESENT TENSE.

I. *First Singular.*	
Kup-*paum*-ush, I pay thee	Kup-*paum*-unumwoo, I pay you
Nup-*payum*, I pay him	Nup-*paum*-ôog, I pay them.
THOU. *Second Singular.*	
Kup-*paum*-eh, thou payest me	Kup-*paum*-imun, thou payest us
Kup-*paum*, thou payest him	Kup-*paum*-oog, thou payest them.
HE. *Third Singular.*	
Nup-*paum*-uk, he payeth me	Kup-*paum*-ukqun, he payeth us
Kup-*paum*-uk, he payeth thee	Kup-*paum*-ukou, he payeth you
Up-*paum*-uh, he payeth him	Up-*paum*-uh nah, he payeth them.
WE. *First Plural.*	
Kup-*paum*-unumun, we pay thee	Kup-*paum*-unumun, we pay you
Nup-*paum*-oun, we pay him	Nup-*paum*-ounonog, we pay them.
YE. *Second Plural.*	
Kup-*paum*-imwoo, ye pay me	Kup-*paum*-imun, ye pay us
Kup-*paum*-au, ye pay him	Kup-*paum*-oog, ye pay them.
THEY. *Third Plural.*	
Nup-*paum*-ukquog, they pay me	Nup-*paum*-ukqunnonog, they pay us
Kup-*paum*-ukquog, they pay thee	Kup-*paum*-ukoo-o-og, they pay you
Up-*paum*-ouh, they pay him	Up-*paum*-ouh nah, they pay them.

In consequence of this curious mechanism of the Indian verbs, as doctor Edwards has remarked, in his Observations on the Language of the Muhhekaneew (Mohegan) Indians, they cannot say, *John loves Peter*, but must say, *John he-loves-him Peter*. Hence, when the Indians begin to talk English, they universally express themselves according to this idiom. It is further observable (he adds, in speaking of the Mohegan dialect), that the pronoun, in the accusative case, is sometimes,

in the same instance, expressed by both a prefix and a suffix; as, *kthuwhunin* (I love thee); the *k* prefixed, and the syllable *in* suffixed, both unite to express, and are both necessary to express, the accusative case *thee*."* Mr. Heckewelder informs us, in explaining this curious structure of the Indian verbs, that the form expressive of the pronoun governed, is sometimes placed at the beginning; as in *k'dahoatell* (I love thee), which is the same as *thee I love*; for *k*, from *ki*, is the sign of the second person: sometimes, however, the governing pronoun is placed first, as in *n'dahoala* (I love him), *n* being the sign of the first person: one of the pronouns, governing or governed, is generally expressed by its proper sign, *n'* for the first person *I*, *k'* for *thou* or *thee*, and *w* for *he* or *him*; the other pronoun is expressed by an inflexion; as in *k'dahoalohhumo* (I love you); *k'dahoalineen* (thou lovest us); *k'dahoalawak* (thou lovest them). It will be here perceived, that the governing pronoun is not always in the same relative place with the governed.—(*k*) *Voices, active and passive.* The Indian verbs have an active and passive form; as, in Delaware, *n'dahoala* (I love), *n'dahoalgussi* (I am loved); in the Massachusetts dialect, *noowadchan* (I keep you), *noowadchanit* (I am kept). From this passive form, says Eliot, verbals are often derived; as, *wadchannit-tuonk* (salvation), &c.—(*l*) *Conjugations.* The verbs may also be classed under different conjugations, the number of which varies in the different dialects. In the Delaware, Mr. Zeisberger and Mr. Heckewelder made eight conjugations: the first ends in *in*, as *achpin* (to be there, in a particular place): the second, in *a*, as *n'da* (I go): the third, in *elendam*, and indicates a disposition of mind, as *wulelendam* (to be glad): the fourth, in *men*, as *n'pendamen* (I hear): the fifth, in *an*, as *ahoalan* (to love): the sixth, in *e* or *we*, as *n'dellowe* (I say): the seventh, in *in*, as *miltin* (to give); it has no simple active or passive voice, and is only conjugated through the personal forms or transitions: the eighth, in *ton*, as *peton* (to bring); it has the simple active, but not the passive form, and has the personal indicative and subjunctive transitions. Their conjugations are as regular as those of any language that we know.—(*m*) *Tenses.* The writers on Indian grammar have usually made three tenses—present, past, and future; but, as Mr. Heckewelder observes to Mr. Du Ponceau, "You will be much mistaken, if you believe that there are no other modes of expressing actions and passions in the verbal form, as connected with the idea of time." This will be presently exemplified in some Indian verbs. The *present* and *preterite* require no particular illustration; but the *future* admits of a modification, which, to those who are conversant with the European languages only, is very remarkable. We take Mr. Heckewelder's exemplification, abridged:

INDICATIVE, PRESENT.

Positive Form.

N'dahoaltineen, we love one another
K'dahoaltihhimo, you love one another
Ahoaltowak, they love one another.

Negative Form.

Matta n'dahoaltiwuneen, we do *not* love one another
Matta k'dahoaltiwihhimo, ye do *not* love one another
Matta ahoaltiwiwak, they do *not* love one another.

It is to be observed, that, in this negative form, *matta* (or *atta*) is an adverb, which signifies *no* or *not*, and is always prefixed; but it is not that alone which indicates the negative sense of the verb. It is also pointed out by *wu* or *wi*, which is interwoven throughout the whole conjugation; the vowel which immediately precedes being sometimes changed for the sake of sound, as from *aholtawak* (they love each other) is formed *ahoaltiwiwak* (they do not love each other). The reader will now readily understand the remarkable modification of the future tense above spoken of, which is a concordance in tense of the adverb with the verb. The future tense of the above negative example is—

Mattatsh n'dahoaltiwuneen, we shall or will *not* love each other
Mattatsh k'dahoaltiwihhimo, you shall or will *not* love each other
Mattatsh ahoaltiwiwak, they shall or will *not* love each other.

Now, the termination *atsh* or *tsh*, in the verbs, indicates the future tense; but, by a peculiarity in these languages, it is sometimes attached to the verb, as in *ktahoaliwitsh* (thou shalt or wilt not love me), and sometimes to the adverb, as in the examples last above given, and to other parts of speech accompanying the verb. So they say, *mattatsh n'dawi*, or *matta n'da-*

* The word *kthuwhunin*, in Mohegan, does not, at first view, appear to have an etymological affinity with the Delaware example above given, *k'dahoatell* (I love thee); but when we recollect, that the change of *l* into *n*, is a common distinction between these two dialects, and that *t* and *d* are constantly interchanged in languages, the affinity between these two words becomes more manifest.

witsh (I shall not go). Mr. Heckewelder observes, that, in deciding which form to use, the ear is the best guide. The same thing is noticed by doctor Edwards, in the Mohegan dialect. In the Massachusetts language, the future was expressed by a word signifying futurity, added to the indicative mood; as *mos*, *pish* (shall or will). In addition to these three tenses, we find, by Mr. Zeisberger's Grammar, that, in the Delaware, the subjunctive mood has only a pluperfect in the active and passive voices, but not otherwise.—(*n*) *Moods.* These have generally been made conformable to the corresponding divisions in our own language—indicative, imperative, subjunctive, infinitive, with the participial form. In the Delaware, Mr. Zeisberger has also given what he (or his translator) calls the *local-relative* mood; as, indicative, *n'da* (I go); local relative, *eyaya* (where or whither I go). Eliot, in the Massachusetts language, makes five moods—indicative, imperative, optative, subjunctive or suppositive, and indefinite or infinitive. We conclude the subject of the Indian verb with an example of a conjugation, from the Delaware, by which the preceding observations will be more fully illustrated; adding only the just remark made by Eliot more than a century and a half ago—that "the manner of formation of the nouns and verbs have such a latitude of use, that there needeth little other syntaxis in the language." After this example from the Delaware, we shall give some parts of a conjugation from the Cherokee language, which belongs to an entirely different stock, and has some peculiarities still more extraordinary than those already given from other languages. Our limits will not allow us to insert a whole conjugation of the verb, in its various modifications of the inanimate, animate, affirmative, negative and other forms. We shall therefore only give so much as will exhibit the personal forms or transitions, which have been above spoken of.

AHOALAN, *to love.*

PERSONAL FORMS (OR TRANSITIONS)—POSITIVE.

FIRST TRANSITION.

INDICATIVE MOOD.

Present.

K'dahoatell, I love thee	K'dahoalohhummo, I love you
N'dahoala, I love him	N'dahoalawak, I love them.

Preterite.

K'dahoalennep, I loved thee	K'dahoalohhummoap, I loved you
N'dahoalap, I loved him	N'dahoalapannik, I loved them.

Future.

K'dahoalelltsh, I shall *or* will love thee	K'dahoalohhummotsh, I shall *or* will love you
N'dahoalauchtsh, I shall *or* will love him	N'dahoalawaktsh, I shall *or* will love them.

SUBJUNCTIVE MOOD.

Present.

Ahoalanne, if *or* when I love thee	Ahoaleque, if *or* when I love you
Ahoalachte, if *or* when I love him	Ahoalachtite, if *or* when I love them.

Preterite.

Ahoalannup, if *or* when I loved thee	Ahoalekup, if *or* when I loved you
Ahoalachtup, if *or* when I loved him	Ahoalachtup, if *or* when I loved them.

Pluperfect.

Ahoalanpanne, if *or* when I had loved thee	Ahoalekpanne, if *or* when I had loved you
Ahoalachtuppanne, if *or* when I had loved him	Ahoalatpanne, if *or* when I had loved them.

Future.

Ahoalanhetsh, if *or* when I shall *or* will love thee	Ahoalequetsh, if *or* when I shall *or* will love you
Ahoalachtetsh, if *or* when I shall *or* will love him	Ahoalachtitetsh, if *or* when I shall *or* will love them.

SECOND TRANSITION.

INDICATIVE MOOD.

Present.

K'dahoali, thou lovest me
K'dahoala, thou lovest him
K'dahoalineen, thou lovest us
K'dahoalawak, thou lovest them.

Preterite.

K'dahoalinep, thou didst love me
K'dahoalap, thou didst love him
K'dahoalihhenap, thou didst love us
K'dahoalapannik, thou didst love them.

Future.

K'dahoalitsh, thou shalt *or* wilt love me
K'dahoalauchtsh, thou shalt *or* wilt love him
K'dahoalihhenatsh, thou shalt *or* wilt love us
K'dahoalawaktsh, thou shalt *or* wilt love them.

IMPERATIVE MOOD.

Ahoalil, love thou me
Ahoalineen, love thou us.

SUBJUNCTIVE MOOD.

Present.

Ahoaliyanne, if *or* when thou lovest me
K'dahoalanne, if *or* when thou lovest him
Ahoaliyenke, if *or* when thou lovest us
K'dahoalachte, if *or* when thou lovest them.

Preterite.

Ahoaliyannup, if *or* when thou didst love me
Ahoalannup, if *or* when thou didst love him
Ahoaliyenkup, if *or* when thou didst love us
K'dahoalachtup, if *or* when thou didst love them.

Pluperfect.

Ahoaliyanpanne, if *or* when thou hadst loved me
Ahoalanpanne, if *or* when thou hadst loved him
Ahoaliyenkpanne, if *or* when thou hadst loved us
K'dahoalachtuppanne, if *or* when thou hadst loved them.

Future.

Ahoaliyannetsh, if *or* when thou shalt *or* wilt love me
Ahoalachtetsh, if *or* when thou shalt *or* wilt love him
Ahoaliyenketsh, if *or* when thou shalt *or* wilt love us
Ahoalachtitetsh, if *or* when thou shalt *or* wilt love them.

THIRD TRANSITION.

PARTICIPLES.

Ehoalid, he who loves me
Ehoalat, he who loves him
Ehoalquenk, he who loves us
Ehoalquek, he who loves you
Ehoalquichtit, he who loves them.

INDICATIVE MOOD.

Present.

N'dahoaluk, he loves me
K'dahoaluk, he loves thee
W'dahoalawall, he loves him
W'dahoalguna, he loves us
W'dahoalguwa, he loves you
W'dahoalawak, he loves them.

Preterite.

N'dahoalgunep, he loved me
K'dahoalgunep, he loved thee
W'dahoalap, he loved him
N'dahoalgunap, he loved us
K'dahoalguwap, he loved you
W'dahoalapannik, he loved them.

Future.

N'dahoalauchtsh, he shall *or* will love me
K'dahoalauchtsh, he shall *or* will love thee
W'dahoalauchtsh, he shall *or* will love him
N'dahoalgunatsh, he shall *or* will love us
W'dahoalguwatsh, he shall *or* will love you
W'dahoalawaktsh, he shall *or* will love them.

SUBJUNCTIVE MOOD.

Present.

Ahoalite, if *or* when he loves me
Ahoalquonne, if *or* when he loves thee
Ahoalate, if *or* when he loves him
Ahoalquenke, if *or* when he loves us
Ahoalqueque, if *or* when he loves you
Ahoalachtite, if *or* when he loves them.

Preterite.

Ahoalitup, if *or* when he loved me
Ahoaliyonnup, if *or* when he loved thee
Ahoalatup, if *or* when he loved him
Ahoalquenkup, if *or* when he loved us
Ahoalquekup, if *or* when he loved you
Ahoalachtitup, if *or* when he loved them.

Pluperfect.

Ahoalitpanne, if *or* when he had loved me
Ahoalanpanne, if *or* when he had loved thee
Ahoalatpanne, if *or* when he had loved him
Ahoalquenkpanne, if *or* when he had loved us
Ahoalquekpanne, if *or* when he had loved you
Ahoalachtitpanne, if *or* when he had loved them.

Future.

Ahoaletsh, if *or* when he shall *or* will love me
Ahoalquonnetsh, if *or* when he shall *or* will love thee
Ahoalechtetsh, if *or* when he shall *or* will love him
Ahoalquenketsh, if *or* when he shall *or* will love us
Ahoalquequetsh, if *or* when he shall *or* will love you
Ahoalechtitetsh, if *or* when he shall *or* will love them.

FOURTH TRANSITION.

INDICATIVE MOOD.

Present.

K'dahoalenneen, we love thee
N'dahoalawuna, we love him
K'dahoalohummena, we love you
N'dahoalowawuna, we love them.

Preterite.

K'dahoalennenap, we loved thee
N'dahoalawunap, we loved him
K'daholohummenap, we loved you
N'dahoalawawunap, we loved them.

Future.

K'dahoalohhenatsh, we shall *or* will love thee
N'dahoalawunatsh, we shall *or* will love him
K'dahoalohummenatsh, we shall *or* will love you
N'dahoalawawunatsh, we shall *or* will love them.

SUBJUNCTIVE MOOD.

Present.

K'dahoalenk, if *or* when we love thee
Ahoalanque, if *or* when we love him
Ahoaleque, if *or* when we love you
Ahoalawonque, if *or* when we love them.

Preterite.

Ahoalenkup, if *or* when we loved thee
Ahoalankup, if *or* when we loved him
Ahoalekup, if *or* when we loved you
Ahoalawawonkup, if *or* when we loved them.

Pluperfect.

K'dahoalenkpanne, if *or* when we had loved thee
Ahoalankpanne, if *or* when we had loved him
Ahoalekpanne, if *or* when we had loved you
Ahoalawonkpanne, if *or* when we had loved them.

Future.

Ahoalenquetsh, if *or* when we shall *or* will love thee
Ahoalanquetsh, if *or* when we shall *or* will love him
Ahoalequetsh, if *or* when we shall *or* will love you
Ahoalawonquetsh, if *or* when we shall *or* will love them.

FIFTH TRANSITION.

INDICATIVE MOOD.

Present.

K'dahoalihhimo, ye love me
K'dahoalanewo, ye love him
K'dahoalihhena, ye love us
K'dahoalawawak, ye love them.

Preterite.

K'dahoalihhimoap, ye loved me
K'dahoalanewoap, ye loved him
K'dahoalihhenap, ye loved us
K'dahoalawapannik, ye loved them.

Future.

K'dahoalihhimotsh, ye shall *or* will love me
K'dahoalanewotsh, ye shall *or* will love him
K'dahoalihhenatsh, ye shall *or* will love us
K'dahoalawawaktsh, ye shall *or* will love them.

IMPERATIVE MOOD.

Ahoalik, love you me
Ahoalo, love you him

Ahoalineen, love you us
Ahoalatam, love you them.

SUBJUNCTIVE MOOD.

Present.

Ahoaliyeque, if *or* when ye love me
Ahoalaque, if *or* when ye love him

Ahoaliyenke, if *or* when ye love us
Ahoalachtike, if *or* when ye love them.

Preterite.

Ahoaliyekup, if *or* when ye loved me
Ahoalachtup, if *or* when ye loved him

Ahoaliyenkup, if *or* when ye loved us
Ahoalachtiyekup, if *or* when ye loved them.

Pluperfect.

Ahoaliyekpanne, if *or* when ye had loved me
Ahoalekpanne, if *or* when ye had loved him

Ahoaliyenkpanne, if *or* when ye had loved us
Ahoalachtitpanne, if *or* when ye had loved them.

Future.

Ahoaliyequetsh, if *or* when ye shall *or* will love me
Ahoalaquetsh, if *or* when ye shall *or* will love him

Ahoaliyenquetsh, if *or* when ye shall *or* will love us
Ahoalachtiquetsh, if *or* when ye shall *or* will love them.

SIXTH TRANSITION.

INDICATIVE MOOD.

Present.

N'dahoalgenewo, they love me
K'dahoalgenewo, they love thee
W'dahoalanewo, they love him

N'dahoalgehhena, they love us
K'dahoalgehhimo, they love you
W'dahoalawawak, they love them.

Preterite.

N'dahoalgenewoap, they did love me
K'dahoalgenewoap, they did love thee
W'dahoalgenewoap, they did love him

N'dahoalgehhenap, they did love us
K'dahoalgehhimoap, they did love you
W'dahoalawapannik, they did love them.

Future.

N'dahoalgenewotsh, they shall *or* will love me
K'dahoalgenewotsh, *or* k'dahoalgetsh, they shall *or* will love thee
W'dahoalanewotsh, they shall *or* will love him

N'dahoalgehhenatsh, they shall *or* will love us
K'dahoalgehhimotsh, they shall *or* will love you
W'dahoalawawaktsh, they shall *or* will love them

SUBJUNCTIVE MOOD.

Present.

Ahoalinke, if *or* when they love me
Ahoalquonne, if *or* when they love thee
Ehoalinde, if *or* when they love him

Ehoalquenke, if *or* when they love us
Ehoalqueque, if *or* when they love you
Ehoalachtite, if *or* when they love them.

Preterite.

Ehoalinkup, if *or* when they loved me
Ehoalquonnup, if *or* when they loved thee
Ehoalindup, if *or* when they loved him

Ehoalquenkup, if *or* when they loved us
Ehoalquekup, if *or* when they loved you
Ehoalachtitup, if *or* when they loved them.

Pluperfect.

Ehoalinkpanne, if *or* when they had loved me
Ehoalquonpanne, if *or* when they had loved thee
Ehoalindpanne, if *or* when they had loved him

Ehoalquenkpanne, if *or* when they had loved us
Ehoalquekpanne, if *or* when they had loved you
Ehoalachtitpanne, if *or* when they had loved them.

Future.

Ehoalinketsh, if *or* when they shall *or* will love me
Ehoalquonnetsh, if *or* when they shall *or* will love thee
Ehoalindetsh, if *or* when they shall *or* will love him

Ehoalquenketsh, if *or* when they shall *or* will love us
Ehoalquequetsh, if *or* when they shall *or* will love you
Ehoalachtitetsh, if *or* when they shall *or* will love them.

We have remarked above, that the Indian verb has various modifications in different dialects. Those of the Delaware language have been sufficiently explained for the purposes of a general view; and we shall now further develope this curious subject, by exhibiting some of the peculiarities of the verb, in the Cherokee, or, more properly, *Tsullakee* language, which belongs to an entirely different stock, and appears not to have the least etymological affinity with the Delaware, though its grammatical forms, generally speaking, are similar. In the course of our remarks, we shall occasionally advert to some of these points of resemblance, as well as to the difference between the two.—(*a*) *Numbers.* One of the peculiarities which first strikes us, is, that, besides the singular and two plurals, which are found in the Delaware, the Cherokee has also a proper *dual* number, both in its verbs and its nouns and pronouns. This dual is again subdivided, in its first person, into two distinct forms; the first of which is used when one of two persons speaks *to* the other, and says, for example, *We two* (i. e. thou and I), *will do* such a thing; the second form is used when one of two persons speaks *of* the other to a third person, and says, *We two* (i. e. he and I) *will do* such a thing;* for example, *inalu̱ĭha* (we two [i. e. thou and I] are tying it); *awstalu̱ĭha* (we two [i. e. he and I] are tying it). So in the dual of the nouns and pronouns—*kinitaw-tŭ*, our father (i. e. of thee and me); *awkinitawtŭ*, our father (i. e. of him and me.)—(*b*) *Pluralized* or *Multiplicative Form.* We mean by this denomination a form which indicates, that the action expressed by the verb is predicated of more than one object, or that the object of the verb is understood in the plural number. This modification is effected through all the tenses and numbers of the verb, by means of the common plural prefixes, *t*, *te*, *ti*; for example, *katitaw'ti* (I use a spoon); *tekatitaw'ti* (I use spoons); *tsigawwati* (I see [a thing]); *tetsigawwati* (I see [things]); *tsistigi* (I eat [thing]); *tetsistigi* (I eat [things]), &c.—(*c*) *Habitual or Periodical Form.* This is a form or conjugation, which expresses the being in the habit or custom of doing an act, or the doing of it regularly, periodically, &c.; for example, the common form of the verb *tsikeyu* means *I love him*; but, in the *habitual* form or mode, it is *tsikeyusaw* (I love him habitually, or, am in the habit of loving him); again, *galu̱ĭha*, in the common form, means *I tie*, or *am tying* (it); but *galungihaw-i* means *I tie habitually*, &c. This form appears to correspond to what Mr. Zeisberger, in the Delaware, calls the *continuous* form.—(*d*) *Conjugations.* These have not yet been sufficiently investigated to furnish us with a satisfactory classification. Some have made them six in number.—(*e*) *Moods.* These have been described as five in number, corresponding to our indicative, imperative, subjunctive, potential (relating simply to power or ability) and infinitive; to which, in the opinion of the same writers, may be added a sixth, denoting *liberty to do an act*; but this classification is not yet sufficiently established.—(*f*) *Tenses.* An exact arrangement of the tenses, as well as the moods, is still wanting. Besides the three general divisions of present, past and future, the Cherokee has several subdivisions of time; but these subdivisions have not yet been settled with much exactness, so as to enable us to compare them with the European verb. The perfect or past tense, however, has a very remarkable subdivision into two forms, which may, properly enough, be called *two perfects.* They are used not to mark a difference in time, but one of them indicates, that the person speaking was present, or an eye-witness, or conscious of the fact which he relates to have taken place; and the other, that he was absent, or not conscious, but has learned it since by information, discovery, &c. They might be denominated the *absential* and *presential* perfect, or, to avoid

* In writing the Cherokee words, in these examples, we are obliged to express the sounds by the best approximations that our English alphabet affords. The true sounds cannot, in every instance, be perfectly expressed by any other than the national *syllabic alphabet*, if we may so call it, which was invented by a native Cherokee, Guest, who was unacquainted with any other language than his own, but has analyzed that like a philosopher, and has devised an ingenious set of characters to denote all its elementary sounds, which he has reduced to 85, and has denoted by that number of syllabic characters. We cannot employ this native alphabet here, as it would be wholly unintelligible without a good deal of study. To express the *nasal*, which is so common in the language, we have used the character *u̱*; but the reader should be apprized, that the true sound is more like the French nasal *un*; like *ŭn* in the first syllable of our words *uncle*, *hunger*, as heard the instant before the tongue touches the roof of the mouth. The short *ŭ* is to be sounded, as in *but*, *nut*, &c. The *aw* is to be sounded as in English. The other vowels are to have the foreign or Italian sound, as in *far*, *there*, *machine*, *note*, *rule*; and the consonants as in English and its kindred languages. In writing this language with our alphabet, the *g* and *k* are often used promiscuously; as are also the *d* and *t*. The double consonant *kl* is also often employed where the sound is more correctly represented by *tl*.

the double signification of the word *present*, we might call them simply the *perfect* and the *absent perfect*. The former ends in the nasal ų̃, and the latter in *é* or *éï*. Examples: perfect, *u-hlų̃* (he killed him)—speaking of a killing when the speaker was present, or conscious of the fact; absent perfect, *u-hléï* (he killed him)—speaking of a killing when the speaker was absent. In the following conjugation of the present tense of a Cherokee verb, we are obliged to confine ourselves, as in the case of the Delaware example, to the *animate* form:

Conjugation of the Present Indicative of a Cherokee Verb.

INDICATIVE MOOD.

Present Tense.

NEUTER GENDER; THE OBJECT OF THE VERB BEING IN THE SINGULAR NUMBER.

Singular.		*Plural.*	
1 *person.*	Galų̃iha, I am tying it	1 & 2.†	Italų̃iha, ye and I are tying it
2 *do.*	Halų̃iha, thou art tying it	1 & 3.	Awtsalų̃iha, they and I are tying it
3 (*pres.**)	Kahlų̃iha, he is tying it	2.	Itsalų̃iha, ye and I are tying it
3 (*abs.*)	Gahlų̃iha, he is tying it.	3‡ (*pr.*)	Tanalų̃iha, they and I are tying it
Dual.		3 (*abs.*)	Analų̃iha, they and I are tying it.
1 & 2.†	Inalų̃iha, thou and I are tying it		
1 & 3.	Awstalų̃iha, he and I are tying it		
2.	Istalų̃iha, ye two are tying it.		

NEUTER, DUAL AND PLURAL; THE OBJECT PLURAL.

Singular.		*Plural.*	
1.	Tegalų̃iha, I am tying these things	1 & 2.	Tetalų̃iha, ye and I are tying them (these things)
2.	Tehalų̃iha, thou art tying these things	1 & 3.	Tawtsatlų̃iha, they and I are tying them
3.	Tekahlų̃iha, he is tying these things.	2.	Tetsalų̃iha, ye are tying them
Dual.		3 (*pr.*)	Tetanaų̃liha, they are tying them
1 & 2.	Tenalų̃iha, thou and I are tying these things	3 (*abs.*)	Danalų̃iha, they are tying them.
1 & 3.	Tawstalų̃iha, he and I are tying these things		
2.	Testalų̃iha, ye are tying these things.		

THE FIRST PERSON SINGULAR, OBJECTIVE.

Singular.§		*Plural.*	
2.	Skwalų̃iha, thou art tying me	2.	Skiyalų̃iha, ye are tying me
3 (*pr.*)	Takwalų̃iha, he is tying me	3 (*pr.*)	Kų̃kwalų̃iha, they are tying me
3 (*abs.*)	Akwalų̃iha, he is tying me.	3 (*abs.*)	Gų̃kwalų̃iha, they are tying me.
Dual.			
2.	Skĭnalų̃iha, ye two are tying me.		

FIRST AND SECOND PERSONS DUAL, OBJECTIVE.

		Collective.‖	*Distributive.*‖	
Singular.	3 (*pr.*)	Tĭkĭnalų̃iha,	Tetĭkĭnalų̃iha,	He is tying thee and me
	3 (*abs.*)	Gĭnalų̃iha,	Tegĭnalų̃iha,	He is tying thee and me.
Plural.	3 (*pr.*)	Kekĭnalų̃iha,	Tekekĭnalų̃iha,	They are tying thee and me
	3 (*abs.*)	Geginalų̃iha,	Tegegĭnalų̃iha,	They are tying thee and me.

* We use the term *present* to denote the expectation and intention, on the part of the speaker, that the present person should hear. The form styled *absent* is used when the speaker has no such intention, or is indifferent respecting it.

†1 and 2 persons; 1 and 3 persons. This is, perhaps, a proper distinction between those two forms in the dual and plural, either of which would be expressed by the first person in English.

‡ The dual and plural of the third person are always the same. Where the dual and plural numbers are given separately, in the other persons, we have omitted the dual of the third person, because it always accords with the plural.

§ Where a person is wanting, it will be seen plainly to result from the nature of the case, as the first person in this instance.

‖ Collective; Distributive. Collective, *tikĭnalų̃iha* (he ties us two together). Distributive, *tetikinalų̃iha* (he ties us two separately). This distinction relates to the object of the action, and runs throughout the dual and plural numbers of all the persons. The two forms, however, are not both in common use with every verb; but the one or the other, according as the nature of the action relates to objects, collectively or separately considered.

FIRST AND THIRD PERSONS DUAL, OBJECTIVE.

		Collective.	*Distributive.*	
Singular.	2.	Skĭnalŭiha,	Teskĭnalŭiha,	Thou art tying him and me
	3 (*pr.*)	Tawkinalŭiha,	Tetawkinalŭiha,	He is tying him and me
	3 (*abs.*)	Awgĭnalŭiha,	Teawgĭnalŭiha,	
Dual.	2.	Skinalŭiha,	Teskinalŭiha,	Ye two are tying him and me.
Plural.	2.	Skiyalŭiha,	Teskiyalŭiha,	Ye are tying him and me
	3 (*pr.*)	Kakĭnalŭiha,	Tekawkĭnalŭiha,	They are tying him and me.
	3 (*abs.*)	Gagĭnalŭiha,	Tegawgĭnalŭiha,	

In the same analogy, there are distinct forms for the English expressions, "he is tying you and me," "they are tying you and me," "thou art tying them and me," "he is tying them and me," "ye are tying them and me," "they are," &c.; "I am tying thee," "he is," &c., "he and I, they and I, they are," &c.; "I am tying you two," "he is," &c., "they are," &c.; "I am tying you (all, in the plural), he is, we are, they are," &c.

Adverbs, Prepositions, Conjunctions, Interjections. These parts of speech require no particular remarks. According to some writers, all of them are to be found, as distinct parts of speech, in the Indian languages. But others, on the contrary, affirm that some of them are wanting in particular dialects; as, for example, it is said that the Cherokee has no *prepositions*; though they are to be found in the Delaware.—We conclude this article, which the novelty of the subject has led us to extend beyond our original plan, with a few miscellaneous remarks on the Cherokee language. The name of this nation, we would observe, is *Tsalaki* (pronounced nearly like *Tsullakee*), the last syllable of which is often written *gi*; the sound of this final syllable being neither exactly our *k* nor *g*, but an intermediate sound between those two. The English name *Cherokee*, it is supposed, was originally taken from one of the dialects in which the sound of *r* occurs, *Tsaraki* or *Tsurrakee*. This name is believed not to be significant; but, if originally so, the signification of it is now lost. Some names of places among them have been much more changed than this national name, by our English orthography; as *Chattahoochie* from *Tsatahutsi* (which may have been a Creek name), *Coosewaytee* from *Kusuwetiyi*; *Tellico* from *Taliqua*; *Hightower* from *Itawa*, pronounced *Eetawah*, &c. Among the words of relationship, *brother*, *sister*, &c., we find some terms that have a different signification, according as they are used by a man or woman. Example: the word *ungkitaw*, used by women, signifies *my brother*; but used by men, it means *my sister*; and the women exclusively use *ungkilúng* for *my sister*. It is said that this language has no relative pronoun. Like the Indian languages in general, it is highly compounded, or, as Mr. Du Ponceau first very happily denominated this class, *polysynthetic*. There are, as we should naturally expect, therefore, but few monosyllables; some say, only fifteen in the whole, which are all interjections and adverbs, with the exception of one, the monosyllable *na*, which is sometimes a pronoun and sometimes an adverb. Of its polysynthetic character we are able to give one very remarkable example, in *a single word*, which, for perspicuity's sake, we have separated into its syllables; viz. *Wi-ni-taw'-ti-gé-gi-na-li-skaw'-lung-ta-naw-ne-li'-ti-se-sti*; which may be thus rendered—"They-will-by-that-time-have-nearly-done-granting-[favors] from-a-distance-to-thee-and-to-me." It is said that the expression "*I ought* to tie thee or him" cannot be translated into Cherokee; and that the nearest approach they can make to it is, by a circumlocution, which means, "it would be right for me to tie, or it would be wrong for me not to tie," &c. It is also a feature of this language, that all its words end with a *vowel* sound; and this has enabled the 'philosopher' Guest to reduce its elementary syllables to so small a number as eighty-five, and to adopt a *syllabic* alphabet. Their neighbors, the Choctaws (more properly *Chah'tahs*), having a language which is wholly different in this particular, have not been able to adopt a similar alphabet.—But we are admonished that our limits forbid any further details; and we only add, that this very general survey of these curiously constructed languages "will convince every reader," as is justly remarked by our American philologist, Mr. Du Ponceau, "that a considerable degree of art and method has presided over their formation. Whether this astonishing fact (he adds) is to be considered as a proof—as many are inclined to believe—that this continent was formerly inhabited by a civilized race of

men, or whether it is not more natural to suppose, that the Almighty Creator has endowed mankind with a natural logic, which leads them, as it were, by instinct, to such methods in the formation of their idioms as are best calculated to facilitate their use, I shall not at present inquire. I do not, however, hesitate to say, that the bias of my mind is in favor of the latter supposition, because no language has yet been discovered, either among savage or polished nations, which was not governed by rules and principles which nature alone could dictate, and human science never could have imagined."—For further information on this novel and curious subject, we refer our readers to the following as the most important works: *Historical and Literary Transactions of the American Philosophical Society* (vol. i, 8vo., Philadelphia, 1819;) in which the reader will find the correspondence of Mr. Du Ponceau and Mr. Heckewelder, and also a copious list of manuscript grammars, dictionaries and other works on the Indian languages); Eliot's *Grammar of the Massachusetts Indian Language*, first printed in 1666, Cambridge, New England, and reprinted in 1822, by the Massachusetts Historical Society, in their Collections; Edwards's *Observations on the Language of the Muhhekanneew* [Mohegan] *Indians*, first published in 1788, and reprinted by the same society in their Collections for 1823; Zeisberger's *Grammar of the Delaware or Lenape Language*, translated by Mr. Du Ponceau, and published by the American Philosophical Society, in their Transactions, vol. iii—the most important of all the recent publications, to the student; and the *Cherokee Phœnix*, a newspaper now edited and printed by natives of that nation, in their own and the English languages. We subjoin, from that paper, the curious syllabic alphabet, invented by Guest, the native Cherokee to whom we have before alluded. For the use of the types, which have been obligingly furnished by the founders, Messrs. Greele & Willis, of Boston, we acknowledge our obligations to the American Missionary Society, under whose directions they were made. The letters of the English syllables, affixed to each Cherokee character, are to be pronounced according to the following rules:—The vowels have the following sounds: *a*, as *a* in *father*, or short, as *a* in *rival*; *e* as *a* in *hate*, or short, as *e* in *net*; *i*, as *i* in *pique*, or short, as *i* in *pit*; *o*, as *aw* in *law*, or short, as *o* in *not*; *u*, as *oo* in *fool*, or short, as *u* in *full*. To these add *ụ*, as *u* in *but* made nasal, nearly as if followed by the French nasal *n*. The consonants are used as follows: *d* represents nearly the same sound as in English, but approximating to that of *t*; *g* nearly the same as its hard sound in English, but approximating to *k*; *h*, *k*, *l*, *m*, *n*, *g*, *s*, *t*, *w*, as in English. The letter *q*, as in English, is invariably followed by *u*, with the same power, equivalent to *kw*. The sounds of the other English consonants never occur.

D *a*	R *e*	T *i*	*o*	*u*	*ụ*
ga, *ka*	*ge*	*gi*	*go*	*gu*	*gụ*
ha	*he*	*hi*	*ho*	*hu*	*hụ*
la	*le*	*li*	*lo*	*lu*	*lụ*
ma	*me*	*mi*	*mo*	*mu*	
na, *hna*, *nah*	*ne*	*ni*	*no*	*nu*	*nụ*
qua	*que*	*qui*	*quo*	*quu*	*qụ*
sa	*se*	*si*	*so*	*su*	*sụ*
da, *ta*	*de*, *te*	*di*, *tih*	*do*	*du*	*tụ*
dla, *tla*	*tle*	*tli*	*tlo*	*tlu*	*tlụ*
tsa	*tse*	*tsi*	*tso*	*tsu*	*tsụ*
wa	*we*	*wi*	*wo*	*wu*	*wụ*
ya	*ye*	*yi*	*yo*	*yu*	*yụ*

The circumstance of the alphabet being syllabic, and the number of syllables so small, is the greatest reason why the task of learning to read the Cherokee language is so vastly easier than that of learning to read English. An active Cherokee boy may learn to read his own language in a day; and not more than two or three days are ordinarily requisite. To read is only to repeat successively the names of the several letters; when a boy has learned his alphabet, he can read his language.

CONTENTS.

Page.

Greece (Ancient) 3
History of Greece. 5
Greek Language and Literature 8
Revolution of Modern Gr. . . 15
First Attempt towards a Political Organization of the Greeks, Jan. 13, 1822, in Epidaurus, until the Second National Assembly, in Astro, March 14, 1823 21
Adoption of a Constitution in Greece, and third unsuccessful Campaign of the Turks, in 1823 25
Modern Greek Language and Literature 42
Greek Church 44
Greek Fire (see Fire, Greek) . 48
Green River (Kentucky) . . . "
Green Bank of Newfoundland . . . . . "
Green Bay, or Puan Bay (in Lake Michigan) . . . . . "
Green Bay (town, Michigan) . "
Green Cloth . . . . . "
Greene (Nathaniel) 49
Green Gage (a kind of plum) . 51
Greenland . . . . . "
Green Mountains 53
Greenock . . . . . "
Greenstone (see Hornblende) "
Greenville College (Tennessee) . . . . . "
Greenwich . . . . . "
Greffier. 54
Gregoire (Henry) . . . . . "
Gregorian Calendar (see Calendar) . . . . . "
Gregory (bishop of Neocæsarea) . . . . . "
——— of Nazienzen . . . . . "
——— of Tours . . . . . "
——— I (pope) . . . . . "
——— of Nyssa. 55
——— VII (Hildebrand, pope) . . . . . "
——— (James) 56
——— (David) . . . . . "
Gregory (patriarch of Constantinople) 57
Greifswalde (town in Pomerania). 58
Grenada (see Granada) . . . . "
——— (New) . . . . . "
Grenade . . . . . "
Grenadier . . . . . "
Grenoble (city, France) 59
Grenville (lord) . . . . . "
Gresham (sir Thomas) . . . . . "
Gresset (Jean Baptiste Louis) 60
Gresson (mountain, France) . "
Gretna Green, or Graitney . . "
Grétry (André Ernest Modeste) . . . . . "
Greville (Fulk, lord Brooke) . "
Grey, (lady Jane) 61
——— (Charles, earl) 62
Greyhound . . . . . "
Greywacke, or Grau Wacke . 63
Gridley (Jeremiah) . . . . . "
Gries (John Dietrich) 64
Griesbach (John James) . . . . "
Griffin, or Gryphon . . . . . "
Grillparzer (Francis) 65
Grimaldi (family) . . . . . "
Grimm (Frederic Melchior, baron) 67
——— (James Lewis Charles) "
Grimod de la Reynière. . . . . "
Griselda 68
Grisette . . . . . "
Grisons (the) . . . . . "
Grist Mill (see Mill) 69
Griswold (Roger) . . . . . "
Gritti (family) . . . . . "
Grog. . . . . "
Gröger (Frederic Charles) and Aldenrath (Henry) . . . "
Groin (in architecture) . . . . "
Grolman (Charles Louis Wm. von) 70
Groningen (province of Netherlands) . . . . . "
——— (city) . . . . . "
Gronovius (family) . . . . . "
Gros 71
——— (Anthony John) . . . . . "
Grosbeak . . . . . "
Groschen 72
Gross . . . . . "
Gross-Beeren (Battle of) . . . 72
Grotefend (George Frederic) "
Grotesques . . . . . "
Grotius, or De Groot (Hugo) 73
Grotta del Cane 74
Grotto . . . . . "
Grouchy (Emanuel) . . . . . "
——— (Sophie) 75
Groundsel . . . . . "
Ground Tackle . . . . . "
Group . . . . . "
Grouse 76
Grünburg (city, Silesia) . . . "
Gruner (Christian Godfrey) . . "
——— (Charles Justus von) . 77
Gry . . . . . "
Gryphius (Andrew) . . . . . "
Guadalaxara (state, Mexico) "
——— (city) . . . . . "
Guadaloupe (island, West Indies) . . . . . "
Guadet (Marguerite Elie) . . . 78
Guaiacum . . . . . "
Gual (Pedro) . . . . . "
Guamanga (town, Peru) . . . . "
Guanahani (see Cat Island) . "
Guanaxuato (state, Mexico) . "
——— (city) . . . . . "
Guanca Velica (jurisdiction, Peru) 79
——— (town) . . . . . "
Guards. . . . . "
——— (National) 80
Guarini (Giovanni Battista) . . 82
Guastalla (duchy, Upper Italy) . . . . . "
Guatimala (state, Central America) . . . . . "
——— (city) . . . . . "
Guava 83
Guaxaca (state, Mexico) . . . "
——— (town) . . . . . "
Guayaquil (province, Colombia) . . . . . "
——— (city) . . . . . "
——— (bay) . . . . . "
Gubitz (Frederic William) . . "
Gudgeon . . . . . "
Guebers . . . . . "
Guelfs 84
Guercino (the painter) 85
Guericke (Otto von) . . . . . "

Guerillas 85
Guérin (the painter) 86
Guernsey (island) . . . . . "
Guerrero (Vicente) 87
Guesclin (Bertrand du) 88
Gueux 89
Guevara (Louis Valez de las Duenas y) . . . . . "
Guglielmi (Peter) 90
Guiana . . . . . "
Guibert (Jacques-Antoine-Hippolite) 91
Guicciardini (Francis) . . . . "
Guides 92
Guido Aretino (see Aretino) . "
—— Reni . . . . . "
Guienne (see Aquitania, and Department) 94
Guignes (Joseph de) . . . . . "
Guild . . . . . "
Guilder (see Coins) 96
Guildhall (London) . . . . . "
Guilford (town, Connecticut) "
Guilleminot (Armand Charles) 97
Guillotin (Joseph Ignatius) . . "
Guillotine 98
Guinea . . . . . "
——— (a coin) 99
——— Cloth . . . . . "
——— Pepper (see Cayenne Pepper) . . . . . "
——— Pig . . . . . "
Guiscard (Robert) . . . . . "
Guischard (Charles Gottlieb) 101
Guise (family) . . . . . "
—— (Henry) 102
Guitar . . . . . "
Guizot (Francis) . . . . . "
Guldberg (Frederic) 103
Gulf Stream (see Current) . . "
Gull . . . . . "
Gum 104
—— Arabic . . . . . "
—— Resins 105
Gun . . . . . "
Gunnery . . . . . "
Gunpowder . . . . . "
——— Plot 107
Gunter (Edmund) 108
Gunter's Chain . . . . . "
——— Line . . . . . "
——— Quadrant 109
——— Scale . . . . . "
Gunwale, or Gunnel, of a Ship . . . . . "
Gurnard . . . . . "
Gustavus I (Gustavus Vasa) "
——— II (Adolphus) . . . "
——— III 111
——— IV 113
Gusto 115
Gut (in geography) . . . . . "
Guts-Muths (John Christian Frederic) . . . . . "
Gutta Serena (see Cataract) "
Guttenberg (John) . . . . . "
Guttural 116
Guy (in marine affairs) . . . . "
—— (Thomas) . . . . . "
—— de Chauliac . . . . . "
—— Fawkes (see Gunpowder Plot) . . . . . "
Guy's Hospital (London) . . "
Guyon (Madame) . . . . . "
Guys (Pierre Augustin) . . . "
Gwinnett (Button) 117
Gwynn (Eleanor) . . . . . "
Gyges . . . . . "
Gymnasium . . . . . "
Gymnasia, (German) 118
Gymnastics 119
Gymnosophists, or Brachmans 123
Gynæceum . . . . . "
Gynæcocracy . . . . . "
Gypsies . . . . . "
Gypsum 125
Gyrfalcon, or Jerfalcon (see Falcon) 126
Gyromancy . . . . . "

H.

H 126
Haarlem, or Haerlem 127
Habakkuk . . . . . "
Habeas Corpus . . . . . "
Habitation (see vol. iv. p. 613) . . . . . "
Hache d'Armes 129
Hacienda . . . . . "
Hackberry, or Hoop Ash . . "
Hackert (Philip) 130
Hackmatack (see Larch) . . "
Hackney (town, England) . "
——— and Hackney Coach . . . . . "
Haddock . . . . . "
Hades (see Pluto) . . . . . "
Hadjy . . . . . "
Hadley (John) . . . . . "
Hadriatic (see Adriatic) . . . "
Hæma . . . . . "
Hæmatics 131
Hæmatite (see Iron, Ores of) "
Hæmus Mountains . . . . . "
Hænke (Thaddeus) . . . . . "
Haff . . . . . "
Hafiz, (Mohammed Schemseddin) . . . . . "
Hagar . . . . . "
Hagedorn (Frederic von) . . "
Hagen (Frederic Henry von der) 132
Hager (Joseph) . . . . . "
Hagerstown (Maryland) . . . "
Haggai 133
Hagiographa . . . . . "
Hague (the) . . . . . "
Hahn (Philip Matthew) . . . . "
Hahnemann (Samuel Christian Frederic) . . . . . "
Hai 134
Hail . . . . . "
Hailing (in sea language) . . 135
Hainaut, or Hainault . . . . . "
Hair . . . . . "
Hair's Breadth 137
Hake . . . . . "
Hakim 138
Hakluyt (Richard) . . . . . "
Halbard, or Halbert . . . . . "
Halberstadt (city, Prussia) "
Halde (John Baptiste du) . . "
Haldenwang (Christian) . . . "
Hale (in sea language) 139
—— (Sir Matthew) . . . . . "
—— (Nathan) . . . . . "
Halen (don Juan van) 140
Hales (Alexander de) . . . . . "
Half Mark 140
—— Moon . . . . . "
Half Pike . . . . . "
Halibut (see Holibut) . . . . . "
Halicarnassus, (city, Asia Minor) 140
Halifax (city, Nova Scotia) 141
——— lord (see Montague) "
Hall (Lyman) . . . . . "
—— (Robert) . . . . . "
Halle (city, Prussia) 142
—— or Hall (Edward) . . . 143
Hallein (town, Austria) . . . . "
Halleluja, or Hallelujah, or Alleluja . . . . . "
Haller (Albert von) . . . . . "
—— (Charles Louis von) . . 145
Halley (Edmund) 146
Hallowell (town, Maine) . . . "
Halo 147
Hamadryads . . . . . "
Hamah (city, Syria) . . . . . "
Haman . . . . . "
Hamann (John George) . . . "
Hamburg (city, Germany) . "
——— Marc, &c. (see Coin) 149
——— Bank (see Bank) . "
Hamilcar (see Hannibal) . . "
Hamilton (Anthony) . . . . . "
——— (Elizabeth) 150
——— (sir William) . . . . "
——— (lady) . . . . . "
——— (William Gerard) . 151
——— (Alexander) 152
——— College (see Clinton) . . . . . "
Hammer (a tool) 153
——— (in German names) "
——— (Joseph von) . . . . "
Hammock (in naval affairs) 154
Hammond (James) 155
Hampden (John) . . . . . "
——— Sidney College . . "
Hampshire (county, England) 156
——— New (see New Hampshire) . . . . . "
Hampstead (village, England) . . . . . "
Hampton Court . . . . . "
Hanaper . . . . . "
Hanau (province, Hesse-Cassel) . . . . . "
Hancock (John) . . . . . "
Hand 157
Handbreadth . . . . . "
Handcuffs . . . . . "
Handel (George Frederic) . . "
Handspike 159
Hanging (see Death, Punishment of) . . . . . "
Hang-Tcheou (city, China) . "
Hanmer (sir Thomas) . . . . "
Hannibal . . . . . "
Hanno 161
Hanover (kingdom) 162
——— (city) 163
——— (town, N. H.) . . . . "
Hansa, or Hanseatic League "
Hans Folz (see Folz) 165
—— Sachs (see Sachs) . . . "
Hanway (Jonas) . . . . . "
Hapsburg (in Switzerland) . "
Hardenburg (Frederic von) . 166

Hardenburg (Charles Augustus) 166
Hardicanute . . . . . "
Hardness (in physiology) . . "
Hardouin (John) . . . . . "
Hare. . . . . "
Harelip. . . . . "
Harem . . . . . "
Hariot, or Heriot (in law) . . 169
Harleian Library (see Harley). . . . . "
Harlem (see Haarlem) . . . . "
Harlequin . . . . . "
Harley (Robert) 170
Harmattan . . . . . "
Harmodius (see Hippias, and Aristogiton) . . . . . "
Harmonia, or Hermione . . . "
Harmonica, or Armonica . . 171
Harmony (towns in Pennsylvania and Indiana) "
——— (in music) 172
——— or Evangelical Harmony . . . . . "
——— (figured; in music) "
——— of the Spheres . . . "
——— (preëstablished) (see Leibnitz). . "
Harmotome, or Cross-stone "
Harms (Klaus). 173
Harness (see Mail). . . . . "
Harold I of Norway. . . . . "
——— I of England. . . . . "
——— II of England . . . . . "
Haroun or Aaron al Rashid 174
Harp . . . . . "
—— Æolian (see Æolian Harp) 175
Harpagus . . . . . "
Harpe (Jean François de la) (see Laharpe, J. Fr. de). . . . . "
——- (Frederic Cæsar la). (see Laharpe, Fr. Cæsar la) . . . . . "
Harper (Robert Goodloe) . . "
Harper's Ferry (Virginia) . . 177
Harpies . . . . . "
Harpocrates . . . . . "
Harpoon . . . . . "
Harpoon-Gun 178
Harpsichord . . . . . "
Harquebuss 179
Harrington (James) . . . . . "
Harris (James) . . . . . "
Harrisburg (town, Pennsylvania) 180
Harrison (Benjamin). . . . . "
——— (John) . . . . . "
Harrowby (Dudley Ryder) . 181
Harrow-on-the-Hill (village, England) . . . . . "
Harsdorfer (George Philip) "
Hart (John). . . . . "
Hartford (city, Connecticut) 182
——— Convention (see U. States) 183
Hartley (David, M. D.) . . . "
——— (M. P.) . . . 184
Hartshorn . . . . . "
Hartz Mountains . . . . . "
Haruspex (see Aruspices) . . 185
Harvard College (see Cambridge). . . . . "
Harvey (William) . . . . . "
Harwich (seaport, England) 186
Hasdrubal . . . . . "
Hase (Charles Benedict). . . "
Hasenclever (Peter). . . . . "
Haser (Charlotte Henrietta) 187
Hasse (John Adolphus) . . . "
Hassel (John George Henry) . . . . . "
Hasselquist (Frederic) 188
Hastings (town, England) . . "
——— (Warren) . . . . . "
——— (Francis) 189
Hatching (see Incubation). . "
Hatteras, Cape (see Cape) . "
Hatti-sheriff . . . . . "
Hatton (sir Christopher) . . . "
Hatzfeld (Francis Louis) . . 190
Haubold (Christian Gottlieb) "
Haugwitz (Christian Henry Charles) . . . . . "
Haussez (baron le Mercier d') 191
Hautboy . . . . . "
Hautelisse and Basselisse . . "
Haüy (René Just) . . . . . "
—— (Valentin) 192
Haüyne 193
Havana . . . . . "
Havercamp 194
Haverhill (town, New Hampshire) . . . . . "
——— (town, Massachusetts). . . . . "
Havre de Grâce (seaport, France) 195
——————(town, Maryland) "
Hawaii (see Owhyhee). . . . "
Hawk . . . . . "
Hawke, (Edward, lord) . . . 196
Hawkesworth, (John, LL. D.) . . . . . "
Hawkins (admiral sir John) "
——— (sir John) 197
Hawkwood (sir John). . . . . "
Hawley (Joseph) . . . . . "
Hawthorn. 198
Haydn (Joseph) . . . . . "
Haydon (B.). 199
Hayley (William) . . . . . "
Haymarket Theatre . . . . . "
Hayne (Isaac) . . . . . "
Haystack Mountain (New Hampshire) 200
Hayti 201
Hazel 204
Hazlitt (William) . . . . . "
Head. 205
Hearing (see Ear) . . . . . "
Hearne (Samuel) 206
Heart . . . . . "
Heart's-Ease (see Violet) . . 207
Heat (see Caloric, and Animal Heat) . . . . . "
Heath. . . . . "
Heathfield (lord) (see Eliott) "
Heaven. . . . . "
Heavy Spar (see Barytes, Sulphate of) 208
Hebe . . . . . "
Heber (Reginald, D. D.) . . "
Hebert (James René) . . . . "
Hebrews 209
Hebrew Language and Literature 212
Hebrides 214
Hebrides (New) 214
Hecate . . . . . "
Hecatomb 215
Heckewelder (John) . . . . . "
Hecla (mountain, Iceland) . "
Hector 216
Hecuba . . . . . "
Hedgehog . . . . . "
Hedlinger (John Charles) . . 217
Heemskerk (Martin van) . . "
Heeren (Arnold Hermann Lewis) 218
Hegel (George William Frederic) . . . . . "
Hegira. 219
Heiberg (Peter Andrew). . . "
Heidegger (John James) . . "
Heidelberg (city, Baden) . . "
——— Catechism 220
Heights, Measurement of . . "
Heiligen 222
Heim . . . . . "
Hein (Peter Petersen) . . . . "
Heineccius (John Gottlieb) "
Heinecken (Christian Henry) "
Heinitz (Anthony Frederic) "
Heinsius (Daniel) . . . . . "
——— (Nicholas). 223
——— (grand pensionary of Holland) . . . . "
Heir (see Descent) . . . . . "
—— apparent . . . . . "
—— presumptive . . . . . "
Heldenbuch. . . . . "
Helena . . . . . "
——— (St., island of) 224
Helenus 225
Heliacal . . . . . "
Heliades. . . . . "
Helianthus (see Sunflower). "
Helicon . . . . . "
Heligoland . . . . . "
Heliocentric Place of a Planet . . . . . "
Heliodorus . . . . . "
Heliogabalus 226
Heliometer. . . . . "
Heliopolis, in Cœlosyria (see Balbec) . . . . . "
———, in Egypt . . . . . "
Helios 227
Helioscope . . . . . "
Heliotrope (see Quartz) . . . "
Hell (Maximilian) . . . . . "
Hellas, Hellenes, Hellenism "
Helle 228
Hellebore . . . . . "
Hellenes (see Hellas) 229
Hellenists . . . . . "
——— (Egyptian) . . . . . "
Hellespont . . . . . "
Hell-Gate (see East River) "
Helm (in naval affairs) . . . . "
Helmers (John Frederic). . . 230
Helmet . . . . . "
Helminthagoga . . . . . "
Helminthiasis. . . . . "
Helmont (John Baptist van) "
Helmstadt (town, Brunswick) 231
Héloïse, Eloïse, or Louisa. . "
Helots . . . . . "
Helsingfors (seaport, Finland) . . . . . "
Helst (Bartholomew van der) 232
Helvetia . . . . . "

Helvetius (Claude Adrien) . 332
Helvig (Amalia von) 233
Helvin . . . . . "
Helvoetsluys (seaport, Holland) . . . . . "
Hemerodromi . . . . . "
Hemlock . . . . . "
——— Spruce (see Spruce) . . . . . "
Hemmling, or Hemmlink (Hans) . . . . . "
Hemorrhage 234
Hemorrhoids . . . . . "
Hemp 235
Hemsterhuis (Tiberius) 236
——— (Francis) . . . . . "
Hemus (see Balkan) 237
Henault (Charles John Francis) . . . . . "
Henbane . . . . . "
Hendecasyllables . . . . . "
Hengist . . . . . "
Henke (Henry Philip Conrad) 238
Henley (John) . . . . . "
Henlopen, (cape) . . . . . "
Henna Plant . . . . . "
Hennepin (Louis) . . . . . "
Henrietta (Anna, of England) 239
Henry I of Germany . . . . "
—— III " " 240
—— IV " " . . . . . "
—— V " " 241
—— VII " " 242
—— the Lion 243
—— the Navigator . . . . . "
—— the Younger, duke of Brunswick 244
—— III of France . . . . . "
—— IV " " 245
—— I " England 247
—— II " " 248
—— III " " 249
—— IV " " 250
—— V " " 251
—— VI " " 252
—— VII " " 253
—— VIII " " 254
—— (prince of Prussia) . . 256
—— (Patrick) 257
—— Christophe (see Christophe and Hayti) 260
Hepatitis (see Liver Complaint) . . . . . "
Hephæstion . . . . . "
Heptachord . . . . . "
Heptarchy . . . . . "
Heptateuch . . . . . "
Heraclidæ . . . . . "
Heraclitus . . . . . "
Herald 261
Heraldry 262
Hérault de Sechelles (Marie Jean) 264
Herbarium . . . . . "
Herbelot (Bartholomew d') . 265
Herberstein (Sigismund) . . . 266
Herbert (Edward) . . . . . "
——— (George) 267
Herculaneum . . . . . "
Hercules 269
——— (Pillars of) 273
Hercynia . . . . . "
Herder (John Godfrey von) "
Here (see Juno) 275
Hereditaments . . . . . "
Hereditary Diseases (see Diseases, Hereditary) . . . . "
——— Offices . . . . . "
Heretic 276
Heriot (see Hariot) 278
Hermandad . . . . . "
Hermann (John Godfrey James) . . . . . "
——— or Arminius (see Arminius) 279
Hermanstadt (city, Transylvania) . . . . . "
Hermaphrodite . . . . . "
Hermaphroditus 280
Hermbstædt (Sigismund Frederic) . . . . . "
Hermelin (Samuel Gustavus) "
Hermeneutics 281
Hermes (see Mercury) . . . . "
——— (in statuary) . . . . . "
——— Trismegistus . . . . . "
Hermetic Art (see Alchemy) "
Hermetical Philosophy . . . . "
Hermetical Sealing . . . . . "
Hermione . . . . . "
Hermit (see Anachorets) . . . 282
Hermitage Wine . . . . . "
Hermit Crab . . . . . "
Hernia . . . . . "
Hero 283
Herod the Great . . . . . "
—— Antipas 284
—— Agrippa . . . . . "
—— —— II . . . . . "
Herodes Atticus . . . . . "
Herodian 285
Herodotus . . . . . "
Heroes 287
Heroical Epistle . . . . . "
Heron 288
Herostratus, or Eratostratus "
Herrera Tordesillas (Antonio de) . . . . . "
——— (Hernando de) . . . 289
Herring . . . . . "
Herrick (Robert) . . . . . "
Herrnhutt (town, Saxony) . . 290
Herschel (sir William) . . . . "
Hertford College (England) 291
Hertha, Jord, Joard . . . . . "
Hertzberg (Ewald Frederic) "
Hervey (James) . . . . . "
Hesiod 292
Hesperides 293
Hesperus . . . . . "
Hess (several artists of this name) . . . . . "
Hesse-Cassel . . . . . "
——Darmstadt 294
——Homburg . . . . . "
——Philippsthal 295
—— —— Barchfeld "
——Rothenburg . . . . . "
Hessia . . . . . "
Hesychastes . . . . . "
Hesychius . . . . . "
Hetæra . . . . . "
Hetaireia, or Hetæria 296
Heterodox . . . . . "
Hetman, or Ataman . . . . . "
Heulandite 297
Hewes (Joseph) . . . . . "
Hexachord 297
Hexameter . . . . . "
Hexapla 298
Heyne (Christian Gottlob) . "
Hiacoomes 300
Hiatus . . . . . "
Hibernia . . . . . "
Hibrida, Hybrida, or Ibrida 301
Hickory . . . . . "
Hidalgo (among the Spanish nobility) . . . . . "
——- (Miguel) . . . . . "
Hien . . . . . "
Hierarchy . . . . . "
Hiéres (islands of) 303
——— (town, France) . . . . "
Hiero I . . . . . "
—— II 304
Hieroduloi 305
Hieroglyphics 306
Chronological Periods of Egyptian History . . . 316
Egyptian Mythology . . "
Hieromancy 321
Hieronymites, or Jeronymites . . . . . "
Hieronymus, St. (see Jerome, St.) . . . . . "
Hierophant 322
Higginson, (Francis) . . . . . "
Highlands (Scotch) . . . . . "
——— of the Hudson . . 327
High Mass . . . . . "
Highmore (Joseph) . . . . . "
Highness (a title of honor) . . 328
High Pressure (see Steam Engines) . . . . . "
—— Priest . . . . . "
—— Treason (see Treason) "
—— Water . . . . . "
Highway Robbery (see Robbery) 329
Highways (see Roads) . . . . "
Hilarion . . . . . "
Hilary (St.) . . . . . "
Hildburghausen, Saxe (duchy) . . "
——— (town) . . . . "
Hildebrand (see Gregory VII) . . . . . "
Hildesheim (principality, Hanover) . . . . "
——— (city) . . . . . "
Hill (Aaron) . . . . . "
— (sir John) 330
— (Robert) . . . . . "
— (Rowland) . . . . . "
— (lord) 331
Hima . . . . . "
Himalaya, Himaleh, or Himala Mountains . . . . . "
Himmel (Frederic Henry) . 332
Hinckelmann (Abraham) . . "
Hindenburg (Charles Frederic) 333
Hindoos, or Gentoos . . . . . "
Hindoostan 334
Hindostan (see Hindoostan) 336
Hing-Ching . . . . . "
Hingham 337
Hipparchus (see Hippias) . . "
Hippias . . . . . "
Hippocentaurs . . . . . "
Hippocrates . . . . . "
Hippocrene 338

Hippodamia 338
Hippodrome . . . . . "
Hippogriff 339
Hippolytus (see Phædra) . . "
Hipponax . . . . . "
Hipponous . . . . . "
Hippopotamus . . . . . "
Hirschberg (town, Silesia) . . 341
Hirt (Aloys) . . . . . "
Hispania . . . . . "
Historical Painting (see Painting) 342
Historical Sciences and Historical Literature . . . . . "
History . . . . . "
General Chronological Table 347
Histriones 375
Hita, (Gines Perez de) . . . . "
Hive (see Bee) . . . . . "
Ho . . . . . "
Hobart Town . . . . . "
Hobbes (Thomas) 376
Hobhouse (John Cam) 377
Hobson's Choice . . . . . "
Hoche (Lazarus) . . . . . "
Hochheim 378
Hochkirch, or Hohkirch . . . "
Hochstadt (see Blenheim) . . "
Hock (see Hochheim) . . . . "
Hockhocking (river, Ohio) . . "
Hocus Pocus 379
Hoditz (Albert Joseph) . . . "
Hoest (Jens Kragh) (see Höst) . . . . . "
Hof . . . . . "
Hofer (Andrew) . . . . . "
Hoffmann (Christopher Lewis) 380
——— (Frederic) . . . . . "
——— (Ernest Theodore Amadeus) . . . . . "
Hoffmannsegg (John Centurius) . . . . . "
Hofwyl (see Fellenberg) . . . "
Hog . . . . . "
Hogarth (William) 383
Hogendorp (Gysbert Charles) 384
Hogg (James) . . . . . "
Hohenlinden 386
Hohenlohe (Alexander Leopold, prince of) "
——— (a German principality) 387
——— Ingelfingen (Frederic Louis) . . "
Hohenstaufen (house of) . . . "
———(mountain, Würtemberg) . . . 389
Hohenzollern-Hechingen, and Hohenzollern-Sigmaringen (German principalities) . . "
Holbach (Paul Thyry) . . . . "
Holbein (Hans) 390
Holberg (Louis) . . . . . "
Holcroft (Thomas) 391
Hold (of a ship) . . . . . "
Hole (Black) 392
Holibut . . . . . "
Holinshed, or Holingshed (Raphael) . . . . . "
Holkar . . . . . "
Holland . . . . . "
——— (New) 393
——— (a kind of linen) . . . 394
Holland (Henry Richard Fox, lord) 394
Holles (Denzil, lord) . . . . . "
Holley (Horace) 395
Hollis (Thomas) . . . . . "
Hollow Square (in the military art) 396
Holly . . . . . "
Hollyhock . . . . . "
Holmes' Hole . . . . . "
Holstein (a German duchy) 397
Holt (sir John) 398
Hölty (Lewis Henry Christopher) . . . . . "
Holy Alliance . . . . . "
—— Ghost (see Ghost, Holy) 401
—— —— (Order of the) (see Ghost, Order of the Holy) . . . . . "
—— Office (see Inquisition) "
Holyhead . . . . . "
Holyoke (Edward Augustus) "
Holyrood (Palace and Abbey of) 402
Holy Water . . . . . "
Holywell . . . . . "
Homburg (see Hesse-Homburg) . . . . . "
Home . . . . . "
—— (Henry, lord Kaimes) 403
—— (John) . . . . . "
Homer and the Homerides . "
Homeromastix 407
Home-Sickness . . . . . "
Homicide . . . . . "
Homilius (Godfrey Augustus) 410
Hommel (Ferdinand Augustus and Charles Ferdinand) "
Homo Novus . . . . . "
Homœopathy . . . . . "
Hompesch (Ferdinand, baron of) 411
Hondekoeter, or Hondekotter (Giles, Gysbrecht, and Melchior) . . . . . "
Honduras (state of) 412
——— (bay of) . . . . . "
Honey . . . . . "
——— Locust, Sweet Locust, or Black Locust . . . 414
Honeysuckle, or Woodbine "
Honfleur . . . . . "
Hong Merchants . . . . . "
Honor . . . . . "
—— (Courts of) . . . . . "
—— (Maids of) . . . . . "
—— (Legion of) (see Legion of Honor) . . . . "
—— (Point of) (see Duel) 415
Honors of War . . . . . "
Honorarium . . . . . "
Honorius (Roman emperor) "
——— (popes of the name) "
Hontan (baron de la) . . . . . "
Hontheim (Johann Nicolaus von) . . . . . "
Honthorst (Gerard) 416
Hood (Robin) . . . . . "
—— (Samuel, lord viscount) "
Hooft (Peter Cornelius van) 417
Hooghly River . . . . . "
Hooke (Nathaniel) . . . . . "
—— (Robert) . . . . . "
Hooker (Richard) . . . . . "
Hooker (Thomas) 418
Hoole (John) . . . . . "
Hoop Ash (see Hackberry) "
Hooper (William) . . . . . "
Hooping-Cough . . . . . "
Hop 419
Hope (Thomas) . . . . . "
Hop-Hornbeam (see Iron-Wood) . . . . . "
Hopital (Michael de l') . . . "
——— (Wm. Francis Anthony de l') 420
Hopkins (Lemuel) 421
——— (Samuel) . . . . . "
——— (Stephen) . . . . . "
Hopkinson (Francis) 422
Horace (see Horatius Flaccus) . . . . . "
Horæ (see Hours) . . . . . "
Horapollo . . . . . "
Horary, or Hour Circle of a Globe . . . . . "
——— Circles or Lines . . . "
——— Motion of the Earth "
Horatii 423
Horatius Cocles . . . . . "
Horatius Flaccus (Quintus) "
Horeb 425
Horehound . . . . . "
Horizon . . . . . "
——— of a Globe 426
Horizontal Dial . . . . . "
——— Range (in gunnery) . . . . . "
Hormayr (Joseph) . . . . . "
Horn (in physiology) . . . . . "
—— of Plenty 427
——, or Bugle Horn 428
—— (French) . . . . . "
—— (Cape) . . . . . "
——, or Hornes (Philip, count of) . . . . . "
Hornbeam . . . . . "
Hornblende, or Amphibole . "
Horn-Book 429
Horneck (Ottocar of) 430
Hornemann (Frederic Conrad) . . . . . "
Hornpipe . . . . . "
Hornstone (see Quartz) . . . "
Hornthal (Francis Louis) . . "
Horology (see Watch and Clock Making) 431
Horoscope . . . . . "
Horrox (Jeremiah) . . . . . "
Hors d'Œuvre . . . . . "
Horsa (see Hengist) . . . . . "
Horse . . . . . "
—— Power 434
—— Chestnut . . . . . "
—— Guards 435
Horsemanship . . . . . "
Horseradish 436
Horse-Tail (see Equisetum) "
——— (a standard among the Ottomans, &c.) . "
Horsley (Samuel) . . . . . "
Hortense (wife of Louis Bonaparte, q. v.) . . . . . "
Hortensius (Quintus) . . . . . "
Horticulture 437
Hortus Siccus (see Herbarium) 443
Horus . . . . . "

Horus Apollo (see Horapollo) ... 443
Hosanna ... "
Hosea ... 444
Hospital ... "
——— Fever ... 445
——— the chancellor (see Hopital) ... "
——— the marquis (see Hopital) ... "
Hospitality ... 446
Hospitium ... "
Hospodar ... "
Host ... "
—— (Jens-Kragh) ... 447
Hostilius (see Tullus Hostilius) ... "
Hotel ... "
Hot Springs, (in Virginia) ... "
Hottentots ... "
Hottinger (family) ... 448
Houdon (N.) ... "
Houlieres (Madame) (see Deshoulieres) ... 449
Hound ... "
Hour ... "
Hours ... 450
Houris ... 451
House (see Domicil, Appendix to vol. iv.) ... "
House-Breaking (see Burglary) ... "
House-Burning (see Arson) ... "
Household Troops (see Guards) ... "
Houseleek ... "
Houstonia ... "
Houtmann (Cornelius) ... "
Houwald (Christopher Ernst von) ... 452
Hoveden (Roger de) ... "
Howard (Thomas, duke of Norfolk) ... "
——— (Henry, earl of Surrey) ... "
——— (Charles, earl of Nottingham) ... 453
——— (Thomas, earl of Arundel) ... "
——— (Frederic, earl of Carlisle) ... "
——— (John, the philanthropist) ... 454
——— (John Eager, colonel) ... 455
Howe (Richard, earl) ... 456
—— (sir William) ... "
Howel the Good ... "
Howitzer ... 457
H. R. R. ... "
Huarte (Juan) ... "
Hub ... "
Huber (several of this name) 458
—— (Francis) ... "
Hubert (St.) ... "
—— (order of St.) ... "
Hubertsberg ... "
Hubner (John) ... 459
Hudson (Henry) ... "
——— or North River ... "
———'s Bay ... "
——— —— Company ... "
——— Strait ... "
——— City ... 460
—— and Delaware Canal (see Canals, ii, p. 464.) ... 460
Hudson and Erie Canal (see Canal, ii. p. 464) ... "
Huer, or Boiling Spring (see Iceland) ... "
Huet (Peter Daniel) ... "
Huethuetlapallan ... "
Hufeland (Christian William) 461
Hugh Capet ... "
Hugo (Gustavus) ... "
Huguenots ... 462
Huissier ... 464
Hull, or Kingston upon Hull "
Hullin (Pierre Auguste) ... 465
Humanities ... "
Humboldt (Charles William) "
——— (Frederic Henry Alexander) ... 466
Hume (David) ... 470
—— (Joseph) ... 471
Hummel (John Nepomuk) ... 472
Humming-Bird ... "
Humoral ... 473
Hundred (a division of a shire) "
——— Court (see Courts)
——— Days (see Cent Jours) ... "
Hundsrück ... "
Hungary ... "
Hungarian Literature ... 479
——— Language ... 480
——— Wines ... 482
Hunger ... "
——— Cure ... "
Huningen, or Huningue ... "
Hunniades (John Corvinus) "
Huns ... 483
Hunter (William) ... "
—— (John) ... 484
Hunting ... 485
Huntingdon (Selina, countess of) ... 486
——— (William) ... "
——— (Henry of) ... "
Huntington (Samuel) ... "
Hupazoli (Francis) ... 487
Hurd (Richard) ... "
Hurl Gate ... "
Huron (lake) ... 488
Hurons ... "
Hurricane ... "
Husband and Wife ... "
Huskisson (William) ... 491
Huss, Hussites ... "
Hussars ... 494
Hustings (court of) ... "
Hutcheson (Francis,) ... "
Hutchins (Thomas) ... 495
Hutchinson (Ann) ... "
——— (Thomas) ... "
Hutten (Ulrich von) ... 496
Hutton (Charles, LL.D.) ... 497
—— (James) ... 498
Huus ... "
Huygens (Christian) ... "
Huysum (John van) ... 499
Hyacinth ... "
——— in mineralogy (see Zircon) ... "
Hyacinthus ... "
Hyades ... "
Hyæna ... "
Hyalite (see Opal) ... 501
Hybla ... 501
Hycsos, or Hyk-shos ... "
Hydaspes ... "
Hyde, (Edward, earl of Clarendon) (see Clarendon) ... "
—— (Thomas) ... "
—— de Neuville ... "
—— Park ... 502
Hyderabad ... 503
Hyder Ally Khan ... "
Hydra (a fabulous monster) "
——— (a Greek island) ... 504
Hydrangea ... "
Hydraulicon ... 505
Hydraulics ... "
Hydriads ... 507
Hydro ... "
Hydrocephalus (see Dropsy) "
Hydrodynamics ... "
Hydrogen ... "
Hydrography ... 509
Hydrometer ... "
Hydrophane (see Opal) ... "
Hydrophobia ... "
Hydrostatics ... 512
Hyeres (see Hieres) ... 514
Hygieia ... "
Hygrometer, Hygroscope ... "
Hylas ... "
Hymen, Hymenæus ... "
Hymettus ... 515
Hymn ... "
Hypatia ... "
Hyperboreans ... 516
Hyperion (see Titans) ... "
Hypermnestra ... "
Hypersthene ... "
Hypo ... "
Hypochondriasis ... "
Hypogastric ... 517
Hypothecation (see Bottomry) ... "
Hypsipyle ... "
Hyrcania ... "
Hyson Tea (see Tea) ... 518
Hysterics ... "
Hysteron Proteron ... "

I.

I ... 518
Iambus ... 519
Iar ... "
Iarbas (see Dido) ... "
Ibarra (Joachim) ... "
Iberia ... "
Iberus (see Ebro) ... "
Ibex ... "
Ibidem ... 520
Ibis ... "
Ibrahim ... 521
Ibycus ... "
Icarus (see Dædalus) ... "
Ice ... "
Artificial Ice ... 522
Iceland ... 523
Iceland Moss (see Lichen) ... 526
Ice Plant ... "
Icetas ... 527
Ichneumon ... "
Ichthyology ... 528
Ichthyolite ... 530
Ichthys ... "
Icolmkill ... "

Icon 531
Iconoclasts ..... "
Iconolatry 532
Icononzo ..... "
Id., Ibid ..... "
Ida Mt. ..... "
Ideal ..... "
Idealism 533
Ideler (Christian Lewis) ... "
Identity, System of (see Schelling) ..... "
Ideographic ..... "
Ides, or Idus ..... "
Idiosyncrasy ..... "
Idiot ..... "
Idioticon 534
Idocrase ..... "
Idolatry ..... "
Idomeneus ..... "
Idria 535
Iduna (see Northern Mythology) ..... "
I. E. ..... "
Iferten (see Yverdun) ..... "
Iffland (Augustus William) . "
Ignatius Loyola (see Loyola, and Jesuits) 536
——— (St.) ..... "
Ignition ..... "
Ignis Fatuus (see Meteor) . "
Iguala (Plan of) ..... "
Iguana ..... "
Ildefonso (St.) 537
Ile de France (see France, Isle of) ..... "
Ili ..... "
Iliad (see Homer) ..... "
Ilissus ..... "
Ilithyia ..... "
Ilium ..... "
Ille-et-Vilaine (see Department) 538
Illimani (see Nevados de Illimani, and Andes) .... "
Illinois (state) ..... "
——— (river) 539
Illuminati ..... "
Illuminating (see Manuscripts, Illuminated) .... "
Illyria 539
Imagination 540
Iman, Imamode, Imam ... 541
Imarethi ..... "
Imaus ..... "
Imbert (Bartholomew) .... "
Imbezzling (see Embezzlement) ..... "
Immersion (see Occultation) "
Immortality ..... "
Impalement 543
Impannel (see Jury) ..... "
Impeachment ..... "
Imperative 544
Imperator ..... "
Imperial Chamber (see Chamber, Imperial) 545
Imperiali-Lercari (Francis Maria) ..... "
Impression (in the arts) .... "
Impressment of Seamen (see Seamen) ..... "
Imprimatur ..... "
Imprisonment for Debt (see Debtor and Creditor; also Capias) ..... "
Impromptu ..... "
Impropriations ..... "
Improvvisatori 546
Ina 548
Inachus ..... "
Inca, or Ynca ..... "
Incarnation ..... "
Incest ..... "
Inchbald (Elizabeth) 549
Incledon (Benjamin Charles) "
Inclination (in mathematics) "
Inclined Plane ..... "
In Cœna Domini 550
Incommensurable (in mathematics) ..... "
Incubation ..... "
Incubus 551
Incunabula 552
Independence 553
Independents ..... "
Index 554
India; The Indies 555
European Commercial Colonies in India 556
Portuguese India ... "
Dutch India 557
English India ..... "
Danish India 558
French India 559
Indian Languages ..... "
——— Literature 562
1. Sacred Literature "
2. Profane Literature 563
——— Mythology 565
——— Chronology (see Epoch) 569
——— Corn (see Maize) ... "
——— Ocean ..... "
——— Rubber (see Caoutchouc) ..... "
Indians (American) ..... "
Indian Languages of America (see Appendix to this volume) .. 574
Indiana ..... "
Indianopolis 575
Indicative ..... "
Indicator ..... "
Indiction 576
Indictment ..... "
Indies, West (see West Indies) ..... "
Indigestion (see Dyspepsia) "
Indigo ..... "
Indirect Taxes 579
Indorsement of Negotiable Paper (see Bills of Exchange) ..... "
Indostan (see Hindoostan) . "
Indre (river, France) ..... "
——— (department, France) "
———-and-Loire (department, France) ..... "

APPENDIX 581
Indian Languages of America ..... "