

Encyclopedia for youth; or, an abridgment of all the sciences, for the use of schools of both sexes / Translated from the French, arranged, and compiled by John Joseph Stockdale.

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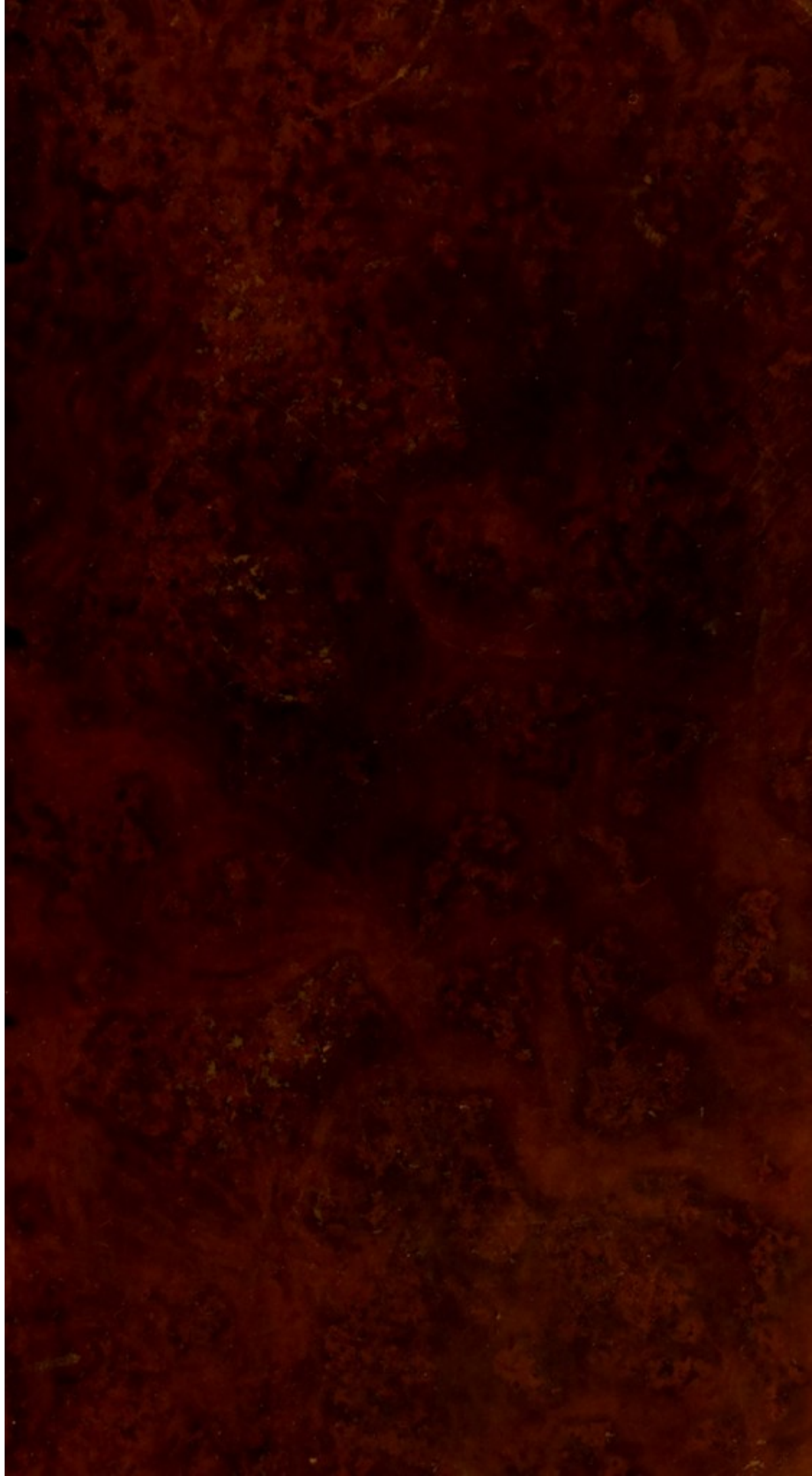
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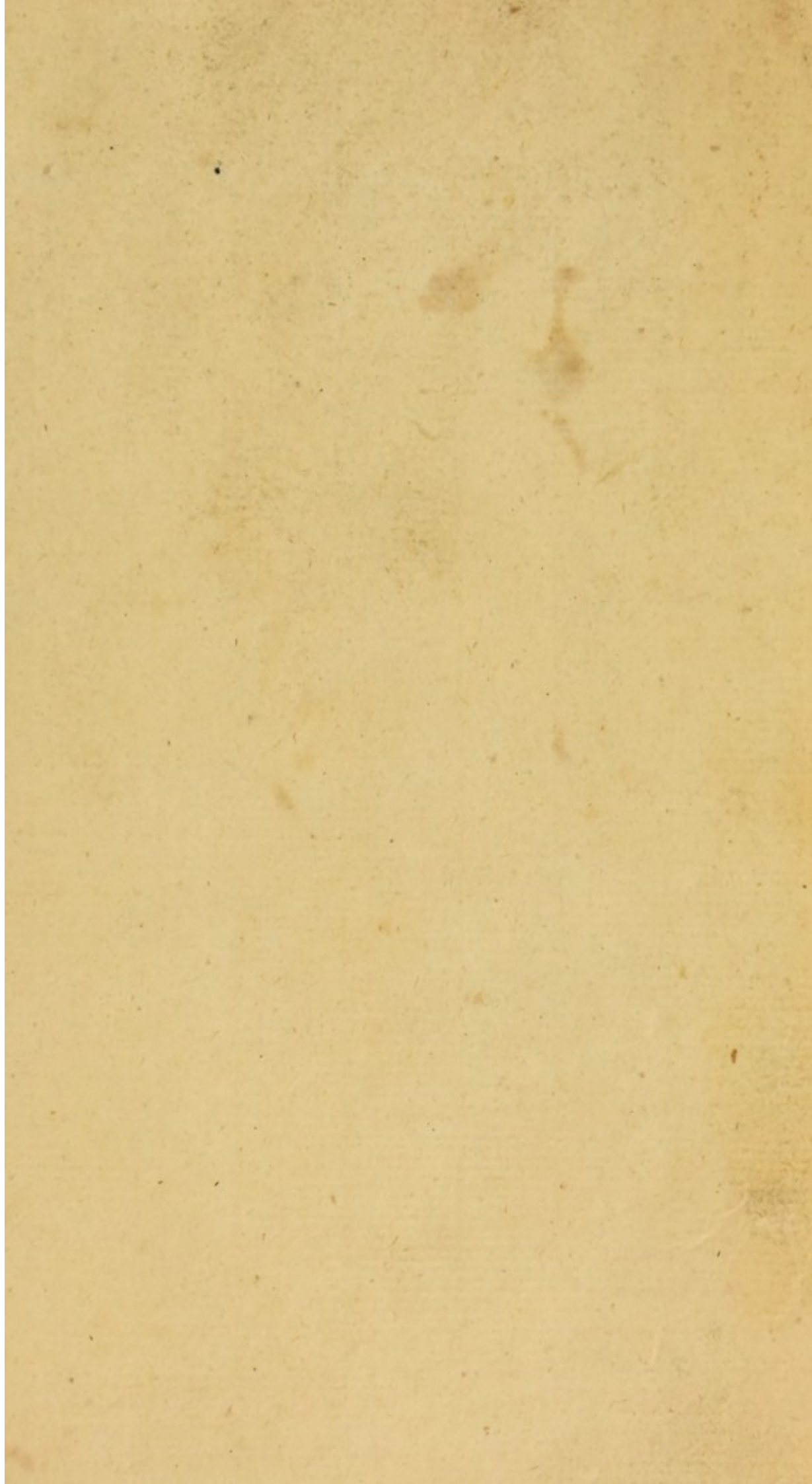


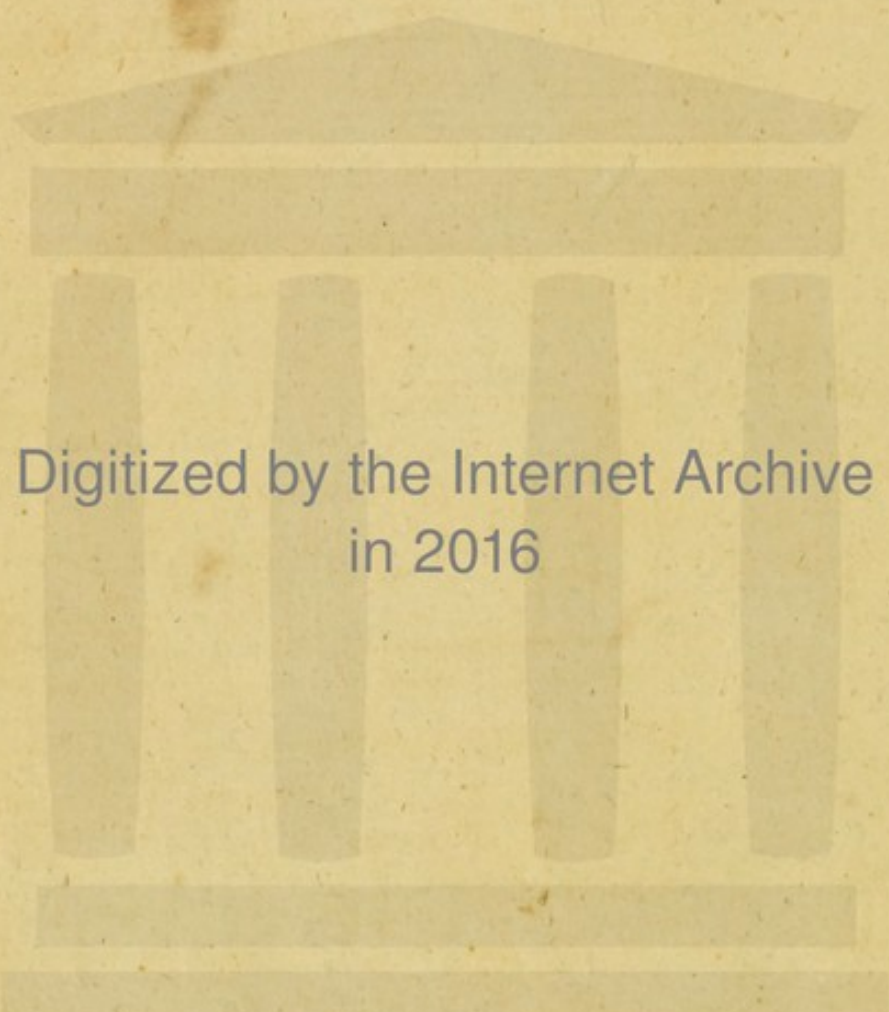
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ENCYCLOPEDIA

FOR

YOUTH;

OR, AN

ABRIDGMENT OF ALL THE SCIENCES,

FOR THE USE OF SCHOOLS

OF BOTH SEXES.

TRANSLATED FROM THE FRENCH, ARRANGED, AND COMPILED,
BY JOHN JOSEPH STOCKDALE.

ILLUSTRATED WITH ELEVEN PLATES.

SECOND EDITION.

LONDON:

PRINTED FOR J. J. STOCKDALE, 41, PALL-MALL.

1807.

Price Half-a-Guinea.



T. Gillet, Printer, Wild-court, Lincoln's-inn-fields.

TO WILLIAM WRIGHT, Esq.

OF APSLEY, NEAR WOBURN, IN BEDFORDSHIRE.

DEAR SIR,

AFTER having looked round amongst all my connections, notwithstanding the inducements of high rank and fortune, I cannot find any to whom my own heart tells me I can dedicate this, my first publication, with such propriety as to you. The work being intended for schools, how far it is likely to be of use to them, none can more readily decide than yourself, who have had the charge of one of the most considerable private academies in this country for, within my own recollection, between twenty and thirty years. The master of that establishment, where I spent so many of my early and pleasant years, will, I am sure, recognize, if with surprize, with satisfaction also, the grateful tribute of an old pupil. Sensible of the advantages which, while under your anxious care, I enjoyed, in common with my fellow students, many of whom I daily see rising to eminence around me, I do not hereby acquit myself of, but only in part discharge a debt, to which you have every claim. Nor am I less sensible of the benefit I derived from your arduous and unremitting instruction, than of the paternal kindness which is uniformly a characteristic of your hospitable roof. That the success you have met with may attend every individual of your family, is the heartfelt prayer of many besides,

My dear Sir,

Your affectionate and sincere well-wisher,

JOHN JOS. STOCKDALE,

LONDON,

22nd October, 1806.

ADVERTISEMENT

TO THE

SECOND EDITION.

NO sooner had this work made its appearance, than one edition was almost instantaneously sold off; a circumstance which, while it has confirmed me in the general opinion of the utility of *such* a work, by the rapid demand it has met with, has also prevented my receiving those corrections and hints, towards its future improvement, which I so earnestly desired.

I, therefore, again take the liberty of repeating my request to be favoured with any suggestion which may occur, either to render its utility immediate and universal, or to remedy those errors which it will most probably be found to contain.

J. J. S.

P R E F A C E.

ALTHOUGH I do not recollect that such a work as the present has ever been introduced into schools, yet, as an auxiliary to those generally adopted, it seems to me that it might be attended with advantage, in paving the way for that detail which is afterwards most essential. However superficial knowledge may be deprecated, yet general ideas must tend greatly to facilitate any acquirements which may hereafter be thought necessary: and, after all, the life of man is but a short space for attaining perfection, even in one branch. Children, too, will frequently find a pleasure in, and catch at variety with eagerness, and by way of recreation, when, perhaps, the mind would be incapable of deriving advantage from the increase of any individual study on which it might then be intent; for we all know that the most willing student may find himself oppressed in his exertions. It would be ridiculous, in such a work as the present, to lay claim to novelty. Whatever may be its merits or demerits, very little of either belong to me. Notwithstanding it is almost entirely translated from the French, yet so numerous are the alterations in the arrangement, and so great the additions in some parts, and

curtailments in others, that it may be termed a new work, except in regard to the plan, in which, indeed, nearly its whole merit must consist. The compilation I believe to be faithfully executed, and in most cases it has been compared and rectified by the best authorities on the various subjects it embraces. I shall feel very much obliged by the favor of hints towards the improvement of a future edition, should it ever be called for, and especially for notices of errors that may have crept in. Although it has been my study to guard against misrepresentation, or mistakes, yet they will often be obvious to an indifferent reader, when the author himself may repeatedly pass them over, and correction, in any respect, will be received with particular acknowledgments.

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ENCYCLOPEDIA

FOR YOUTH.

RELIGION.

OF every description of Knowledge, that of the true Religion is beyond all question the most important, as it is essentially connected with good education, as they support each other, and as the happiness of states is dependent upon it; for Religion is always the best security that can possibly be had for the morality and probity of mankind. In vain, without Religion, can we pretend to the great name of an honest man; to merit that title we must no less acquit ourselves of what we owe to God, than of what we owe to mankind.

QUESTION. What is true Religion?—ANSWER. It is a worship rendered to the true God, the creator of every thing in existence, by the sacrifice of the heart and mind, and by the practice of duties and ceremonies which God himself has taught and ordered to man.

Q. Why do you say that it is a worship rendered to the true God?—A. Because that worship which is offered to idols is not a true worship, but superstition and idolatry.

Q. What do you understand by idolatry?—A. The worship and honour internally and externally given to creatures which are put in the place of the Creator.

Q. Was it necessary that God should reveal a religion to man?—A. It was absolutely necessary; because the nature and end of man, the study of which is essentially allied to his happiness, are a mystery impenetrable to man himself, when he has the light of reason alone. The same may be said in regard to our future state; the

nature of the Supreme Being to whom we are indebted for our existence and for being what we are, and to the kind of worship he requires of us. It was therefore necessary that divine revelation should instruct us on so many objects of such infinite importance.

Q. Can there be only one true religion?—A. There can be but one for all men, since there is but one only God, and but one only truth.

Q. What are the marks or characters by which the true religion may be known?—A. True religion is simple but sublime in its precepts; uniform and immutable in its plan, but progressive in its developements, like the lights and wants of man. It begins with the world, it unfolds itself without bending under the weight of the passions and circumstances; while, on the other hand, the religions of men are done away in the course of time; they incessantly vary and change in conformity with the ideas, interests, and caprice of the people, and thereby divide into an infinity of branches, which are weaker in proportion as they are extended; whence so many dissimilar religions in the world.

Q. What are the principal religions?—A. The Christian, Jewish, and Mahometan religions, and that of Brama.

Q. Which is the only true religion?—A. The Christian religion, which alone has the characteristics of true divine religion.

Q. Who is the author of it?—A. Jesus Christ, the son of God, who was made man, and suffered death to save the world.

Q. Who did Jesus Christ fix upon to make known the gospel, and to found his church?—A. Twelve poor fishermen, low men, whom he took from the common people of the Jewish nation, and whom he made his disciples, that he might thereby show his divine power and works.

Q. What name did he give to those twelve disciples?—
A. Apostles.

Q. What are the advantages that religion procures for man?—
A. Religion being the source of all good morality, it renders men happy on earth, by giving them patience, which supports them under misfortunes; charity, which makes them love their fellow-creatures; hope, which comforts them in their afflictions; and tem-

perance, which prevents them from injuring their health: virtues which all tend to their preservation and happiness in this world and in the next.

Q. What are the evils which irreligion causes?—A. It makes men intolerable to themselves; it is the cause of their discouragement and despair; it makes them hate other men by carrying them into all sorts of excesses; and subjects them to eternal punishment after their death.

Q. How do they call the divisions which sometimes take place in religion?—A. They are termed schisms, and those who follow them are called schismatic.

Q. What is morality?—A. It is an indispensable knowledge, the source of which is in religion and our conscience. It gives us rules of conduct for private as well as for public life; it directs our actions according to the duties which we owe to God, to the state, to our families, friends, and to mankind in general. The study and practice of morality have always been considered by wise men as the paths to real happiness.

SCIENCES AND ARTS.

Q. Before we define the sciences, tell me what definition is?—A. Definition is neither more nor less than an abridged explanation of the thing which is defined; an explanation which can only suit the thing defined, and distinguishes it from every other.

Q. What is science?—A. It is a certain and reasonable knowledge of something.

Q. How can a knowledge be acquired?—A. By evidence, demonstration, and the testimony of persons deserving credit.

Q. What is evidence?—A. Evidence is a rational truth, which cannot be denied without having lost the use of reason.

Q. What is demonstration?—A. It is a just and clear argument supported by evident principles.

Q. What do you understand by the testimony of persons deserving of credit?—A. The written or verbal report of persons who merit our belief.

Q. How are the sciences divided?—A. Into abstract sciences

which are only founded on conventions and arguments, natural science which we acquire by experience, and supernatural science which is given us by faith and revelation.

Q. What are the abstract sciences?—A. They are mathematical sciences.

Q. Which are the natural sciences?—A. Natural history, physic, and chemistry.

Q. Which are the supernatural sciences?—A. There is but one—Theology.

Q. What is an art?—A. It is a method of doing something well according to rules prescribed.

Q. How are the arts divided?—A. Into liberal and mechanical arts.

Q. Which are the liberal arts?—A. Those which have the greatest affinity to the sciences, as rhetoric, grammar, logic, poetry, drawing, painting, sculpture, and music.

Q. Which are the mechanic arts?—A. All others belonging more particularly to the work of hands.

Q. Why are the former called the liberal arts?—A. Because they were, in old times, only exercised by free people, of a certain rank.

Q. What order should be pursued in the study of learning?—A. Notwithstanding all the sciences and arts are in suchwise allied that they belong to and mutually assist each other, it is however well to follow an order; and the most natural order is that of beginning with those which are the easiest, require the least preliminary knowledge, and which, on the contrary, are necessary to learning the others. The languages being indispensable for understanding and instruction, we must begin with them.

LANGUAGE.

Q. What is meant by language?—A. The terms and methods of speaking which different nations make use of.

Q. How are the languages divided?—A. Into dead languages and living languages.

Q. Which are called dead languages?—A. Those which were

spoken formerly, and which are not at this time spoken by any nation.

Q. Which are called living languages?—A. Those which are actually in use by different nations.

Q. Which languages are dead?—A. The principal are, the Hebrew, Greek, and Latin.

Q. Which are the living languages?—A. The principal are, English, French, Italian, Spanish, German, and some others in the East, which are little known in Europe.

Q. Is it useful to learn the dead languages?—A. Yes; because they are conducive to understanding the living languages, which derive and take from them many new words; to be able to comprehend the works of old authors who wrote in those languages, and of which the living languages cannot give all the beauties; and lastly, because we can, with those languages, make ourselves understood in every country where some persons may always be found who know them.

Q. Is it of use to learn the living languages?—A. The French language is of use to every one, because there are few countries in Europe where it is not spoken, either among people of quality, or merchants; there is, moreover, a great number of excellent works written in that language. The Italian and English languages are necessary to those who wish to instruct themselves, by reading the good authors who have written in those languages. And, in general, the living languages are very serviceable for understanding and translating into the language of our own country, the capital works written in a foreign language; but more especially to those who travel or have correspondence among foreigners, whether for information or commerce.

Q. What is the best age for learning foreign languages?—A. As soon as we can speak the mother tongue; because at that age, yet tender, the organs of the voice may be easily moved, in every sense, and a child more readily habituates himself to correct pronunciation.

Q. What language was, in old times, diffused the most widely?—A. It is generally believed to have been the Hebrew, which

was spoken by the Jewish people, and in which the Old Testament was written.

Q. Which is the most difficult language of all?—A. The Chinese, which has but about 335 words, all of one syllable, but of five different sounds, according to which, one same word has five different significations: they are therefore adequate to 1675 words. The Chinese in those words make use of about 85,000 different characters, which render that language the most difficult of all that are spoken in the world.

Q. What is the end of languages?—A. To serve for the communication of thoughts.

Q. What are the sciences that have a reference to language?—A. Logic, which consists in order of ideas; grammar, which is their expression; and rhetoric, the manner of issuing them.

LOGIC.

Q. What is logic?—A. That science which teaches us to reason correctly, that is to say, to make use of reason in the knowledge of things, as much for our own instruction as for the instruction of others. It likewise contains certain rules, whereby to define, divide, judge, and draw just inferences.

Q. In what does this science consist?—A. In the reflections which men have made on the four principal operations of the mind; perception, judgment, reason, and method.

Q. How is logic divided?—A. According to those four operations, into the art of thinking, the art of speaking, the art of adjusting the thoughts, and the art of communicating them.

Q. What is the use of logic?—A. It is a guide to us in all the sciences; because there are in all the same rules for finding out the truth, for arranging the ideas, and for transmitting them with exactness.

GRAMMAR.

Q. What is grammar?—A. The art of speaking and writing in a correct manner, and conformably to the genius of the language.

Q. What is a discourse?—A. It is an assemblage of phrases

or periods, which serve to make known and develope our thoughts.

Q. What is a phrase?—A. It is one or more propositions from which results a complete sense.

Q. What is a period?—A. Only a phrase which has grace, strength, and harmony.

Q. What is a proposition?—A. It is the expression of judgment.

Q. What are called parts of speech?—A. They are the different sorts of words which compose the discourse, and are ordinarily estimated to be eight: viz. noun, pronoun, article, verb, adverb, preposition, conjunction, and interjection.

Q. What do you understand by style?—A. The manner of expressing a succession of words, phrases, or periods, in the fashion of the language in question. The style must be suited to the subject it treats on.

Q. What are the rules of grammar?—A. In the living languages, custom is the best rule; in the dead languages, the rules are fixed, and are contained in all good grammars of those languages.

Q. Is it necessary to study the grammar of the mother tongue?—A. Yes; because our own language is that which it is of most consequence for us to understand thoroughly, as, if we are ignorant of the rules of grammar, we can neither express our own ideas correctly, nor perfectly understand the ideas of others.

Q. In how many ways can the thoughts be rendered?—A. In two; viz. prose and verse.

Q. How many sorts of language are there?—A. Two: the language written, and the language spoken.

Q. In what consists the written language?—A. In the art of forming characters, termed writing; in orthography, prosody, and punctuation.

Q. In what does the spoken language consist?—A. In pronunciation, action, and tone.

PROSE.

Q. What do you understand by prose?—A. The common language of man, which is not subject to measure nor rhyme.

Q. In what works is prose used?—A. In works of science, history, commerce; and in business, in letters, in discourses from the pulpit, and at the bar.

Q. Are there many sorts of style in prose?—A. Every kind of subject has a particular style, which is again modified according to different circumstances.

Q. What are the different styles of prose?—A. The principal are, the historic for history; epistolary for letters; dogmatic for the church; didactic for the sciences; and practical, which is in use at the bar.

Q. Give me an example which will point out how those sorts of style are modified according to circumstances.—A. The epistolary style makes that very clear; the style of a letter on business should not be the same as a letter to a friend; in the former are found expressions peculiar to men of business, and a necessary brevity in their correspondence; the second, on the other hand, must be in a more familiar, flowing, and diffuse style; that of a son to his mother should be respectful, tender, and submissive; and so on with the others.

POETRY.

Q. What is poetry?—A. Poetry is the art of reducing to the standard of measure and rhyme, ideas proper for depicting certain objects, and for powerfully exciting the feelings.

Q. In what does the art of poetry consist?—A. In imagination and versification; for poetry not only requires that the work should be in verse, but further, that it should be embellished with brilliant ideas and descriptions.

Q. How can imagination be acquired?—A. There are persons who have, in a greater or less degree, a disposition for imagination; but to unfold it, the fables and works of the antient poets should be much read, as they are replete with ideas, fiction, and magnificent descriptions.

Q. How can we learn to make verses?—A. By becoming acquainted with the rules of prosody, which are included in all the good treatises of that sort, by reading the best poets, and after-

wards, by exercise in acquiring the faculty of readily finding measure or rhyme.

Q. Is rhyme used in all languages?—A. No; the Latin, Greek, Spanish, &c. have only measure, and are not subject to rhyme: the French is most particularly adapted for it.

Q. Is measure the same in all languages, and unalterable for each?—A. No; the measure is different, and estimated differently in the various languages; and that of verse is not always fixed for the same language, but is subject to vary.

Q. What are the different measures of French verse?—A. The longest verses in that language are of twelve syllables; there are some of ten, eight, seven, six, and even sometimes five, and four; and it is the same in the English.

Q. What titles are given to the different kinds of poetry?—A. Lyric poetry is that of odes and poems intended to be sung; Dramatic Poetry, for tragedies and comedies; Epic Poetry, for reciting the acts of gods and heroes; Burlesque Poetry, for subjects which are treated in a burlesque and laughable manner; Moral Poetry, for morality; and Sacred Poetry, for religious subjects.

Q. Is every kind of verse made use of indiscriminately for all sorts of poetry?—A. Noble subjects can only be treated of in grand verse, called Alexandrines; fables, in every sort of verse, long and short jumbled together; songs commonly in verses of seven or eight syllables; epigrams, indifferently in long or short verses, &c.

WRITING.

Q. What is writing?—A. It is the art of forming with a pen the characters or letters of the alphabet.

Q. How many letters are there in the alphabet?—A. The French have twenty-four, the English twenty-six; numbers nearly sufficient for the formation of all the languages in the world.

Q. Who invented it?—A. It is attributed to God himself, who gave Moses the ten commandments of the law, written on two tables of stone. Cadmus, king of Thebes, the son of Angenor, king of Phenicia, brought letters from Phenicia into Greece, about

the year 1519 before the birth of Jesus Christ. The Americans, when they first saw a person read, thought the paper spoke. It is said that an Indian slave entrusted by his master with a basket of figs and a letter, ate part of the figs as he went along, and delivered the remainder with the letter to the person they were sent to: he having read the letter, and not finding the quantity of figs mentioned in it, accused the slave of having eaten what were not there, and read him the contents of the letter. But the Indian assuring him of the contrary, cursed the paper, and accused it of bearing false witness.

He was afterwards charged with a similar commission, and a letter mentioning the exact number of figs he was to deliver. On his way he again ate a part, first taking the precaution, that he might not again be accused, of hiding the letter under a large stone, thinking himself certain if it did not see him eat the figs, it could not testify against him. But the poor ignorant creature being accused more than ever, confessed his fault, and regarded with admiration the magic virtue of the paper.

Q. Of what use is writing?—A. It is universally admitted to be of all arts, that which is most useful to society. It is the soul of commerce, the picture of the past, the regulator of the future, and messenger of the thoughts. Writing is, in short, an instrument necessary to the sciences and arts, since without it we could not act in any state of life whatever, particularly in a country which subsists entirely by commerce.

Q. What is the most proper age for learning to write?—A. It is impossible to mark the precise time, but at nine years of age most children are capable of it, because their muscles being supple and tender, they can without difficulty accustom themselves to hold and guide the pen properly.

Q. Is there any thing worthy of observation in the manner of writing of some nations?—A. The Jews and the greater part of the oriental nations write from right to left; the Chinese write from the top to the bottom, while every where else they write from the left to the right.

ORTHOGRAPHY.

Q. What is orthography?—A. It is the art of writing words correctly with all the letters suitable and necessary.

Q. Which orthography is the best?—A. That which is neither too old, nor entirely novel; it is that of the best modern authors.

Q. How can orthography be learnt?—A. By reading and especially by copying a great deal; but the best manner of learning to spell well, is not to write a word until we are very sure of the way in which it is spelt; and for that, it is best to have a dictionary.

Q. By what means can the orthography of a word be ascertained?—A. By its pronunciation, etymology, and by those which belong to the same class.

Q. Is it necessary to learn orthography?—A. It is essential to good education; and every one should strive to make himself master of it, for bad spelling is a great proof of ignorance.

ACCENTUATION or PROSODY.

Q. What is accentuation?—A. It is the art of placing characters called accents over certain vowels.

Q. As the English make no use of accents, how many accents has the French language?—A. Three; the acute accent, from right to left, the grave accent, from left to right, and the circumflex, which is two sides of a triangle.

Q. What are the accents for?—A. To mark the different sounds of the same vowel.

Q. What is punctuation?—A. It is the art of placing properly, in writing, characters which mark the points at which we should rest in reading, and which distinguish the different parts of the discourse.

Q. What characters are employed for that purpose?—A. The comma, (,) semicolon, (;) colon, (:) full stop, (.) note of interrogation, (?) note of admiration (!).

Q. Are there not still other marks used in writing?—A. The apostrophe, (') hyphen, (-) parenthesis, () marks of quotation ("), and caret (^).

PRONUNCIATION.

Q. What is pronunciation?—A. It is the clear or proper manner of giving to words their respective sounds.

Q. What is necessary to good pronunciation?—A. By opening the mouth sufficiently, and not closing the teeth, to make the syllables which are to be pronounced clearly heard, each one separately and distinctly.

Q. In what does action consist?—A. In the manner more or less animated in which a discourse is recited. The action must vary with the different sentiments and different situations of the speaker.

Q. Wherein consists the tone?—A. In the grave or tender pronunciation given to the accent. That likewise must be determined by the different sensations of the speaker.

RHETORIC.

Q. What is rhetoric?—A. It is the art of expressing ideas so as to please, affect, and persuade, either in writing or speaking.

Q. What is requisite for that purpose?—A. To separate the discourse into divisions.

Q. How many parts has a discourse?—A. Five; the exordium, narrative, confirmation, refutation, and peroration.

Q. What is the exordium?—A. It is the first part of an oratorical discourse, which must be drawn from place, person, or circumstance, and which is to prepare the mind for what follows.

Q. What is the narrative?—A. It is the recital of a thing such as it is; it must be clear, varied, true, or probable.

Q. What is the confirmation?—A. It is that place in the discourse where the proofs are arranged in an order, calculated to effect persuasion.

Q. What is the refutation?—A. It is that part of the discourse whereat the orator overthrows the argument and endeavor of his adversary; the refutation must be spirited.

Q. What is the peroration?—A. The peroration or episode is a recapitulation of all that has been said: it should excite lively

emotions, and conformably to the aim of the orator, in the minds of those to whom he addresses himself.

Q. What is requisite in a good rhetorician?—A. He must understand the arrangement of his subject, put every thing into its proper place, and not be deficient in imagination or memory, so that he may bring forward his ideas regularly and in turn; have a good pronounciation, and adapt the action and the tone suitable to the subject he is treating of, without which the speaker makes no impression upon his hearers.

MATHEMATICS.

Q. What is termed mathematics?—A. Those sciences which refer to size, that is to say, every thing susceptible of increase or diminution.

Q. Do the mathematics require much attention?—A. Yes; they are the sciences which demand the greatest; because they consist wholly in arguments. We have a proof of it in Archimedes, who was so intent on a problem, that he was not sensible of the enemy having entered Syracuse, and that they had began pillaging his house, in which he was killed by a soldier who demanded his name, and to whom he gave no answer.

Q. What advantages do the mathematics possess?—A. They are applicable to almost all other science and art, and are further useful to every one, because they exercise and rectify the mind.

Q. How are the mathematical sciences divided?—A. Into pure mathematics, which only refer to size in itself, and mixt mathematics, which borrow some primordial properties from physics, whence they derive, by the assistance of pure mathematics, all the other properties which have a reference to it.

Q. What are the mathematical sciences?—A. They are five; arithmetic, algebra, geometry, and differential and integral calculation.

Q. What are the mixt mathematical sciences?—A. They likewise are five; mechanics, hydrodynamics, astronomy, optics, and acoustics, which is part of physics.

ARITHMETIC.

Q. What is arithmetic?—A. That science which treats of numbers and their operation on numbers.

Q. What is a number?—A. It is the union of several units of the same kind.

Q. Are there not many sorts of numbers?—A. Yes: there is the whole or integral number, which is composed of entire units, and the fractionary or complex number, which is composed of entire units, and parts of units, denominated fractions.

Q. What are the operations upon numbers?—A. Addition, subtraction, multiplication, and division, of which the other operations are but applications.

Q. What is addition?—A. It is the operation whereby in adding several numbers together, one is made which is called the sum total.

Q. What is subtraction?—A. It is the operation of taking a lesser number from a greater to ascertain their difference.

Q. How is it known whether the addition or subtraction is accurate?—A. By making the proof; that of the addition is the subtraction; that of the subtraction is the addition.

Q. What is multiplication?—A. It consists in repeating a number called the multiplicand, as many times as there are units in another called the multiplier. The result is called the product. It is clear that this is merely a simplified manner of making the addition of a number with itself; for repeating a number a certain number of times, is, in fact, adding itself to itself.

Q. What is division.—A. It consists in finding how many times a number called the dividend, contains another number called the divisor. The result is termed the quotient. Division is also clearly seen to be but subtraction: for finding how many times one number is contained in another, is as though the first was taken from the second as many times as the quotient contains the unit.

Q. What are the proofs of multiplication and division?—A. Division is used in proof of multiplication, and multiplication of division.

Q. What other operations are there from the application of these four?—A. The formation of powers, the extraction of roots, the rules of allegation, of three, of profit and loss, of interest, and of false position.

Q. What is the power of a number?—A. It is the product of that number multiplied by itself. The first power is the number itself; the second power is the product of that number, or twice the factor; the third power is three times by itself, or thrice the factor; the fourth, four times, and so on. The second power is called the square, and the third the cube.

Q. What is the root of a number?—A. It is the number which multiplied by itself has produced the given number. The first root is, as well as the first power, the number itself; the second root, also called the square root, is that which must be multiplied once by itself, to have the number; the third root or cube, is that which must be multiplied twice by itself, to have the number; and so in continuation.

Q. In what then consists the formation of powers, and extraction of roots?—A. The formation of powers consists in making products of numbers, by multiplying them by themselves; and the extraction of the roots consists in finding the number which, multiplied by itself, produced the number proposed.

Q. What is the rule of Alligation used for?—A. To find the mean value of one of the parts of a mixture, when the value and number of the things it is composed of are known, or the number of parts of the things which are to be mixed, when the value of those parts and that of the mixture are known. This rule, as well as the other, is performed by addition, subtraction, multiplication, and division; which is the reason why they are said to be its application.

Q. Give me an example of this rule?—A. If a wine-merchant mixed together three hundred bottles of wine, at a given price, suppose ten pence; two hundred bottles at seven pence half-penny,

and one hundred at five pence, and he wanted to know the value of each bottle of the mixture, he must make a rule of alligation. If a goldsmith would know how much gold and silver he must take to form an alloy of a given weight and price, he must also resort to alligation.

Q. On what are the other rules founded, that is to say, the Rule of Three, of Fellowship, of Interest, and of False Position?—

A. On the proportions.

Q. How many terms has a proportion?—A. Four.

Q. In what consists the Rule of Three?—A. It consists, or is reduced to finding the fourth term of a proportion, when three are given, and is of use to every body.

Q. What is the rule of Fellowship?—A. It is a method whereby a number is divided into parts, proportional to given numbers. It is used in trade to divide the gains and losses made in partnership, in proportion to the particular sums put in.

Q. What is the rule of Interest?—A. The Rule of Interest, or Discount, is a method, whereby, knowing the interest which a certain sum brings, during a given time, the interest which any other sum whatever ought to bring in proportion, during a time likewise given, is determined. It is much used by bankers.

Q. What is the rule of False Position?—A. It is a method of dividing a number into parts, proportioned to numbers determined relatively to the state of the question. To effect this division, sometimes only one supposition is wanted, and sometimes two. This rule is likewise much in use for unequal shares.

Q. Are there not numbers called Logarithms?—A. Yes, it is a discovery very useful to mathematicians, which was made by Lord Napier, a Scotchman.

Q. What are the advantages of Logarithms?—A. It is a material abridgement of calculation, by changing multiplication into addition, and division into subtraction, and by the formation of powers in multiplication, and the extraction of roots in division.

Q. What is done with Fractions?—A. The same as with whole numbers.

Q. Are there not several kinds of Fractions?—A. Yes, there

are Compound-fractions, and Decimal-fractions, which are much easier than the former.

Q. To whom is arithmetic necessary ?---A. To all persons, in all states ; it teaches us to put our affairs in order, it is indispensable to men in business, and almost all the sciences require a previous knowledge of this.

ALGEBRA.

Q. What is algebra ?---A. A knowledge of the calculation of magnitude, or quantity, in general, in which, instead of figures, the letters of the alphabet are made use of, and they having no determinate value, may represent every magnitude, or quantity.

Q. How is algebra performed ?---A. By all the methods that are used in arithmetic ; but mostly by equation, from which are deduced general rules.

Q. What is an equation ?---A. It is the expression of the equality of two quantities.

Q. Why is equation applied ?---A. To ascertain, by an easy calculation, the value of an unknown quantity, by means of the reference it has to known quantities, which it is necessary to express in equations.

Q. How is equation divided ?---A. Into equations of the first, second, third, fourth degree, &c.

Q. What advantage has algebra over arithmetic ?---A. Arithmetic refers only to numbers, and algebra calculates size in general. algebra makes its results general, and extends them to all questions of a similar kind ; in short, it lays down rules for a method which materially shortens calculation.

Q. To whom is algebra of use ?---A. To all those who are occupied in any branches of mathematics, of which it is itself one of the most important by its application to the others.

GEOMETRY.

Q. What is geometry ?---A. That science which embraces the measure of space in its three dimensions, length, width, and thickness or depth.

Q. What is the meaning of the word?—A. It signifies the art of measuring land; was so named, and because that was its primary object; the Egyptians invented it that they might be able to ascertain their possessions, the marks of which were every year carried off by the overflowing of the Nile.

Q. Into how many parts is geometry divided?—A. Into three equal parts; viz. lineametry, which refers to lines; planemetry, which refers to surface; and stereometry, which refers to solids.

Q. What difference is there between a line, a surface, and a solid?—Q. A line is a space only in length; a surface in length and width; and a solid is extended to length, width, and thickness.

Q. What class is geometry used by?—A. It is indispensable to architects, and in general to all those who have to do with building; it is the foundation of many other sciences, as mechanics, and all the arts connected therewith; and it accustoms us to a just mode of reasoning in every thing, because it consists wholly in reason itself.

DIFFERENTIAL and INTEGRAL CALCULATION.

Q. What is differential calculation?—A. An advanced branch of mathematics, which consists in the calculation of very small parts in curved lines; parts which are called differences. Newton calls it the calculation of fluxions.

Q. What is integral calculation?—A. Again, another branch of mathematics, which forms the inverse of differential calculation, by teaching the calculation of those quantities which are called variable.

Q. To what are these two sciences applied?—A. To sines, curved surfaces and their tangents, which are lines that only touch them at one point.

DRAWING.

Q. What is drawing?—A. The art of representing on a plane, such as a sheet of paper, the figure or form of any body whatever, house, tree, or person.

Q. Are there not two distinct methods of drawing?—A. Yes;

one in which instruments are made use of, to measure the body to be drawn, so as to make, according to the rules of geometry, what is called a plan; another, where only a pencil, pen, or some such things, are used to trace, by sight alone, those features which represent the form of the body.

Q. What are the arts in which the first method of drawing is used?—A. Principally in that of taking plans, and in architecture: but it is generally requisite in every art, to give the workmen the dimensions and arrangement of the objects they have to make.

Q. In what case is the second used?—A. Where mathematical nicety is not requisite, and particularly in drawing landscapes, animals, or the human body, because it would be almost useless, very tedious and very difficult, to draw them by the rules of geometry.

Q. Wherein does the pleasure and utility of this method consist?—A. In being able, in a short time, to take the view, or situation of a place that pleases us, or the portraits of those we love, and giving us the enjoyment, in some respect, of seeing them while they are absent.

Q. Are not these two methods of drawing mutually serviceable to each other?—A. The first is of great use to those who adopt the second, in giving the perspective, and placing the figures with accuracy; and the second cannot be dispensed with in drawing certain objects, such as trees which are found in a plan; wherefore it is desirable to learn both. The second manner, alone, is commonly called drawing, the other is comprehended in the arts which make use of it.

Q. How is drawing acquired?—A. It is well first to know that geometry, termed descriptive, which is learnt by means of instruments; and afterwards drawing, properly so called, by copying drawings set by the masters, commencing by very easy subjects, and gradually going on to the more difficult; and when, by long practice, we are become sufficiently acquainted with it, to draw figures from plaster, called bosses, and then proceed to the human body.

Q. Can drawing be learnt without a master?—A. We certainly may learn tolerably well how to draw petty objects, in particular,

landscapes; but it is almost absolutely necessary to have a master to correct us where we are wrong, and to instruct us in the rules of proportion of the human body.

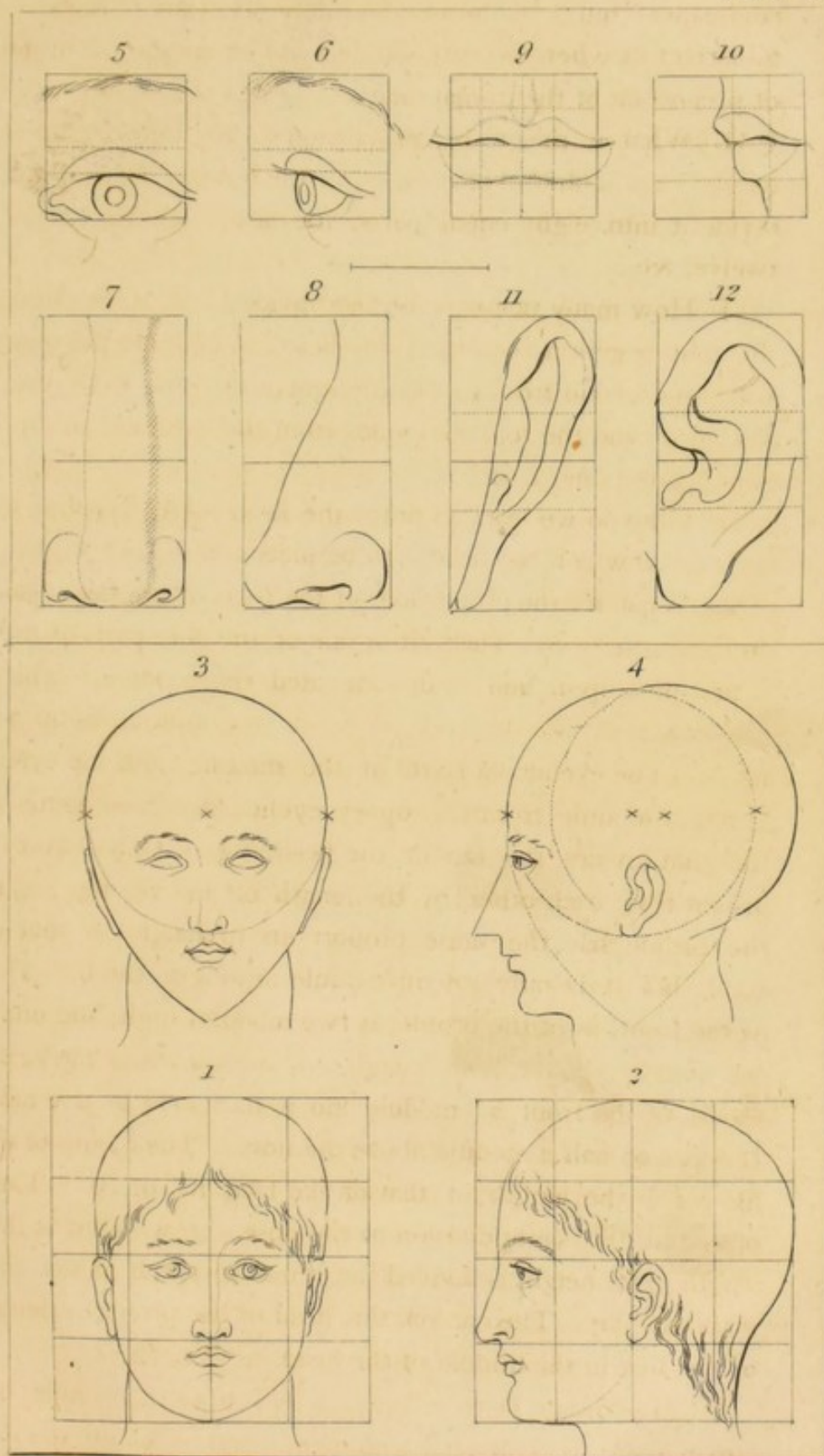
Q. What is meant by proportion?—A. The division which painters and sculptors have made of the human body; the former divide it into eight equal parts, the latter into ten, others into twelve, &c.

Q. How many points is the face divided into?—A. Into four; the first begins at the top of the head, and goes to the root of the hair: the second from that to the root of the nose: the nose forms the third, and the fourth extends from the nose to the tip of the chin, plate 1. fig. 1, 2.

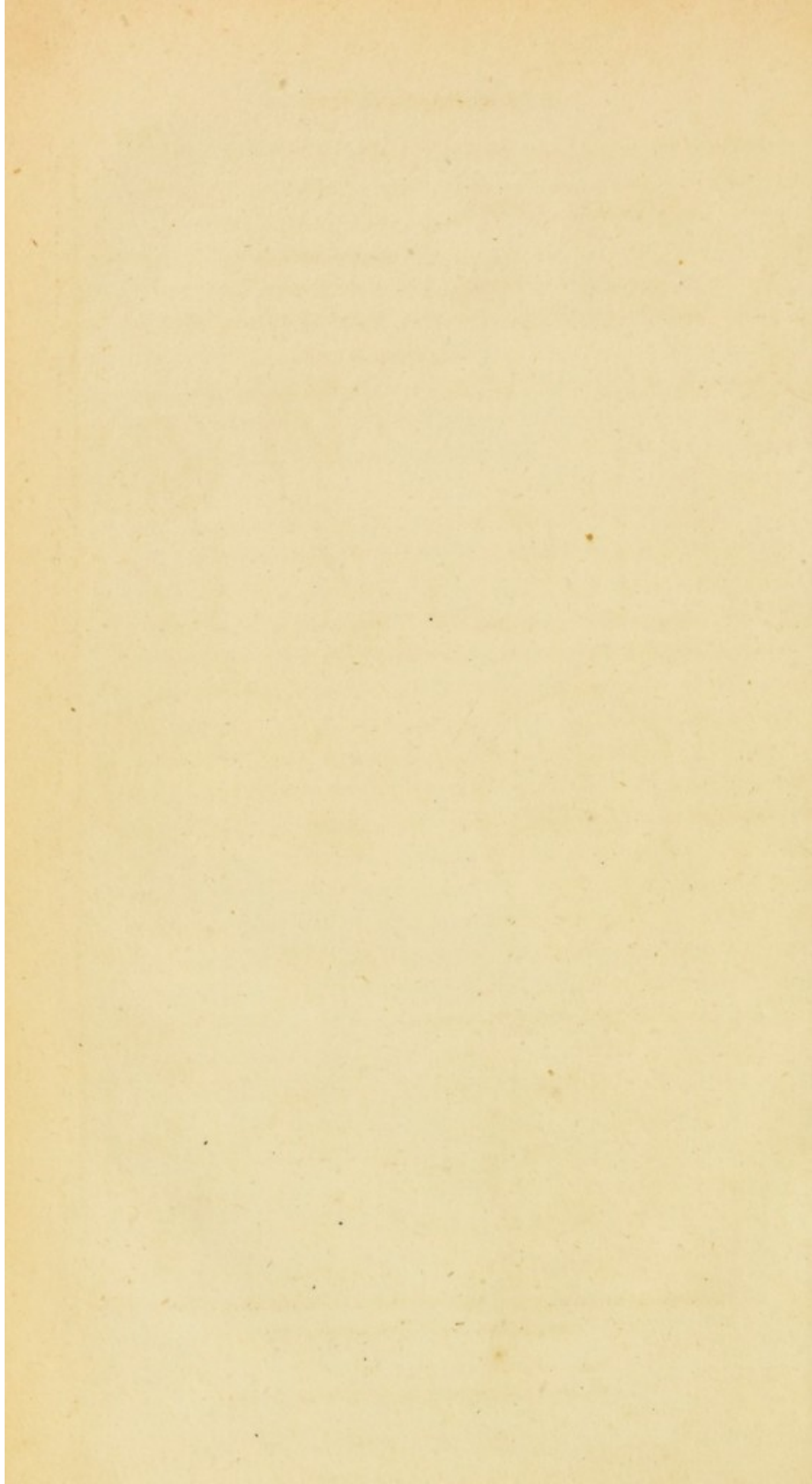
Q. How do we learn to draw the head?—A. By first striking the oval in which the head is to be placed, fig. 3, 4.

Q. What are the proportions of the parts of the head, and how do they arise?—A. The half of one of the fore parts of the head is first measured, and is denominated the module. The eye is the length of one module, of which the pupil takes up a third, fig. 5. The eyelid is a sixth of the module, and the eyebrow is at half a module from the upper eyelid, which is found on the line that divides the top of the head, fig. 1. The two eyes are distant from each other by the length of an eye, fig. 1.; that of the profile has the same proportions in height as that of the front, but it is only a demi-module in length, fig. 6. The nose of the front, as of the profile, is two modules high, and one wide; the nostril is half a module high, and a third wide, fig. 7, 8. The mouth of the front is a module and a half long by one half high. It is placed half a module above the nose. The mouth of the profile is half the length of that on the face, fig. 9, 10. The ear is placed in the same division as the nose, of which it is the same length. Its height is divided into three parts, of which the shell is the middle. The ear on the head of the profile is determined by the line in the middle of the head, fig. 11, 12.

Q. How many faces or head's length make the whole body of a man?—A. It is divided into eight; and is of all the divisions the most easy to learners. The first is from the top of the head



Principles of the Head & its parts.





Principles of the Human Body .

to the chin : the second from the chin to the nipples : the third from the nipples to the navel : the fourth from the navel to the fork, or where the body branches off : the fifth from the fork to the middle of the thigh : the sixth from the middle of the thigh to the knee : the seventh from the knee to the middle of the leg : the eighth from the middle of the leg to the sole. The length of the arms extended, or the length of the two legs, is equal to the height of a man, plate 2. fig. 1, 2, 3. The woman is also eight heads high : a child is but five.

Q. Are those proportions strictly the same in both sexes?—

A. There is generally a difference of two or three inches in height between women and men ; the head of the former is also less, the neck longer, the projection of the breast more elevated, the loins and thighs larger and not so long, the top of the arm and the hand more narrow ; thicker legs, thinner feet, and their muscles not so visible, which makes their contours more equal and flowing, and movement more easy.

Q. What are the proportions of the feet and hands?—A. The feet and hands are the length of a head ; that length is divided into four parts. In the hand, the first reaches from the wrist to the palm, the second to the joint of the thumb, the third to the first joint of the middle finger, and fourth to the tip of the same finger, plate 2. fig. 6, 7, 8, 9. In the foot the first reaches from the heel to the ankle-bone, the second to the middle of the instep, the third to the root of the toes, and the fourth to the tip of the great toe, plate 2. fig. 10, 11, 12, 13.

Q. What are the arts whereto drawing, properly called, is necessary?—A. Principally painting and sculpture, which require a perfect knowledge of it.

ARCHITECTURE.

Q. What is Architecture?—A. It is in general the art of building, and in that sense is as old as the time when men first sought to defend themselves against the intemperance of the weather and season ; but a more extensive taste for convenience and elegance, having given rise to rules for the decorations and

use of houses, architecture is now called the art of constructing buildings, as well public as private, according to one of the five received orders, or according to all the five orders, by adhering to the proportions and ornaments suitable to the grandeur, solidity, and character of the different edifices.

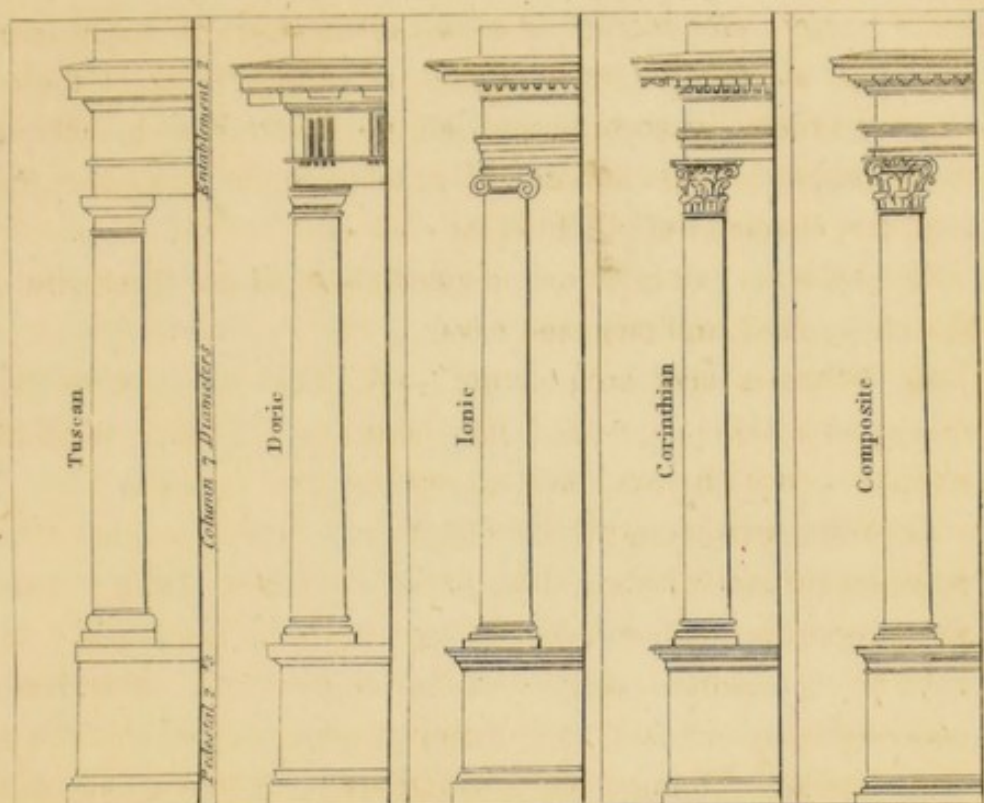
Q. How is architecture divided?—A. Into three distinct branches: civil, military, and naval.

Q. What is civil architecture?—A. That which consists in raising all buildings intended for the use of life, such as palaces, temples, private houses, theatres, bridges, &c. plate 3.

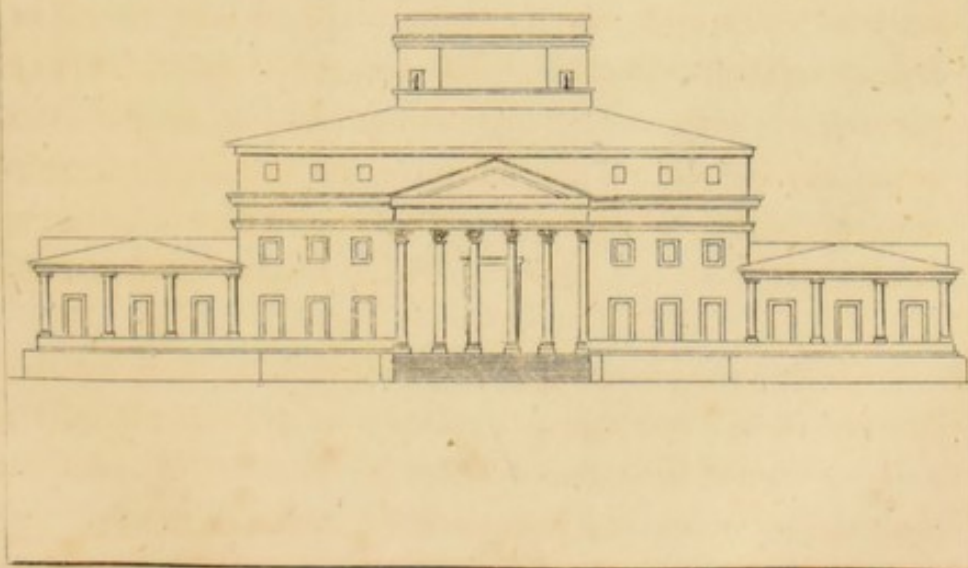
Q. What architecture is the oldest?—A. The most antient monuments that we have are those of the Egyptians; simple in their form, poor in ornament, but of an astonishing magnitude: they have by their extreme solidity triumphed over time. The Greeks, endowed by nature with a delicacy of mind adapted to catch the true meaning of things, brought that art to perfection and discovered its proportions: the Romans added a richness to it, which often degenerated into profusion. The Arabs, whose lively imaginations could not be subject to rules, have a fantastical and particular architecture, which amongst us is termed Gothic; extreme lightness is its principal merit.

Q. What is the general opinion in regard to those different kinds of architecture?—A. The Greek architecture combines, in the most eminent degree, beauty of proportion and choice of the finest forms: it is that which we cannot but imitate. However our manners and customs, very different from those of the Greeks, necessarily influencing that imitation, the result of it is an architecture which is called modern, to distinguish it from that of the Greeks and Romans, which goes by the name of ancient architecture.

Q. Is architecture an art of pure invention, or is it like painting founded on the imitation of nature?—A. Instinct common to all beings endowed with ideas, taught the first men to seek shelter from the severity of the atmosphere in caves, or to construct huts by means of trees. Those are the objects of imitation which art has since brought to perfection. Art has changed the shape



The Five Orders .



Civil Architecture .

less roof of caverns into regular vaults, apertures into doors, and crevices to windows of a pleasing proportion and symmetry. Necessity taught us to use the trunks of trees in raising the roofs of huts, but it was art which thence formed the columns of our temples and imagined the orders. It was art again which transformed the projections of a roof into majestic cornices; the extremity of the poles, which supported the columns, into mouldings, and the rustic hedges into balustrades. We may, therefore, conclude that architecture is so much beyond its models, that it may be considered an invented art.

Q. What is understood by the five orders of architecture?—

A. The orders form the principal part of the decorations of buildings. Every order consists of three divisions, which are the pedestal, column, and entablature. This composition has its origin in the construction of the primitive huts. To secure those huts from inundations they were raised on heaps of earth or stone; trunks of trees fixed in the heap formed the circumference; they sustained the roof, to which a little projection was given, to take off from the gutters of rain water penetrating the interior. The roof was placed on horizontal pieces of wood, brought and fastened to the trunks of trees. That rude arrangement refined and brought to perfection, produced the pedestal, the column and the entablature of the first order, and of all those which have been found out in imitation of it.

Q. How many orders are there in architecture?—A. Five. The Tuscan, Doric, Ionic, Corinthian, and Composite. Plate 3.

Q. Which is the Tuscan order?—A. It is the first and most simple of all the orders of architecture. To its columns are allowed only seven times their diameter for height.

Q. Which is the Doric order?—A. Durability and nobleness are the characteristics of this order; it is the only one, the entablature of which has a distinct attribute. That attribute is an imitation of Apollo's lyre, termed a triglyph, and which is placed in the frieze: eight diameters of the column of this order go to its height.

Q. Which is the Ionic order?—A. The medium between the firmness of the Doric and the elegance of the Corinthian. The essential difference of this order, consists in the volutas without foliage, which ornament its capital. The proportionate height of its column is nine times the diameter.

Q. Which is the Corinthian order?—A. The first and most noble of the five orders. Its elegance is the last effort of the lightness of Grecian architecture. The height is ten times the diameter of its columns. Its capital, the richest that has been discovered, is ornamented with two rows of leaves; and six volutas in general, is the characteristic of this order.

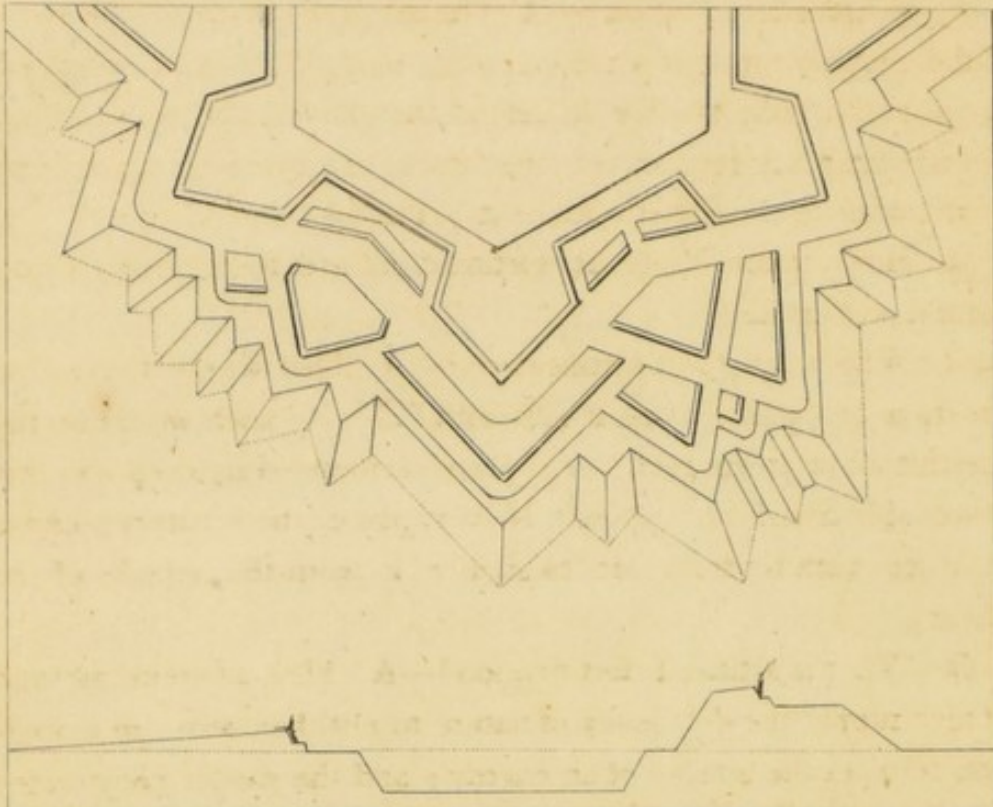
Q. Which is the Composite order?—A. It has no particular characteristic or proportion. The height of its columns is ten diameters. This order is only known by the four Ionic volutas which are added to the foliage of the Corinthian capital.

Q. Is there not a Rustic order?—A. The Rustic is not a particular order; but a method of treating all the orders as if they were executed with stones simply hewn, which is however only practised on the columns and friezes. The columns thus executed are composed of barrels in bunches more or less projecting. There is a celebrated example of this in the palace of the Luxenbourg at Paris and that of Pitti at Florence.

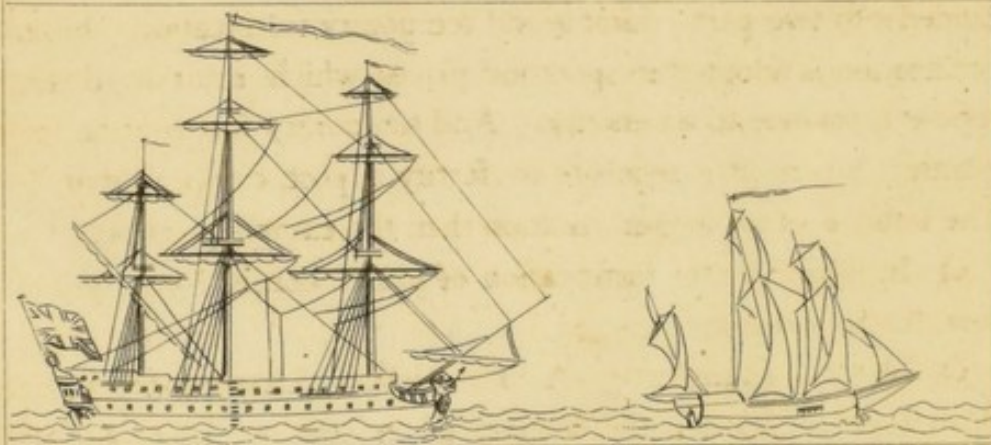
Q. What kind of knowledge is necessary to architecture?—A. Mathematics and drawing; architects must in particular be perfectly acquainted with that part of their art which is called construction, and which consists in executing with precision and solidity the edifices drawn on paper. It is the part most necessary to an architect; that which impresses his buildings with the stability which hands down his glory to posterity, and gives him the confidence of his cotemporaries, whose lives and fortunes depend on the career and knowledge of those who cultivate the art.

MILITARY ARCHITECTURE.

Q. What is understood by military architecture?—A. That building which is the security of cities and states; fortification and all that relates to the attack and defence of places.



Military Architecture or Fortification .



Naval Architecture .

Q. What is fortification?—A. The art of disposing all the parts of the circumference of a place or post, so that the men intended to protect it, may be able to defend themselves, and make a long and advantageous resistance to the attacks of a greater number who might want to drive them out of it. Plate 4.

Q. How many kinds of fortifications are there?—A. Two; natural and artificial.

Q. Which is natural fortification?—A. That where the actual situation of a place makes it difficult of access; such would be the summit of a steep rock, or a place surrounded by deep and impracticable marshes; and such is every place where nature requires little or nothing from art to shelter it from the attacks of an enemy.

Q. What is artificial fortification?—A. That wherein art and genius supply the deficiency of nature to put themselves in a situation to repel the attacks of an enemy; and the works constructed for that purpose are called fortifications. Artificial fortification is divided into two parts, durable and temporary fortification. Durable fortification is adopted in spots and places which must at all times oppose resistance to an enemy. And temporary fortification, in a country where it is requisite to fortify a post, camp, bridge, &c. The latter is of no longer duration than the campaign or war.

Q. In what does the fortification of places consist?—A. A rampart, ditch, and covered way.

Q. What is a rampart?—A. The earth which surrounds a place, thrown up to shut out the entrance of an enemy: its object is to cover, by its height, the principal edifices of the town, and to elevate those who defend it above all the country within the range of cannon, and to give them the advantage of plunging on the enemy when he makes his approach.

Q. What is the ditch and its use?—A. The ditch is a hole or deep formed at the foot of the rampart on the side next the country; its use is to increase the declivity and height of the rampart, and to check the enemy by the difficulty of passing it: there are two kinds; wet and dry ditches, but they have their inconve-

niences; the best is a dry ditch that can be filled with water at pleasure.

Q. What is a covered way?—A. A space of about six fathoms beyond the fosse or ditch; this space is covered by a mound of earth called parapet of the covered way: it loses itself by a gentle declivity into the country at the distance of twenty or twenty-five fathoms; the declivity is called the glacis. This parapet is terminated by a row of stakes squared and pointed at top, firmly bound together: no interval is left between them more than is sufficient for the muzzle of a firelock; these stakes are called a pallisade.

Q. Are there no more fortifications beyond the glacis?—A. There are still others which are called advanced fortifications, or out-works, such as bastions, half-moons, counter-guards, great and little lunettes, horn and crown works, redoubts, &c. But their description, which is only of use to those who make fortifications a particular study, would be superfluous here.

Q. What is a citadel?—A. It is a particular spot, fortified on the side of the town and country, destined to keep the inhabitants to their duty: with that view the town is not fortified on the side of the citadel, which is so situated as to have the command of the supplies of water, and that the inhabitants or enemy, after having obtained possession of the town, cannot cut them off. The citadel must be fortified stronger than the town, because if it were weaker, the enemy would begin by attacking the citadel, and when he had made himself master of it, he would also be master of the town; whereas being obliged to commence by attacking the town, when that is taken he must then undertake a second siege against the citadel. The architects of these buildings are termed engineers, to whom the study of mathematics is indispensable.

NAVAL ARCHITECTURE.

Q. In what does naval architecture consist?—A. In the art of constructing or building ships; but as it is connected with that of manœuvring them we comprehend it all under the single title of the art of navigation.

Q. What is navigation?—A. It is an art, composed of several

parts of mathematics, which teaches how to conduct a ship from one place to another, by the safest and shortest way, and always to know in what part it is ; this is done by means of the wind, sails, compass, rudder, oars, sea charts, &c.

Q. What is a ship?—A. A house of timber, constructed in a manner adapted to floating and being conducted on the water. Its dimensions are its length, width, and depth, plate 4.

Q. In what respects do ships of war differ from merchant ships?—A. Ships of war are stronger and larger, and carry more guns than merchant ships : they are distinguished according to their size, number of decks, and quantity of guns they mount, and are divided into rates, of which there are three.

Q. What is a first-rate ship?—A. Those are so called, which are about 220 feet long, 50 wide, 21 feet deep. The dimensions, however, differ materially. They have three entire decks, and three complete batteries ; two half-decks, called the forecastle and quarter-deck, and above the quarter-deck two stages called the poops. They carry from 100 to 120 guns, 850 men, and 2150 tons burthen.

Q. How are second-rate ships?—A. They have three entire decks, forecastle, and quarter-deck and poop, and carry from 90 to 98 guns. These ships are manœuvred more easily than those of the first-rate,

Q. What are ships of the third-rate?—A. They carry from 500 to 560 men, and from 64 to 80 guns, have two whole decks. The latter class is the most manageable in storms, and are of the greatest utility in war. These three different sorts of ships form what are termed in a squadron, ships of the line ; those of a smaller size go by the name of frigates, &c.

Q. What is a frigate?—A. It is a ship of war little encumbered with wood, which does not stand high out of the water, sails fast, and the largest only have two decks. Frigates of forty-four guns have 280 men.

Q. What is a corvette?—A. It is a little frigate about fifty feet in length, carries from sixteen to twenty-four guns, and goes

by oars and sails. They are much used for voyages of discovery, and conveying intelligence.

Q. What is a cutter?—A. A small ship, light made, for the service of ships: its size is proportionate to that of the ship it attends: it goes by oars and sails. During a voyage the cutter is put on board the ship: it is only put to sea in roadsteads, and used for disembarking, &c.

Q. How are the trading ships or merchantmen distinguished?—A. By the number of tons they can carry. We speak of a vessel of 100 tons; that is to say, that can carry 2000 quintals of merchandize.

Q. What is meant by the prow and the poop?—A. The prow is that part of the ship which goes first into the water; the poop is the latter or hindermost part.

Q. What is the rudder?—A. A piece of wood, long, flat, and large, placed behind the ship in the water, and moves on hinges. It may be inclined or moved to the right or left by means of a bar or helm, which comes inside the ship. Its intention is to direct the way of the ship, make it turn, perform evolutions, &c. It is most essential to manœuvring.

Q. What is understood by the deck?—A. The floor or platform on which the guns are placed as in a battery.

Q. What is meant by a mast?—A. A great trunk of a tree fixed in a ship to fasten the yards and sails to. In a large ship there are four: the main-mast in the middle, the fore-mast by the side of the prow, the mizzen-mast towards the poop, and the bowsprit which lays on the beak-head at the prow.

Q. What are the sails?—A. An assemblage of several pieces of canvas sewed together, attached to the yards to catch the wind by which the ship is impelled. The principal are three: the main-sail, fore-sail, and mizzen-sail. The numerous others serve only to give effect to these.

Q. What is the compass?—A. A most useful instrument to navigators; it is a box carrying horizontally a magnetic or needle of iron, well rubbed with loadstone, turning freely on a pivot.

This needle, always keeping direct north and south, serves to guide the ship's course by thirty-two airs of wind marked by lines round the inside border of the box. These lines corresponding with those which are on the sea charts, designate in a certain manner the course of the ship to its destination. The rate of a good sailing ship is about twelve knots or miles in the hour. It is impossible to be a good sailor or ship-builder without a knowledge of mathematics.

PAINTING.

Q. What is painting?—A. That art which, by lines and colours, represents on a single surface all visible objects. The first idea of painting took its origin from the shadow of a man exactly outlined, and at first consisted only of a few features, which multiplying by little and little, became drawing, and afterwards received the addition of colours.

Q. Which are the essential parts of painting?—A. Composition, drawing, colours.

Q. In what does the composition consist?—A. It comprehends invention and disposition. Invention is the choice of the objects which must enter into the composition of the subject; it is taken from history or fable, or is allegorical; that is to say, the objects represented signify entirely another thing to what they in fact are. Disposition is the distribution of the objects with ingenious arrangement and wise œconomy.

Q. What do you understand by the drawing?—A. The just proportions of the figures; and it refers not only to painters but also to sculptors and engravers. Drawing embraces many things: correction, by which we understand a drawing exempt from faults of measure; that is to say, wherein prevails justness of proportions, and their conformity to the parts of the human body which it represents: taste, which depends on the disposition of the painter, and the school on which he formed himself; for example the Roman school: elegance of drawing; that is, every thing which adds to the beauty of the objects without taking from their fidelity: the character which distinguishes every species of ob-

ject and expresses its genius: Diversity which consists in giving to each personage the air and attitude proper for him, varying the countenances and actions, according to the ages of the people and character of the nations: expression, a certain movement of the body which marks the agitation of the mind: perspective, the art of representing objects according to their different distances; it consists in an accurate foreshortening of lines and correct gradation of colours; that is to say, the painter must be adroit in his management of the powerful and delicate tints of light and shade, according to the different degrees of distance.

Q. What is colour?—A. The art of imitating the colour of every object in nature, by a judicious mixture of colours. This is an important branch: it teaches what sort of colours must be used to produce the admirable effects of *chiaro-obscuro*, which gives relief to the figures and deep tints of the picture. The *chiaro-obscuro* preserves a medium between the lights and shades which enter into the composition of the subject. It is by this distribution of tints, half tints, and all the diminution of colours, that the magic of painting casts so sweet an illusion upon the senses, and strikes every mind. But what must particularly prevail in the painting is truth; that is to say, that the picture, though faint, is called true, when it perfectly imitates the character of its model. This truth, which is called simplicity, is a true and faithful imitation of the expressive movements of nature, so that flesh-colour appears really flesh, drapery, real cloth, according to their diversity.

Q. How many kinds of painting are there?—A. They are reckoned eight: Distemper, which is the most ancient. It is made with earths of different colours, diluted on gum water, and is used in decoration. Fresco, which is executed on arches and walls, on which are laid two coats of common mortar. On these coats is traced the drawing which is made on coarse paper: all the features are traced with a point, so that the paper being taken away, the tracings are clearly visible. Painting in oil has been long in use, and consists in diluting such colours as are wanted, and grinding them with oil of walnuts. The colours in this sort of painting are very brilliant, and neither change by water nor humi-

clity. Crayons is done with crayons, called pastils. They are composed of pastes of different colours, in which white-lead is mixed; the mark of the crayon is blended by the end of the finger, and by that means are made tints, and half-tints, by crushing and mixing the colours upon the very place where they are to remain. This kind of painting is not commonly in use, except for portraits, it is executed on paper pasted on cloth. Its imitation of the bloom of flesh, is infinitely more natural than any other species of painting, on account of the great brilliancy and beautiful softness of its colours. Encaustic Painting is performed with wax, colour, and fire. It is a kind of painting in wax, but very difficult to accomplish.

Miniature painting, is painting in Distemper: the same colours are employed in each, but diluted in this with water of gum arabic, instead of size. It is only used for small works, and is merely in estimation for toys and portraits: it is done on vellum with the point of a pencil.

Cameo is performed by means of one colour on a differently coloured ground; two colours are sometimes used in it. It is generally used to represent bas-reliefs of marble, or white stone.

Enamel. To form an idea of this painting, we must know what enamel is. It is composed of glass, pewter, and lead, in equal quantities, to which are added such metallic colours as are wished to be given to it. This composition attaches itself by means of fire to the metals, and remains there; and is the ground-work of that kind of painting termed Enamel. This ingenious art is an assemblage of those of the sculptor, founder, and painter: it imitates sculpture, as to relief, and method of modelling; founding, as it works by fusion; and painting, as to colours, in freshness and brilliancy of which it surpasses all. This kind of painting is principally used for cabinet pictures, and portrait.

Q. What are the principal terms of painting?—A. Groupe, the assemblage in a picture of several figures, whether of men or animals, which has some reference to each other. It is also a term of sculpture, in which it means several figures pourtrayed on the same pedestal.

Shades, the darkest part of the picture, which heighten and give effect to the other. The great art of painting is to know how to manage lights and shades, clearness and obscurity. Shades is not an entire privation of light.

Drapery, the representation of the clothes, or linen, the folds and turns of cloth and other things, neither flesh nor landscape. The painter does not dispose his draperies until he has drawn the figures naked. The first effect of draperies is to make known what they cover. To throw drapery well over, is to throw the folds well.

Profile, a side representation, or, a portrait in which is painted one eye, and one cheek.

Varnish, a thick and glutinous liquid, used to render the pictures more shining. It is made with juniper-gum, or linseed-oil and sweet aloes.

SCULPTURE.

Q. What is Sculpture?—A. An art which, by means of drawing and the chisel, imitates the objects of nature. For this purpose, different materials are used, as marble, stone, gold, silver, copper, wood. Sculptors work on the material by digging or by relief.

Q. What is meant by a figure in relief, or raised?—A. It is that which is complete in all its views: the figure shaped after nature. Bas-relief is a work which projects a little, and is attached to a ground. When the parts are projecting and detaching, they are called demi-bosses.

Q. Was this art in much use with the antients?—A. Yes, and still more with the moderns. The Turks and Romans excelled in it. We admire the high degree of perfection they attained in the fine antique statues which have resisted the ravages of time, such as the Apollo, Venus, Pallas, Antinous, Laocoon, and other precious works, which revolutionary plunder has transferred from Rome to Paris.

Q. Is not the founder's art employed in sculpture?—A. This art likewise comprehends the casting of metals for making figures, statues, and ornaments. It also includes the art of making figures

and portraits in plaster, by means of moulds ; which gives the advantage of multiplying the best works, and procuring, at a small expence, the enjoyment of the best models of the fine arts.

ENGRAVING.

Q. What is engraving ?—A. The art which makes stamps. It was the discovery of Mazo Finiguera, a goldsmith of Florence. That artist being accustomed to make an impression in clay of whatever he engraved on silver, to enamel ; and having melted brimstone into the mould, found out the method of taking his designs on to paper, by rubbing oil and soot into the impression on the brimstone. This secret soon spread abroad, and in the space of about two hundred years, the art has been carried to that point of perfection at which we now witness it.

Q. How many kinds of engraving are there ?—A. The two principal kinds are engraving in wood, and engraving in copper.

Q. What is the difference of these two kinds of engraving ?—A. In the engraving in wood, all the marks which must receive the ink and appear in the impression, are in relief, and project ; and all which is to be white, is sunk down, and does not touch the ink.

In engraving on copper, the contrary is practised : all that is to take the ink, is cut in, and all that should remain white and without a mark, is more elevated. The copper-plate printer lays the ink over the whole surface, and then carefully wipes it away ; wet paper is placed on the plate, and by the power of the press which passes over it, the paper is forced into all the excavations, and takes away the ink which was left in them, thereby receiving the impression.

Q. Are there many methods of engraving on copper ?—A. Principally two : stroke-engraving is done with the graver, on a plate of copper, polished by the burnisher ; two gravers are made use of, little steel rods, one of which is made square, and the other like a losenge, and several other small steel instruments. The plate is at first chalked out, that is to say, it is prepared with white wax, and underneath, the stamp, or drawing, to be imitated,

is reddened with red-lead : it is then laid on the plate : a round point is passed over all the features of the figure, which makes so many red traces. The wax is then cut in all the red marks, slightly touching the copper : the traces are afterwards enlarged, and the work is finished by the gravers. It is the most difficult, and also the most valuable engraving.

Engraving with aquafortis is the most used ; it is practised by most of the engravers, to come easily and speedily to the completion of their work, and not to be delayed by the resistance of the copper. For this purpose, instead of wax, they lay on one side of the plate, a light coat of varnish ; the copper being heated to receive it, the varnished side is blackened with the smoke of large mould-candles. The drawing is then chalked out, the same as for the stroke-engraving, after which, a ledge is made round the plates, with red or green wax, and a certain quantity of aquafortis, tempered, if requisite, with common water, is thrown on. Then, as the aquafortis bites into the copper, and is certain not to affect that which is greasy from the wax and varnish, it does all the work of the graver. The varnish upon the plate, is afterwards melted over a slow fire, the plate is cleaned, and is rendered complete by the graver. This kind of engraving is very advantageous to subjects which are encumbered with an infinity of traces, for the aquafortis expedites the representation, which the graver could not do.

MUSIC.

Q. What is music ?---**A.** The properties of those sounds which can produce some melody, or harmony. Guy l'Arretin, a native of Ferrara, invented the gamut, the keys, and the six famous notes, ut, re, mi, fa, sol, la. The si was added by a Frenchman named Le Maitre.

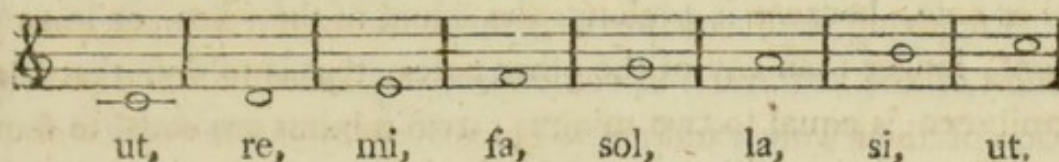
Music is distinguished into vocal and instrumental. It is the art of soothing the sense of the ear by the sound of the human voice, and of instruments which imitate that voice. It is further, the art of conveying ideas by sounds, or by the concord of several sounds united.

The human voice has higher or lower sounds, that is to say,

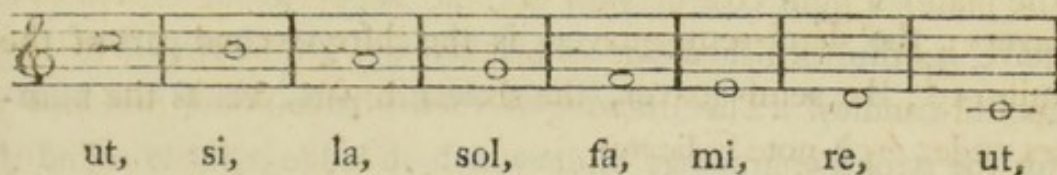
shriller or graver. The different sounds are called the tones. The intervals, or distances, between a higher or a lower sound, are also called tones.

Q. What is the gamut?---A. The gamut is the fundamental basis, or alphabet of music ; it is represented thus :

TO RISE.



TO FALL.

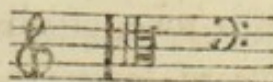


The note ut is repeated twice to make an octave.

Q. What is an octave?---A. The repetition of a note at the distance of eight diatonic degrees. We see by the above example, that the gamut is composed of seven notes, which produce five tones and two demi-tones. The demi-tones are from si to ut, and from mi to fa. As many octaves may be made as there are notes in music. There are six parallel lines, on which the notes are placed. The first line downwards is always taken. Each inter-line, or space, also counts for a degree, because it serves for placing the notes. Little lines, termed ledger lines, are likewise added above and below the other lines, to rise or fall as may be necessary.

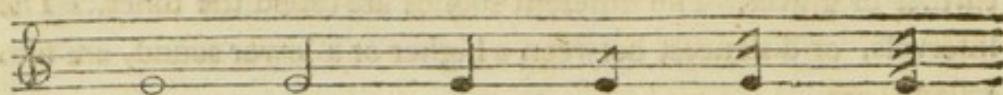
Q. Which is the cliff?---A. That which determines the name of the notes : because the note placed on the same line as the cliff, always takes its name. Under all the cliffs, the notes uniformly pursue the same order ; re follows ut, and mi, re, &c.

There are three cliffs in music, called cliffs



of sol, of ut, of fa.

The cliff of ut is put on the four first lines ; that of sol, on the second ; and of fa, on the third and fourth lines. The key of sol, only, is commonly used on the second : the other keys merely occur in old music. Being obliged to vary the value of the notes, their forms and names are changed.

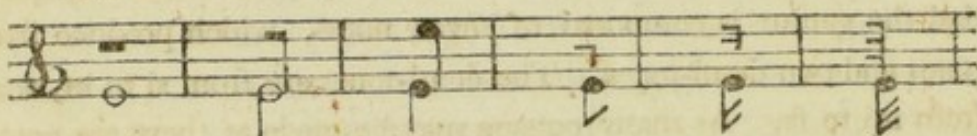


semibreve. minims. crotchets. quav. semi-quav. demi-semi-quav.
1 is equal to 2. equal to 4. equal to 8. equal to 16. equal to 32.

The semibreve is of greater value, or longer duration, than any other note, because it prolongs the sound of the voice, or instrument, longer than any of the other notes, that is to say, that one semibreve is equal to two minims; two minims are equal to four crotchets; four crotchets to eight quavers; eight quavers to sixteen semi-quavers; sixteen semi-quavers to thirty-two demi-semi-quavers; the demi-semi-quaver, is the thirty-second part of the semibreve; the semi-quaver, the sixteenth part, &c. as the numbers under each note indicate.

Q. What is a rest?---A. There are as many signs to mark silence, which are called pause, rests, &c. as kinds, and values of notes:

rest rest rest rest rest rest.



1 is equal to 2 equal to 4 equal to 8 equal to 16 equal to 32.

According to this example, the semibreve rest is equal to one semibreve; a minim-rest, to a minim, &c.

Q. What is the dot?---A. The \cdot increases the preceding note one-half its value; thus, when it follows a semibreve, it lengthens it one-half, &c.

Q. What is meant by a sharp \sharp , flat \flat , and natural \natural ?---A. There are as many flats and sharps as there are notes in the music. When the sharp is placed at the cliff, it denotes the increase, by half a tone, of all the notes on the same line. The flat, on the contrary, lowers them half a tone.

When the sharp, or flat, is placed in the continuation of the music, it only changes the tone of that note, which immediately follows it in the space of a measure. The natural contradicts a preceding flat, or sharp.

KEYS.

Music is divided into two keys, the major and the minor. For

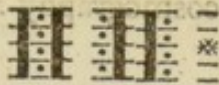
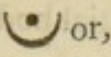
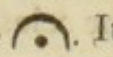
the major, two full tones are requisite to make the first tierce in rising, and for the minor, but one and a half.


Q. What is measure?—A. Measure is what determines the value of the notes, and character of the music. Without this it would only be a chaos of tones, which would be of unlimited duration. Measure is marked on the key with figures, which point out their movement and value. For the progress of the music, perpendicular bars are placed, which mark every place where the measure falls. It is divided into various time. There is common, double, triple, and quadruple time. The different times are likewise put together to make compound time.

In well regulated concerts there is always one musician, who marks and beats time: that it is which gives a whole to a great concert, because, time is the soul of music: without it there would be no harmony.

Q. Which are the signs most frequently made use of in music?—A. The cadence which is marked \times or tr. is a reprise, formed by two notes following each other. The syncope is a note, one part of which is in one time, and the other part in another. The slur is marked \frown , or, \smile , and is a species of syncope: it directs the different notes which it covers, to flow one into the other.

The refrain, or lesser repetition, is marked \circ . It points out that note of the song, which commences a repetition from it to the end.

The grand refrain is thus marked . It divides an air into two parts, each of which goes twice over. The point of rest, or organ stop, is marked thus  or, . It produces a dying tone, which, for an instant, suspends the movement.

In music, little notes  are often met with: they are merely embellishments, which should be sounded very lightly, and which do not count in the measure. Trill, trillo, or shake, is a certain quantity of notes which rise by degrees, and sink successively to the first degree.

Q. What are the different sorts of music?—A. The principal are the overture, symphony, concerto, sonato, &c.

The overture is a species of instrumental music with which the performance opens. Therein may be observed the different characters which prevail in the piece, whether grand, pathetic, or lively. The symphony is always executed by many instruments, and has no decided characteristic ; it is not unfrequently used as the opening of a concert. The concerto has great reference to the symphony. The principal object, which is called solo, is executed by a single instrument, to which the others respond alternately. The sonata is a piece composed of many kinds, tender, graceful, gay, &c. It is performed by only one instrument, but accompaniments are sometimes added to it.

NATURAL SCIENCES.

Q. Which are the natural sciences ?—A. They are principally three, natural history, physics, and chemistry.

Q. What is natural history ?—A. The science which makes us acquainted with all the bodies of nature, by their external characteristics, without regarding their properties.

Q. What are the different branches of natural history ?—A. Six ; Cosmography, Geography, Geology, Mineralogy, Botany, and the History of Animals.

COSMOGRAPHY.

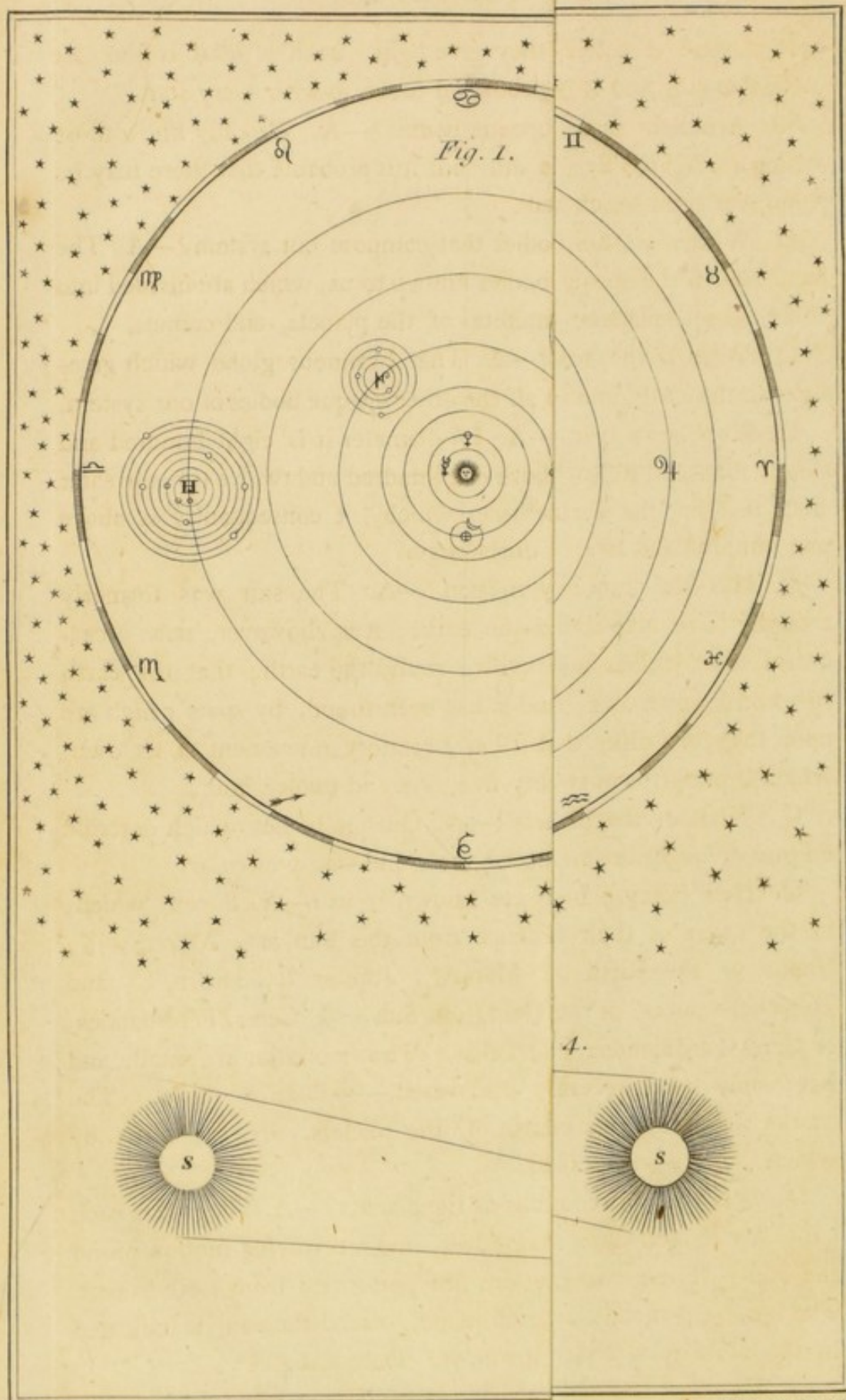
Q. What is cosmography ?—A. That science which describes the world.

Q. What is the world ?—A. The world, or universe, is the assemblage of all the celestial bodies existing in the immense space, which comprehends the earth and the most distant stars.

Q. How are the celestial bodies divided ?—A. Into bodies luminous of themselves, and into opaque bodies not luminous of themselves, but which derive their light from the luminous bodies.

Q. Which are the luminous bodies ?—A. The sun and the stars. The latter are so numerous that they cannot be counted. Plate 5. fig. 1, 2.

Q. What are the luminous bodies for ?—A. They appear to have been destined by God, to occupy the centre of the motion of a certain number of opaque bodies, which form what is called a



system, and to which they give light: such at least is the case with the sun, and it is presumed to be so with every star.

Q. Are there many opaque bodies?—A. We only know those which are lighted by the sun, but it is probable that there may be a number round each star.

Q. Which are the bodies that compose our system?—A. The sun, and all the opaque bodies known to us, which are divided into three classes, planets, satellites of the planets, and comets.

Q. What is the sun?—A. That luminous globe which gives light to the earth, and to all the other opaque bodies of our system.

Q. How large is it?—A. In diameter it is eight hundred and ninety thousand miles, above one hundred and twelve times greater than that of the earth, than which, it consequently is above one hundred and twelve times larger.

Q. Has the sun any motion?—A. The sun was formerly thought to revolve round the earth; it is, however, now ascertained, that it does not revolve round the earth; that the earth turns on its own axis; and it has been found, by spots which are upon the sun's disk, that it has a rotatory movement of its own, which it performs in twenty-five days and twelve hours.

Q. What are the planets?—A. Opaque bodies which describe ellipses of larger or smaller degrees, and nearly circular.

Q. How many planets are known to us?—A. Seven, which, in the order of their distance from the Sun are, Mercury ☿, Venus ♀, the Earth ♂, Mars ♂, Jupiter ♃, Saturn ♄, and Herschel-uranus, or the Georgium Sidus ♅, Ceres, Ferdinanda, or Ceres-Ferdinanda, and Pallas. The two latter are small, and have only been recently discovered.—Plate 5. fig. 1. The marks adjoining the course of the planets, are the signs by which they are represented.

Q. What are the motions of the planets?—A. They have each a rotatory motion upon themselves, and a revolving motion round the sun. These two motions are performed from west to east. The revolving motion of each planet, round the sun, is indicated by the circle upon which it moves. Plate 5. fig. 1.

Q. How is the appearance of planets distinguished from that of

other stars?—A. Because they have not a twinkling light like the stars, and they each are of a particular colour.

Q. What is the form of planets?—A. It seems as though they had been formed round, and that the rapidity of their motion had in the space of time rather flattened them on the poles and swelled them towards the equator.

Q. What is there remarkable in the earth considered as a planet?—A. That it turns on its own axis in 23 hours 56 minutes and 4 seconds: and round the sun in 365 days 6 hours 9 minutes and 10 seconds. Its diameter is 7942 miles and its mean distance from the sun 95,173,000 miles. Its orbit round the sun is named the ecliptic.

Q. What is the velocity of the earth?—A. It moves at the rate of nearly six leagues and a half in a second round the sun, and every part of the equator travels over 1428 feet in a second by its rotatory motion on itself.

Q. Which planet is the most rapid in its motion?—A. The Herschel, which being at the greatest distance, travels 11,100 miles in a minute; a rapidity almost inconceivable.

Q. What are called satellites?—A. Opaque celestial bodies brought into the space by the attraction of the planets round which they move. We know of but four planets that have any, the Earth, Jupiter, Saturn, and Herschel, plate 5. fig. 1. They are pointed out by little white points placed on circles, which express their revolution round their planet.

Q. Which is the earth's satellite?—A. The moon, which the Greeks had classed in the number of planets, and to which they had given the name of Selena, whence comes the word selenography, signifying description of the moon, plate 6. fig. 1. It is indicated by a crescent, the sign generally used in representing it.

Q. What time does the moon occupy in performing its revolution round the earth?—A. 27 days 7 hours 45 minutes and 4 seconds. It does not describe a circle, but an ellipsis. Its distance from the earth is 85,324 leagues by a mean reckoning: or at one time it is further, and at another nearer. The point

of its most remote distance is termed apogæum, and its nearest perigæum.

Q. What is called the phases of the moon?—A. The different forms of increase and diminution it presents to us during the 28 to 29 days it occupies in making its revolution. Those changes of appearance, or phases, are four: the new moon, first quarter, full moon, and last quarter.

Q. What is the cause of the phases of the moon?—A. Its situation in regard to the sun and the earth: the moon not being luminous of itself, and only shining by the light it receives from the sun, and which it reflects exactly like a mirror; when all that part of it which is lightened by the sun is turned towards the earth, it seems round, and is then called at the full, or a full moon; when its part which is not lighted is towards us, we cannot see it; and as by degrees the light part reappears, it is called a new moon. When after the new moon it shews us the half of its lighted part, it is said to be in its first quarter; and when after the full, by decreasing, it shews us but half of its lighted part, it is called in the last quarter.

Q. How many satellites have the other planets?—A. Jupiter is known to have four, plate 5. fig. 1. This sign ♃ denotes the planet Jupiter. Only five were known to belong to Saturn; but Dr. Herschel has discovered two more, which make his seven, same plate and fig. sign ♄, which points out Saturn. Herschel has nine, as represented in the same plate and fig. by the sign ♄.

Q. What are called comets?—A. Those planets, of which we neither know the number nor revolutions. We only know that they describe very long ellipses round the sun: these bodies appear to be accompanied by long sheaves of light, which impressed the ancients with a belief that the appearance of a comet presaged some great event.

Q. What are fixed stars?—A. Bodies luminous in themselves, which are not our sun, but it is supposed that they may be suns to as many other planetary systems.

Q. What is the distance of the stars from the earth?—A. It has not been exactly determined; but we know that the nearest are at least 400,000 times further off than the sun.

Q. How are the stars divided?—A. Into groupes or constellations, of which there are now several; those on the south side are therefore, termed southern constellations: and those on the north, northern constellations.

Q. Were all these constellations known to the antients?—A. No; there were but the twelve constellations or signs of the zodiac very antiently known; the others have been formed successively, and some of them within a very short time.

Q. How are the twelve signs of the zodiac denominated?—A. The three spring signs are Aries ♈, Taurus ♉, Gemini ♊; the summer signs, Cancer ♋, Leo ♌, Virgo ♍; those of autumn, Libra ♎, Scorpio ♏, Sagittarius ♐; and the winter signs, Capricorn ♑, Aquarius ♒, Pisces ♓.

Q. What are meant by spring, summer, autumn, and winter signs?—A. The signs of the spring are those in which the sun is at that season, and the same in regard to summer, autumn, and winter.

Q. What is the sphere?—A. Globes and machines composed of circles used in cosmography, to point out more intelligibly the position of the stars. The armillary spheres are composed of many points and circles, the knowledge of which is necessary in astronomy. The globes are species of balls wherein are traced the position of the stars distributed into constellations, and are called celestial globes; or the situation of the different countries, waters, and cities are laid down on them; and these are terrestrial globes.

Q. What information can you give upon the points and circles of the armillary spheres?—A. At the commencement of cosmography, we were informed that the earth turns round in the space of about twenty-four hours: a line has been imagined which traverses it so that the earth turns upon that line as a wheel on its axis. That line is called the earth's axis: the two extremities of that line are the two poles; one north, or arctic pole, the other south, or antarctic pole. The horizon is next supposed; and of this there are two kinds, the visible and the rational horizon. The visible horizon is the circle which seems to terminate our

view when we are placed in the middle of a large plain; the rational horizon is a circle which we cannot see, but which is represented paralld with the former, and which would divide the earth into two equal parts. It indicates the rising and setting of the stars. Another circle is the equator; it is at an equal distance from the two poles, and likewise divides the earth into two equal parts. The meridian is the circle which intersects the two poles, and in which the sun always is at noon: that likewise divides the earth into two equal parts, the one eastern, the other western. The ecliptic is again another circle which intersects the equator, in reference to which it has an inclination termed the obliquity of the ecliptic. This circle contains a border named the zodiac, whereon the twelve constellations are placed. The circles which we have just spoken of are greater circles, because they divide the earth into equal parts. The following divide it into unequal parts, and are called lesser circles; the two tropical and the two polar circles. The tropical circles are those which describe the sun in the two most distant points from the equator. The polar circles are two other small circles parallel to the tropics, and between the tropics and the poles.

Q. What are called the zones?—A. They are five bands, determined by the polar and tropical circles. The torrid zone between the two tropics; two temperate zones, comprehended each between a tropic and the nearest polar circle; and two frozen zones between each of the poles and polar circles.

GEOGRAPHY.

Q. What is geography?—A. The description, mathematical, physical, and political, of the earth.

Q. Into how many parts is the earth divided?—A. Into four; Europe, Asia, Africa, and America.

Q. By whom was the earth peopled?—A. By the children of Noah; Shem, Ham, and Japheth.

Q. What was the portion of each brother?—A. Shem had the southern parts of Asia; Ham, Africa; and Japheth, Europe, and the northern parts of Asia.

Q. Why is America called the new world?—A. Because it was only discovered towards the end of the fifteenth century, so that it has been known but about 300 years.

Q. By whom was America discovered?—A. By Christopher Columbus, a celebrated Genoese navigator, fitted out by Ferdinand king of Spain, in 1491.

Q. Why then was it called America?—A. Columbus was, it is true, the first author of that important discovery: but Americus Vesputius, a Florentine, despoiled him of part of his glory, because he also first discovered, in 1497, the part of the continent situate to the south of the equinoctial line, to which he gave his name in the narrative of his voyage, and under the name of America was afterwards comprized all the isles and the continent which form the new world.

Q. Which quarter is the most extensive?—A. Asia.

Q. Which contains the most gold and silver mines?—A. America.

Q. Which is the richest in natural productions?—A. Asia, which furnishes spices, precious stones, salutary drugs, &c.

Q. Which is that where the heat of the sun is most ardent?—A. Africa, inhabited principally by Moors and Negroes.

Q. Which is the most peopled, and where the sciences are most cultivated?—A. Europe, the least of the whole.

Q. How are the four sides or regions of the world denominated?—A. South, north, east, west.

Q. How is one known from the other?—A. By turning the back on the rising sun, the left hand is towards the south, right towards the north, back to the east, and face to the west.

Q. By what names are the winds called which blow from these four sides?—A. By the same names, and in the same order.

Q. What is a sea?—A. An immense expanse of salt and bitter water.

Q. Why is its water salt and bitter?—A. By the combination of divers substances, of which salt is the principal, proceeding from the bottom of the sea, with others brought by the rivers that fall into it, and those again accruing from the atmosphere by exhalations from the earth.

Q. How are the seas divided?—A. They are generally distinguished by their situation: we therefore say the South-sea, North-sea, &c. the general denomination of a great sea is that of ocean.

Q. What is a strait?—A. Sea confined between two continents.

Q. What is a continent?—A. Great extent of country not intersected by seas.

Q. What is a gulph?—A. Considerable sea which advances up the country, and is there stopped without losing its communication with the sea.

Q. What is a promontory?—A. Point of land more elevated than, but running into, the sea: it is now termed cape.

Q. What is an island?—A. Land surrounded on every side by water.

Q. What is a peninsula?—A. Land surrounded by water, except in one place where it joins the continent.

Q. What is an isthmus?—A. The tongue of land which joins the peninsula to the continent.

Q. What is a lake?—A. Great extent of water which never dries up, but has no current.

Q. What is a river?—A. Confined running water which passes more or less rapidly through a great extent of country, and afterwards discharges itself into the sea.

Q. What is a rivulet?—A. Current of water of the same nature as the preceding, but not so large, and which loses itself in a lake or river.

Q. What is a brook?—A. A very little rivulet.

Q. What is the origin of rivers and rivulets?—A. It was formerly believed that they were supplied by subterraneous channels from the sea; but we now know that rain and snow produce them, as is proved by their becoming extremely low in times of great drought. It must further be observed, too, that rivers and rivulets almost all take their rise in mountains or high countries.

Q. What is a pond?—A. It is a water which, coming from a river or spring, is detained by a dam or sluice, and is used for preserving fish.

Q. What do you call marshes?—A. Shallow water without an outlet, which stagnates, and often dries by the heat of the sun.

GEOGRAPHICAL MAPS.

Q. What are geographical maps?—A. Plane figures which represent the surface of the earth, or some part of it, according to the laws of perspective, and point out the situations of countries, provinces, mountains, seas, rivers, towns, &c.

Q. How many kinds of geographical maps are there?—A. Two: universal and local. Universal maps are those which represent all the surface of the earth, or the two hemispheres: they are commonly called maps of the world. Local maps are those which represent some particular countries, or parts of a country: they are commonly termed topographical maps.

Q. What are the requisites of a good map?—A. First, that all the places be laid down in the exact situation they in fact have on the earth. Secondly, that the elevation of the different countries are one with another the same in proportion on the maps as they are on the surface of the earth. Thirdly, that the different places be respectively upon the map, at the same distances from each other, and in the same situations, as on the earth itself.

Q. How is the bearing of the map to be ascertained?—A. When it is not otherwise specified, the top of the map is north, the bottom south, east to the right, and west to the left.

Note. Not to interrupt the order of the sciences, the sequel of this is given at the end of the work under the title of Geography for Children.

GEOLOGY.

Q. What is geology?—A. The examination of the interior of the earth.

Q. What is the occupation of a geologist?—A. He examines rocks and mountains; visits subterraneous places, such as quarries and mines, to see what are the different materials of which the earth is composed, and the different beds or strata which lay one upon the other in the interior of our globe.

Q. What is the tendency of geology?—A. Although geologists have long endeavoured to explain, by their knowledge of geology, the formation of the earth, they have not yet satisfactorily succeeded in such explanation; but, by the arrangement and disposition of the different substances they meet with, they prove curious and interesting truths.

Q. What are the principal facts that geologists prove?—A. The sea-fish and beds of shells, which are found in so great quantities, and so far from the sea, prove that it formerly covered those places, and that it is perhaps from the deluge itself, that all those marine bodies, of which entire rocks have been found, come: a great deal of it is seen in the stone of which Paris is built. Arcueil, near that city, is built of stones almost wholly composed of shells: these marine substances abound, too, more or less, in all the hilly and rocky parts of Great Britain.

Q. What is the difference between geology and mineralogy?—A. Geology only embraces great masses, and mineralogy smaller, which may be useful to the arts. It is after all, however, only a branch of geology, referring not to the position of substances in the bowels of the earth, but to their specific nature. Geology is rather curious than useful, but is nevertheless a guide to the mineralogist.

MINERALOGY.

Q. What is mineralogy?—A. The knowledge of the numerous bodies in the interior of the earth, termed minerals and stones.

Q. Into what classes are these bodies divided?—A. Into four orders: earths and stones properly so called; fossil salts soluble in water; combustible substances not being metallic; and metallic substances.

Q. What are the different substances which compose the first order?—A. The millstone, rock crystal, grit, sands, agates, precious stones, carnelians, sardines, silex, petro-silex, flint, chalcedony, jasper, lapis, oriental stones, crystal gems, spaths, asbestos, gyp-

sum, calcareous earths and stones, marbles, calcareous spaths, alabaster, and stalactites.

Q. What is millstone?—A. That which is used to make the grindstones of a mill. When it is wanted of that form, the requisite size and thickness are marked out, and into the notch so made, are driven wooden wedges which are well watered; the wedges swell and detach the stone in the given form.

Q. What is rock crystal?—A. A transparent stone, with or without colour, found in all parts of the world where there are chains of mountains, and commonly in watery grottos and caverns: those are most esteemed which are transparent and hard. When they are coloured, they are named false precious stones. They are likewise used in the imitation of precious stones, by casting them with colouring substances.

Q. What is the stone called grit-stone?—A. Compound of sand, the particles of which are more or less adherent, and it serves for building, paving, filtering, and grinding.

Q. What is sand?—A. It may be considered as formed by the remains of old stones. There are several sorts: some are used for making glass, some for cement, and many others are applied to domestic purposes.

Q. Where are agates procured?—A. The finest come from the east; they are white and dappled: those from the west are differently variegated. The herbalised agate from Mocha and Arabia shows the forms of mosses and bushes tolerably well depicted. These herbalisations are owing to metallic substances which have filtered into the agates.

Q. What are made of the chalcedony?—A. These stones, the beauty of which consists in a dull milky colour, a defect in many others, are used for making rings, seals, and other bijoux, of a small size, because they are only found in small pieces.

Q. Are carnelians rare?—A. Perfect carnelians are very rare: it is said that they come from Persia, and that the quarries are lost. Ordinary carnelians come from India, Arabia, and Egypt. Bijoux, much in request, are made of them.

Q. What is the principal use of Sardines?—A. For being engraved, because they do not retain the wax, and take a beautiful polish. Those of the east are found in Cyprus and Egypt; and of the west, in Silesia and Bohemia. The sardonyx is that which has concentral strata.

Q. What is there particular in the silex or flint?—A. The silex is found in shapeless masses in chalk-pits, disposed nevertheless in horizontal beds.

Q. What is the petrosilex?—A. A kind of stone of which the jasper forms itself. It does not take a fine polish, and its semitransparency is not unlike that of honey: it is very frequently found in rocks.

Q. What are flints?—A. They are differently coloured. Their composition, which changes into glass, is not well known: they are employed, especially the white, in glass-houses, and are very common.

Q. Are there not many sorts of jaspers?—A. Yes, and they all take a polish more or less brilliant. The finest come from the Indies, but they are often found also in Bohemia, Saxony, Sweden and France. They are used in making pretty ornaments and valuable furniture.

Q. What is the colour of the lapis?—A. Blue. There is one sort called the lapis lazuli, which is well known as an article of commerce: it comes from Asia. As its colour is very beautiful, and is not affected by the air, it is extracted in the form of powder, then called ultramarine blue.

Q. Are there not many sorts of oriental stones?—A. The topaz, sapphire, and ruby. There are, indeed, two kinds of the topaz, the eastern and western; the first is more beautiful and in greater estimation than the other: it is the third after the diamond for hardness, and is found in Arabia and Egypt; the sapphire ranks next to the ruby for hardness. It is brought from the kingdom of Pegu and from Ceylon. The rubies are next hardest to diamonds; the finest are brought from the kingdoms of Ava and Pegu.

Q. What are the different kinds of crystal gems?—A. The granates

which come from Calicut and Ethiopia, and the finest from Syria; the Iacynth found in Arabia, susceptible of a very lively polish; the Oriental emerald, which holds the fifth rank among precious stones; the finest are of a beautiful green. Some are found very large in the East Indies and Egypt; they are also met with in Peru, and one of them of an immense size was an object of worship among the inhabitants when the Spaniards atchieved that famous conquest.

Q. Are there not also several kinds of spaths?—A. There is the sparkling spath of Siberia, green grey, and fish-eyed, and the feld spath, which includes many sorts.

Q. What is the asbestos?—A. A fossil substance met with in many countries. It is remarkable for the property it possesses of not burning but blanching in fire. The East Indians formerly possessed the art of making fine linen with it. Charles the Fifth was likewise said to have had many napkins made with this substance, and that he amused himself with throwing them into the fire before company, to make them white when they were dirty.

Q. What is gypsum?—A. The substance used in making plaster. It must be baked with care, for it does not take consistency readily, if it has been originally calcined or exposed to the air. It is found in strata in chalk-pits.

Q. To what is the name of calcareous earth applied?—A. To chalk and all calcinable earths; that is to say, reducible into lime by being properly burnt.

Q. What is called calcareous stone?—A. Those stones the basis of which is chalk. They take in general but a bad polish, except, however, marble, which on the contrary takes a very fine polish, although its basis is chalk. This stone is formed of the remnants of marine shells, as is seen on some marble by the traces which they have left in it. Its use is well known. The marbles of Paros were very much esteemed among the antients. We have succeeded in making a substance nearly resembling marble called stucco; but it is not equally solid. It is also known how to colour white marble with vegetable tints or metallic solutions.

Q. What is calcareous spath?—A. A crystallised calcareous stone

found in wet subterraneous caverns. The calcareous spath of Ireland is clear and transparent: it has the property of making every thing seen through it appear double.

Q. Whence comes alabaster?—A. From stalactites, which are stony concretions attached to the bottom of subterranean grottos. It is not susceptible of so fine a polish as marble, because it is less hard. The finest is formed in the grottos of Paros and Antiparos.

Q. What are stalactites?—A. They also are stony substances formed in water, or which having been drenched by that fluid in subterranean cavities, have fastened there and hardened into different shapes. They are sometimes found in the arches of grottos, and at others on the walls of the galleries of mines.

Q. What are the substances of which the second order is composed?—A. The principal are mineral alkali, common salt, borax, sal-ammoniac, salt of nitre or saltpetre, alum and vitriol.

Q. What is mineral alkali?—A. The substance commonly called pot-ash, a lixivial salt in very common use. Natron which is included in this class is dissolved by the humidity of the air alone.

Q. What say you of the common salt?—A. There are two kinds, one found in the heart of the earth in enormous masses, the extraction of which occupies a great number of workmen in the mines of Poland and Hungary, the finest that are known; and sea salt drawn from sea water by evaporation either of fire or the sun. Its uses are generally known.

Q. What is borax?—A. A salt brought in a crude state from Bengal, Ormus, and Upper Tartary. It is subjected to chymical operations before it is brought to sale, and is valuable in medicine.

Q. Where is sal-ammoniac found?—A. The natural kind sublimates of itself, through the chinks of the brimstone mines of Puzzuoli. It is also collected at the upper crater of Mount Etna. The artificial kind formerly came from Egypt and Syria, where it was made from the excrements of animals, particularly of camels, but it is now manufactured in England and France.

Q. Where is nitre formed?—A. In numerous places where there is a free circulation of air, and in the artificial beds. It is universally known.

Q. What is the use of alum?—A. Prepared alum, for the natural kind is little known, is employed by colourmen, dyers, and in many manufactures. It is also of great utility in medicine, and is extracted from mines in France, England, Italy, Sweden, &c.

Q. Are there not two kinds of vitriol?—A. There is natural vitriol which is found in stalactites against the walls of subterranean caverns, or it separates itself from waters impregnated with principles of pyrites; and vitriol obtained by different means from pyrites, vitriolic earths, and sometimes from waters which contain those mineral salts. It is employed in the arts and in medicine.

Q. What are the principal substances of the third order?—A. The diamond, jet, ambergris, and yellow amber or amber.

Q. What is the nature of the diamond?—A. Modern chymists assure us, that it is the pure principle of coal, which principle they term carbone. It is the hardest and most brilliant body in nature. They formerly all came from Asia, from the kingdoms of Golconda and Visapour; but for some years past they have been found in Brazil.

Q. What is jet?—A. A sort of fossil bitumen found in layers in the earth at pretty considerable depths. Pendants for the ears, bracelets, and other ornaments which receive a very fine polish are made of it.

Q. Whence is ambergris supposed to come?—A. From the excrements of the whale, but it is not certain. Its agreeable odour makes it much in request, and perfumers turn it to good account. It is collected on the surface of the sea or its shores in many places, in lumps of a larger or smaller size. They have been met with of a hundredweight.

Q. Is amber of the same nature as ambergris?—A. it is a bituminous substance found in the Baltic sea on the Prussian coasts, takes a polish equal to the agate, and makes very fine varnishes. Before we were acquainted with the beautiful jewels of the east, it was very precious and served for ornament.

Q. What are the metallic substances of the fourth order?—A. Those best known are arsenic, zinc, mercury, tin, lead, iron, copper, silver, gold and platina. There are several other metals, but they are little known, and not much used.

Q. What are the properties of arsenic?—A. It is a most powerful poison obtained in Saxony by the extraction of azure blue from cobalt, another kind of metal with which it is often mixed.

Q. To what uses is zinc applied?—A. It is used by potters, founders, and goldsmiths, and is met with in many countries but rarely pure.

Q. Where is mercury found?—A. Mercury or quicksilver is found in the earth at great depths, and those who are employed in extracting it do not live long. Mercury mixes with almost every metal; it is used for silvering looking-glasses, and working gold and silver mines.

Q. What is tin?—A. The softest and lightest metal that we know of. The most celebrated mines are those of Cornwall, Bohemia, and Saxony. This metal enters with copper into the composition of bronze, and by different modes of manufacture is converted into utensils and dishes. It is used in the potteries and by enamellers to make enamel.

Q. Where are the lead-mines found?—A. In England, France, and many other countries. There almost always is silver, mixed with it. When it has been purified and reduced into sheets, it is used in making gutters, pipes, &c. It is very useful in the arts; but those who prepare it are often attacked with a very dangerous malady known by the name of the lead cholic.

Q. What is iron?—A. Next to gold it is the most tenacious and next to tin the lightest metal. It is very common and widely diffused, which is extremely fortunate, for its advantages are experienced in nearly all the arts. The iron-mines are the most shallow: they have been known even at the surface of the earth. The loadstone which is contained in iron-mines has the property of attracting iron and directing it towards the pole. Steel is but prepared iron, and not purified as was formerly thought.

Q. Is copper frequently met with?—A. In all parts of the world. Sweden, Denmark, and Germany are the countries which supply the greatest quantities. Brass is a mixture of copper and zinc; latten is copper mixed with calamine; and bronze, copper mixed with tin.

Q. Where are the richest silver-mines?—A. In South America in very cold temperatures. The exhalations which arise often strike the workmen employed in working the mines with death. Its uses and value are generally known.

Q. Does gold merit that preference which it has obtained over other metals?—A. Yes; because it surpasses them all in splendor and in weight, and by its property of being malleable and very ductile: a great proof of which we have in gilding. A natural philosopher has calculated, that with two ounces of gold he can cover a silver thread above 290 miles long. Another says, that it will take 30,000 leaves of gold, laid one on the other, to make the thickness of a line, or the twelfth part of an inch,

Q. What is platina?—A. A metal but recently known, but of great utility from its properties of resisting a very powerful action of fire, and being extremely hard. It is used for making rules on which measures are engraved: but is very difficult to work.

BOTANY.

Q. What is botany?—A. A science which teaches a methodical knowledge of vegetables and all their parts.

Q. How many distinct parts are there in plants?—A. Generally four; the root, the stem, the leaves, and the parts of fructification.

Q. What is the root?—A. The lower part which makes the plant immoveable, and derives from the body in which it is insinuated nourishment for itself and the plant.

Q. Into how many parts is the root divided?—A. Three: an upper or neck from which issues the stem; a middle or body; and a lower or radicle, which imbibes the suction necessary for the nourishment of the plant.

Q. Are not different appellations given to the roots according to their duration?—A. Yes; that is named annual, which grows and dies in the same year; biennial which lasts about two years; and perennial which lasts several years.

Q. What is the direction of the roots?—A. Some strike perpendicularly with the earth, others horizontally, and others

obliquely : they in general have a tendency to the centre of the earth, but there are some which take a different direction in search of a vein of better earth.

Q. What is the stem ?—A. That part which grows out of the neck of the root, which rises above the surface of the earth, and bears the other parts of the plant.

Q. Have all plants stems ?—A. Some plants have not stems, and are therefore termed acaules.

Q. How are the stems divided ?—A. Into ligneous stems forming a body called wood : and herbaceous stems, as in plants vulgarly called herbs, which are not ligneous, and which perish when they have borne their fruit. This is also a distinction of the stalk which only bears flowers : straw which is hollow and intersected by knots, and the trunk which is surrounded by bark.

Q. What is the position of stems ?—A. They are often perpendicular to the surface of the earth, sometimes horizontal, and at other times creeping.

Q. What is the form of a stem ?—A. The greater part are cylindrical ; but there are some rather flat ; others triangular, square, pentagonal, &c. Some are also called geniculous, knotty, articulated, climbing, circular, and spiral.

Q. What is the position of the branches of the stem ?—A. When they issue indiscriminately from different parts of the stem, they are named alternate : when they come out at two points directly opposite they are termed opposite ; when they come out in a ring round the stem they are called verticillated.

Q. What direction do the branches take ?—A. They are divergent, collected, or scattered.

Q. How are branches denominated according to their uses ?—A. Pedunculous, bearing many flowers ; pedicillous bearing but one ; and branch which bears the leaves.

Q. What is there to be observed on the branches ?—A. Tendrils, thorns, prickles, glands, and beards.

Q. What are tendrils ?—A. A kind of little slender flexible branches, like spiral threads, by means of which the plant attaches itself to neighbouring bodies.

Q. What are thorns?—A. Points which project from the wood of the stem, and are covered with bark.

Q. What are prickles?—A. They are points likewise, but which come from the bark and not from the wood of the plant, and are easily removed.

Q. Which are glands?—A. Little vesicles on the branches and leaves, filled with juice peculiar to each vegetable, and which occasion a great part of the drops found on plants in the morning.

Q. What is the beard?—A. Little excretory tubes on different parts of the plants. They are divided into silk, down, cotton, and wool, according to their length, and harshness to the touch.

Q. What is the structure of the stem?—A. It is composed of the epidermis, a thin and external membrane or cuticle, not unlike a sheet of vellum; of the cellular membrane, a green and succulent substance under the epidermis; alburnum or blea, composed of skins one over the other, and placed immediately under the cellular membrane; lignum or wood, the most solid part of the stem under the bark, which acquires an additional layer every year; and lastly of the pith, a spongy substance lodged in the centre of the ligneous strata, and which extends from the root to the top of the stem.

Q. What end does the stem answer?—A. It bears branches, leaves, flowers, and fruits.

Q. How do trees grow?—A. In two ways: in length by shoots which follow each other, and take place every year; and in bulk by new layers, formed two by two between the wood and the bark, one of wood the other of rind.

Q. Whence proceed the inscriptions and extraneous substances which are sometimes found in the interior of wood?—A. These inscriptions having been made on the extraneous substances, placed there by cutting the wood, and the wood increasing by successive layers which cover the first, those inscriptions and foreign bodies, have been recovered by the new strata of the wood without being defaced. It is, therefore, not surprising that we

have found bones, forks, crosses, and inscriptions in the interior of some trees.

Q. To what size do trees grow?—A. It varies according to the soil and climate. Oaks are large at the foot of a mountain, and small at its summit. But some trees push out very fast. The agave has been known to increase its height 25 feet, and its diameter seven inches in ten weeks; bamboos have grown fifty feet in three months; and in the Indies there are rattans exceeding 300 feet.

Q. What bulk do trees attain?—A. That likewise varies greatly. On Mount Etna there was a hollow chesnut-tree, so large that a shepherd and his flock could be sheltered in its trunk: it was 150 feet round. Linnæus also mentions the dragon's-blood of the isle of Teneriffe, which is thirty-four feet in circumference.

Q. Do trees live long?—A. It has been proved that oaks may live from 2 to 300 years in good land; olives about 300. The cedars of Lebanon lived so long, that the ancients regarded them as indestructible. The baobats which attain a circumference of 435 feet, are supposed to live at least 6000 years.

Q. What is ingrafting?—A. An operation of gardening that consists in taking from a cultivated tree a branch or portion of the bark which contains a bud, and inserting it into another uncultivated or wild tree; the consequence of the operation is, that the fruits are greatly ameliorated, and become of the same species as the graft.

Q. Are there not different modes of ingrafting?—A. Five principal ones: the cleft graft, crown graft, whip graft, cheek graft, and the graft by approach.

Q. What are leaves?—A. Parts ordinarily thin and flat, or the organs of respiration and motion of plants. They have different forms and positions, from which they derive the names they are distinguished by: but they are generally divided into simple, as in the apple, apricot-tree, &c. or into compound, as in the large Indian chesnut. They are commonly green, but by depriv-

ing them of light, they may be rendered entirely, or in part, colourless.

Q. Why do you call the leaves organs of respiration or motion?—A. Because they serve to suck in the air and humidity, and they really move. We all know the motion of the sensitive plant when it is touched. There are others which move more remarkably. The *dionæa muscipula* folds up its leaves when it is touched, and thereby catches the flies that come to suck a saccharine liquor which it distils; the *acacia pudice* moves from the mere shadow of a man who is passing. Many other plants shut at the approach of night; and this is called the sleep of plants.

Q. What is the fructification?—A. The assemblage of the plants destined to produce the fruit.

Q. Into how many parts is it distinguished?—A. Five: the calyx, corolla, stamina, pistil, and fruit.

Q. What is the calyx?—A. A prolongation of the rind generally green, which surrounds the parts of fructification.

Q. Which is the corolla?—A. That part the most apparent and brilliant, vulgarly called blossom. The corollæ are distinguished into monopetal corollæ, or those of a single piece, and polypetal corollæ, or of several pieces.

Q. What are the stamina?—A. Certain filaments more or less long, and which have at their summit a small head full of a kind of dust: the filament is called a fibre, and the dust pollen. The number of the stamina varies considerably in the different species of plants. In some there are not any, and others have a great quantity.

Q. What is the pistil?—A. A small differently formed body which generally occupies the middle of the flower. The lower and thickest part is called the ovary. When it is terminated by a fibre, the fibre takes the name of style, and its upper extremity ordinarily puffed out and divided is termed stygma.

Q. What is the fruit?—A. The produce of the fructification which follows the blossom and contains the seed. These fruits are of different forms and kinds.

Q. How are the fruits divided?—A. Into two classes, dry and mellow, or fleshy. The dry fruits are, the capsule, the follicle, the pod, the husk, the corn, and the nut; the mellow fruits are, the berry, the drupa, and the apple.

Q. What is the seed?—A. Substance commonly contained in the fruit, and which includes all the parts of a new plant, exactly similar to that which produces it, and discloses itself in its growth.

Q. Do all plants come from seed?—A. The greater part come from seed, and it is probable that all have seed; but in some plants it has hitherto not been discovered, on account of its diminutiveness and lightness, which occasions it to be carried away by the winds, rivers, and seas, which introduce plants into land where nothing had ever been sown by man.

Q. Are there not different methods of botany?—A. That of Tournefort, founded on the ligneous or herbaceous stems; the number of the petals and the form of the corollæ; that of Jussieu, founded on the number of seminal leaves, called cotyledons, of the petals and the position of the stamina; and lastly, that of Linnæus, founded on the number, insertion, proportion, connection, and separation of the stamina. It is called the system of Linnæus, because his method was founded on one only object, the stamina, and is most generally adopted.

Q. What is the use of these methods?—A. To find out the name of unknown plants; to ascertain which, the following method is pursued: they have a book wherein is the name of every plant in systematic order; the characteristics of the unknown plant are there examined, and those characteristics ascertain the class, order, genus, and species of the plant; the name of which may thereby be found in the book.

Q. What is the use of botany?—A. It is an amusement and pleasure to those who live in the country, and a knowledge necessary to medicine and pharmacy, because plants furnish a great number of good remedies.

Q. Which vegetables are the most curious and interesting from their utility?—A. The principal are the palm, cocoa,

brasil or iron wood, soapwort, mahogany, cotton, pepper, cassia, senna, lignum-vitæ, the papaw, the wax-tree, and flax, which though very common, is not therefore less interesting.

Q. What are the uses of the palm-tree?—A. Every part of this beautiful tree is of use to the cultivator: the wood serves for timber, the leaves for covering huts, and the fruit furnishes abundance of wholesome nourishment: we know of no tree that is more useful. It grows by the sides of rivers in the torrid zone.

Q. Which is the most useful part of the cocoa-tree?—A. Its fruit, the husk or shell of which is used for vessels, which take a bright polish. The substance that envelopes the nut is a kind of filamentous rind of which the Indians make cordage and twine. It is better than tow, because less liable to rot. The kernel of the nut is very wholesome, and of a flavour approaching the almond. These trees are only met with in hot climates.

Q. Why is brasil also called iron-wood?—A. On account of the hardness and weight, which is so great as to make it sink in water. It is of a dark reddish colour. The Indians make it into instruments of offence, and the savages into arrows.

Q. What part of the soapwort gives it the name?—A. The seed and the root, by means of which the inhabitants of the Antilles can dispense with soap; but it must be moderately used, or otherwise the linen is soon worn out, and even burnt.

Q. What is the chief property of the mahogany-tree?—A. It scarcely ever rots, and the worms will not touch it. That of Cayenne is easily polished, and is very beautiful to the eye. This tree grows to the height of eighty feet in the hilly parts of our colonies.

Q. Which is the climate for cotton-trees?—A. The cotton-tree can only flourish in hot climates, such as the torrid zone and the places not far from it. It is found in the two continents: that of the colonies is most esteemed.

Q. Which kind of pepper is the best?—A. The Jamaica pepper, which is gathered from a tree as large as the walnut-tree. Its trunk is upright and beautiful. The fruit is not only made use of in seasoning food, but also in strengthening the stomach and facilitating digestion.

Q. Where does cassia grow?—A. In Brasil; its leaves are purgative, and have the property of folding up at sun-set, when their sleep begins.

Q. Where is senna grown?—A. In Syria, Persia, and Arabia; it attains the height of four or five feet. The husks of this plant are called follicles of senna: we get them from the Levant.

Q. Whence does *lignum-vitæ*, or the tree of life, derive its name?—A. From the length of its duration. The negroes make great use of every part of this tree, which is stomachic.

Q. What taste has the fruit of the papaw?—A. That fruit, which has great resemblance to our melons, contains a milky juice of an insipid flavour. The tree which bears it only lives from four to five years, after which its top rots and destroys the rest of the tree. The males are distinguishable from the females. The trunk of the male arises to the height of about twenty feet, and is hollow and spongy within. It is so tender, that it may be cut entirely through with a single stroke of the sabre. The female bears flowers and fruit the whole year when it is at the side of the male.

Q. What is the wax tree?—A. An aquatic shrub, the berries of which, boiled in water, produce a kind of wax or rosin: one pound of seed produces two ounces of wax, and one man may gather fifteen pounds of the seed in a day.

Q. What are the numerous uses of flax?—A. Its stem, or straw, makes the linen we wear, sails of ships, and generally all the cloths we have in use, and which when they are done with serve to make paper. A very useful and much-esteemed oil is pressed from its seed, and the seed so pressed is used for fattening cattle.

Q. Which are the principal substances and in most general use extracted from vegetables?—A. Balm of Mecca, Indian rubber, myrrh, and benzoin.

Q. What is the balm of Mecca?—A. A liquid rosin, of a tart and aromatic taste, and of a smell inclining to that of the lemon. It oozes from a shrub found in Arabia Felix: the people of the

Levant attribute great virtues to this balm, and look upon it as almost a sovereign remedy.

Q. Whence comes Indian rubber?—A. It flows in a white liquid from a tree resembling the birch; it is a kind of gum, principally sold by stationers, is made up like bottles, and in different forms. The inhabitants pour this liquor over very thin earthen bottles, &c. which they break, and take away when the substance has acquired sufficient consistency.

Q. Where does myrrh come from?—A. From Ethiopia; it is of an acid and aromatic taste, and when burnt, diffuses an agreeable odour. The ancients held it in high estimation.

Q. How is benzoin collected?—A. It runs from a tree in Siam, and in the islands of Java and Sumatra.

NATURAL HISTORY OF ANIMALS.

Q. What is the natural history of animals?—A. A science which teaches the general and specific characters, uses, and habits, of living beings.

Q. How are animals divided?—A. Man, although comprehended in the general class of animals as being animated, forms a particular class; because reason, with which he alone is endowed, and the perfection of his organs, place him first of all beings. But animals, properly so called, are divided into mammiferous, birds, reptiles, fishes, vermicular, crustaceous, molluseula, insects, and polypi.

Q. What is there principally remarkable in man?—A. Man, in his construction, differs little from some animals; but what distinguishes, and for ever secures him the superiority and power over all other beings, is reason, which of itself places an infinite distance between him and brutes.

Man, in the ordinary course of his life, passes into four very distinct states: infancy, youth, manhood, and old age.

Q. What happens to man in his first state?—A. When brought into the world he is incapable of making use of any one of his organs; he is in these early days more helpless than any other.

animal, and of all, stands most in need of the cares of those who gave him life. He begins by announcing with his cries the sufferings he endures; it is the first faculty he acquires.

Most animals have their eyes shut during the first days of their life; the infant opens his the moment he is born, but they are fixed and dull; the organ is yet imperfect; it may however be perceived that the light makes an impression: his other senses are equally imperfect.

The infant does not begin to laugh and cry until after the expiration of forty days; for his cries before that time are not accompanied by tears; he expresses no sense of feeling. All the parts of his body are weak, he cannot sit up, his legs and thighs are folded under him.

New-born infants sleep much; but their sleep is often interrupted, and they want frequent nourishment.

In infancy we are less sensible of cold than in the other stages of life.

Children begin to prattle at twelve or fifteen months old; the vowel they pronounce with the greatest ease is *a*, harshly sounded. Their life is very precarious for the first three years; it gets stronger in the two or three following years; and at six or seven is more likely to endure than at any other age; their size afterwards increases fast, and they attain the period of youth.

Q. At what period does youth begin?—A. Towards the fourteenth year; the body may at that time be said to acquire its full growth. Some persons do not grow after their fourteenth or fifteenth year; others continue growing to twenty-two or twenty-three. Almost all at this time have a thin slender figure, and small thighs and legs; but soon afterwards the flesh increases, the muscles dilate, the members are moulded, and the proportions of the body arrive before thirty, in men, at their highest perfection. Women attain it much sooner; at twenty they are in general as completely formed as men are at thirty.

The body of a well-made man should be square, his muscles powerfully expressed, the contours strongly designated, and the features of the face well drawn.

In women, the body and limbs are rounder, the muscles less apparent, the contours softer, and the features more delicate.

Q. Is not manhood the best period of the life of man?—A. Man at that time enjoys all his faculties in their utmost extent and with all the perfection of which he is susceptible; it is at this age that he appears the master of the earth: he carries himself upright and erect; his attitude is that of command, his august face is turned toward heaven, and upon it is impressed the character of his dignity. The image of his soul is painted in his countenance, and the excellence of his nature breaks through his material organs. That too is the epoch at which man is susceptible of most reflection; his understanding is most mature, and his resolutions most stable. When his soul is tranquil, every feature of his face is in a state of repose; but when it is agitated, the human countenance is a living picture in which the passions are delineated with equal delicacy and energy: it is particularly in the eyes that they may be discovered. Man enjoys his state of perfection but a short time; by degrees his strength decreases, and old age overtakes him.

Q. When does he become old?—A. When the body has acquired its full extent in height and breadth, by the entire developement of all its parts, it increases in thickness. The beginning of this augmentation, is the commencement of its decay, because it is not a continuation of developement, but a simple addition of superabundant matter, which clogs the body with an useless weight. The decay is at first insensible; however, it may be perceived by the external changes; and if we were to pay more attention to them, and to flatter ourselves less, we should perceive them still more clearly, by the changes which take place internally: for we cannot but remark that activity diminishes, and that the limbs grow heavy, because the cartilages and fibres become rigid, and less pliable. At the same time, the skin dries up, wrinkles accumulate, the hair grows white, the teeth fall out, the countenance loses its form, and the body becomes curved. The first indications of this state begin to appear before forty; they increase by

slow degress until sixty, but more rapidly till seventy, when dotage commences : decrepitude follows, and death generally closes old age before ninety or one hundred. As this cannot be avoided, neither ought it to be feared. We should so live here as to have no dread with regard to an hereafter.

Q. What are the causes of the varieties observable in the human species ?—A. The principal causes are three : climate, food, and manners. The climate may be regarded as the primary cause of the colour of men ; experience shews us that food has great influence on their form ; and the features, amongst different nations, depend in a great measure on their customs of crushing the nose, drawing out the eyebrows and ears, flattening the face, &c. ; but the most striking variation is the race of Negroes, whose colour is black, with thick lips, large noses, and short and woolly hair.

Q. How are the *mammiferæ* divided ?—A. Into three classes : the first comprehends quadrupeds, properly so called, without either membranous wings, or fins ; the second, those which have membranous wings, winged-*mammiferæ* ; the third, those which have fins, marine-*mammiferæ*.

QUADRUPEDS.

Q. How are quadrupeds properly called divided ?—A. Into seven sub-divisions, according to the formation of their feet ; and fifteen orders, adding to it the character of the teeth.

Q. What are the sub-divisions ?—A. The first comprehends the animals which have four feet, made like hands, termed *quadrumanes* ; second, those which have hind feet, like hands, *pedimanes* ; third, those that have the sole of the feet so formed, as to rest upon the earth when the animal walks, *plantigrades* ; fourth, those that have toes without hoofs, *digitigrades* ; fifth, those which have toes inclosed in a very thick skin, or more than two hoofs, *pachidermes* ; sixth, those of two hoofs, bisulcated, or *ruminantes* ; and seventh, those with a single hoof, *solipedes*.

Q. How are the orders made out ?—A. According to the existence, or non-existence of incisive cutting, and grinding teeth. The second sub-division, *pedimanes*, forms two orders : the se-

cond order which has incisors, cutting teeth, and grinders; and the third, which has no incisors, but only cutting teeth and grinders. The third sub-division, the plantigrades, make the fourth order which has incisive, cutting teeth and grinders. The fourth sub-division, the digitigrades, comprehends five orders, that is to say, the fifth order incisive, cutting teeth, and grinders; the sixth, incisive and grinders; the seventh, cutting teeth and grinders; the eighth, grinders; and the ninth, which has no teeth. The fifth sub-division, the pachidermes, has three orders; the tenth, which has incisive, cutting teeth and grinders; the eleventh, incisors and grinders; and the twelfth, grinders only. The sixth sub-division, the bisulcated, comprehends two orders, the thirteenth, with incisive, cutting teeth, and grinders; the fourteenth, incisive teeth, and grinders. The seventeenth sub-division, the solipides, makes the fifteenth order which has incisive, cutting teeth, and grinders.

Q. What are the kinds of the first order?—A. The ape, guenon or kebe, sapajou, sagouin, alouate, maki, or maucauco, baboon, maki, lori, and tarsier.

Q. What are the species which bear the name of ape?—A. This name has been given to animals which bear the greatest similitude to man, in their physical organization. They are the man of the woods, or orang-outang, whose face is almost wholly covered with hair, and whose muzzle projects, which gives him a sad and savage look; he walks upright, by the aid of a stick, and has no tail. The Chimpanzee, the internal organization of which has not been yet ascertained, but it is supposed to be nearly like that of the former. The Gibbon, which has arms almost as long as its body, whereby it is distinguished from the two others. It, however, goes like them on its hind feet: its disposition is mild and quiet.

Q. What is the guenon?—A. It is like the ape, but is distinguished from that animal by having a long tail, and materially differs in gaiety and vivacity. They unite in troops, and place themselves in files to steal and carry away fruit from the gardens and plantations near the forests which they inhabit.

Q. How are the sapajous known?—A. From their long tail, by

means of which they hang to the branches, and thus balance and swing themselves from one tree to another. Sometimes they unite and hang to each other to get over a river or large ditch.

Q. Are the sagouins as large as the other apes?—A. No, they appear to be the smallest animals of that name. They have not, like the sapajous, the faculty of hanging and throwing themselves by the tail, but they can jump and climb trees.

Q. Why are the alouates called howlers?—A. Because they make a terrific noise when they cry in the forests, so that hearing them at a distance, one would think there were twenty, when there are but two or three.

Q. Are the maucaucos pretty?—A. They are the most ugly and disagreeable of animals: they cannot be contemplated but with horror and disgust. The magot is included in this species.

Q. Are baboons mischievous?—A. Those great monkeys are of an untractable and ferocious disposition, and to preserve them alive, they are obliged to be shut up in iron cages.

Q. Where are the makis met with?—A. At Madagascar, and on the eastern coasts of Africa.

Q. What is the character of the lori?—A. It is melancholy, silent, and voracious. During the night it makes war on the smaller animals, and sleeps throughout the day with its head rested on its two hands.

Q. Which are the most interesting genera of the second order?—A. The didelphi, or opossum, several of the females of which have a pouch placed under the belly, where their young are nourished and suckled: when pursued she shuts it. Other females, which have not the pouch, twist the tails of their young into their own, take them on their backs, and save them by their speed.

Q. What are the genera of the third order?—A. There are but two, the kangaroo, and the aye-aye. The kangaroo, on account of the disproportion of its four legs to the hinder, cannot run, but only jump. The aye-aye can scarcely see in the day time; its thin toes are useful to it in groping in trunks of trees, where it finds insects and worms which are its food.

Q. Is not the fourth order more numerous?—A. It includes the

bear, coati, kinkajou, mangouste, hedge-hog, tanrec, shrew-mouse, and mole.

Q. What is the character of the bear?—A. He delights only in uninhabited places, and is not so savage but that he may be rendered tame. He is taught to stand upright, gesticulate, and dance to the sound of instruments.

Q. What singularity is there in the coati?—A. That it will eat its own tail; its inclinations are similar to those of the fox; it kills fowls and eats their eggs.

Q. In what manner does the kinkajou feed?—A. It clambers up trees, and thence throws itself upon the elks, and fallow deer, kills them, and drinks their blood. It eats indiscriminately of every thing, but has a particular liking for sugar and sweetmeats.

Q. Why did the antient Egyptians render divine honours to that species of mangouste, called the ichneumon, or Pharaoh-mangouste?—A. Because it destroys rats and mice, takes off the sand from the crocodiles' eggs, and breaks them.

Q. What does the hedge-hog feed on?—A. On fallen fruit, and certain insects, which it finds by turning up the earth a little with its snout.

Q. What is the tanrec?—A. A small animal of the East Indies, not unlike our hedge-hog. Its pace is very slow, and it wallows in the mire like the pig.

Q. Where is the shrew-mouse found?—A. In houses and fields; it is less than the common mouse, and feeds on the same food, but it diffuses a strong smell, which keeps the cats away.

Q. Is it true that the mole is blind?—A. Their eyes are so small, and so much concealed, that many have thought so.

Q. Which are the animals of the fifth order?—A. There are four, the dog, cat, civet, and martin.

Q. Are not several species included in the genus of the dog?—A. It includes the dog, properly called, the hyæna, jackal, wolf, fox, and isatis.

Q. Which variety of the dog has degenerated least?—A. The shepherd's dog, which is the original race, the real dog of nature. Difference of climate, food, and crosses of breed, have effected

the variety now observed in those animals. Those which yet live in the forests of southern Africa, left to their natural dispositions, go in troops and make war upon the lions and wild beasts. We are all acquainted with the fidelity, devotion, and usefulness of the dog in its domestic state, though few appreciate it properly. The Mahometans have hospitals for infirm dogs.

Q. What is the hyæna's disposition?—A. It is ferocious and cruel; when pressed by hunger it will fall upon men, if they come in its way, and at all times will attack flocks, even in their folds, and bury the carcasses, which it afterwards digs up again, and devours nearly in a state of putridity.

Q. Do jackals assemble in troops?—A. Yes, forty or fifty together. They will attack almost every animal, indiscriminately, and sometimes follow caravans, as the shark follows a ship.

Q. What is the character of the wolf?—A. It is the most cruel of European wild beasts, cowardly, and commits great ravages on sheep-folds.

Q. Does the fox merit the reputation it has acquired for cunning?—A. It makes use of great address in surprising poultry and birds, and has a very strong odour peculiar to itself.

Q. What is the food of the isatis?—A. It lives on rats, hares, and birds, and has great analogy to the fox in its habits and art.

Q. Which are the species comprehended in the genus called *felis*?—A. The cat, tyger, leopard, panther, ounce, caracal, serval, cougar, margais or tyger-cat, ocelot, lion, and the lynx.

Q. What are cats good for?—A. They free us from rats, mice, lizards, &c.; but are false and perfidious. They have a near affinity to the most ferocious and sanguinary of animals.

Q. In what country is the tyger found?—A. The royal tyger is found only in India, where he is considered very terrible on account of his strength and the rapidity of his motions.

Q. What is the distinguishing feature of the leopard?—A. The smallness of the spots on the skin, while the tyger is marked with great bands, and the panther with large spots.

Q. Cannot the panther be tamed?—A. In spite of its cruel disposition, the inhabitants of Barbary succeed in training it for the chase, but with very great precautions.

Q. Cannot the ounce be made useful?—A. This little panther is only ferocious when it thinks itself the strongest; and the hunters of Persia carry it behind them with a bandage over its eyes, to let it loose suddenly on its prey, which it quits again at the first menace.

Q. Why do the Arabs call the caracal the lion's provider?—A. Because he often accompanies the lion to eat the remnants of his prey: the name, therefore, is misapplied.

Q. What is the serval's disposition?—A. Its ferocity is very great, and is neither diminished by kindness nor severity.

Q. Is the cougar dangerous?—A. It is much dreaded in America, where it is called the black tyger, as the tyger is in Africa; but it is neither so strong nor so courageous.

Q. Where does the margais dwell?—A. In Brasil and Guiana, where it is called the tyger-cat: it hunts small game and birds.

Q. What is the nature of the ocelot?—A. It is more thirsty for the blood, than greedy after the flesh, of animals weaker than itself, which it kills to quench its thirst; nevertheless it dreads man, and rarely attacks dogs.

Q. Why is the lion said to be the king of animals?—A. From his force, address, and generosity. When he is cruel, it is either from want or revenge. History records some remarkable traits of his sensibility.

Q. Where does the lynx harbour?—A. Upon trees; and it hunts squirrels, wild-cats, martins, and birds, and falls upon deer, hares, and other animals, that pass within its reach.

Q. Does the civet furnish any thing of utility?—A. It produces a perfume, which it carries in a little pouch under the belly. That of the zibet is the strongest and most esteemed.

Q. Why are martins so much in request?—A. On account of their skin, which makes a fur of the finest and richest quality.

Q. What are the species of the martin genus?—A. The saricovienne, ferret, pole-cat, sable, ermine, and weasel.

Q. Where does the saricovienne come from?—A. America, on the banks of the Rio de la Plata: it swims particularly well, and feeds on crabs and small fish.

Q. Why do the farmers endeavour to destroy ferrets?—A. Because they often commit ravages on hen-coops, and dove-cots.

Q. What is the nature of the pole-cat?—A. It partakes much of that of the ferret. Its odour is obnoxious; and so bad is the flavour of its flesh that dogs will not eat of it.

Q. What is the sable?—A. An animal much valued on account of its fur, which is very fine.

Q. What is the ermine?—A. A pretty little animal, the fur of which is of great value: its skin is fine and white during winter, and becomes red on the back in summer.

Q. Why are weasels destroyed?—A. Because, when they succeed in getting into a hen-house, they kill all the poultry they find.

Q. What are the animals of the sixth order?—A. The hare, cabiai, agouti, beaver, otter, marmot, hamster, rat campagnol, or little field-rat, dormouse, jerboa, squirrel, porcupine, and coendou.

Q. What are the species of the hare?—A. The hare and the rabbit. The hare sleeps much with its eyes open: it has no eyelashes, and seems to have a bad sight. The rabbit is universally known, and its fecundity is proverbial.

Q. Of what place are the damans natives?—A. Of the Cape of Good Hope: they are fond of being upon high places, and leap with great agility.

Q. Where are the cabiais found?—A. On the banks of the rivers in Guiana: they are generally seen only at night, when they go in troops.

Q. Are there not several kinds of agoutis?—A. Yes; but the paca is the only one that is well known: it burrows like a rabbit.

Q. Does not the beaver pass for a very ingenious animal?—A. Yes; in some parts of America they build little towns and embankments which retain the waters of the river at a height suitable to their convenience. Four or five hundred of them live together there in the winter season, and enjoy all the sweets of society.

Q. Do not the otters partake much of the nature of beavers?—A. Their manners and habits of industry are very much alike. In winter, they, like the beaver, live in huts of their own constructing; and, in summer, are only found in couples.

Q. What is the characteristic of the marmot?—A. It is said to resemble the hare about the head; the badger in skin and claws; and the bear in its feet. It generally sits up, and uses its fore feet to carry any thing to its mouth. It is easily accustomed to domestic life, and is taught to dance to the sound of music.

Q. Is the hamster hurtful to the farmers?—A. Not only because it eats and destroys a great quantity of grain, but also that it lays up considerable hoards in its burrows for the winter.

Q. Are there not several species of rats?—A. The common rat, the mouse, and the field-mouse: they are animals very common and well known in these climates. The rat and mouse dwell in houses, cellars, granaries, barns, &c.: the field-mouse lives in the earth. The rat is the largest, next the field-mouse, and the mouse is the least.

Q. In what does the campagnol differ from the field-mouse?—A. In being of a smaller size, having the tail short and mutilated, and a larger head.

Q. What are the habits of the dormouse?—A. They nearly resemble those of the squirrel; like that animal it lives in forests, and at the tops of trees.

Q. Does the jerboa drink frequently?—A. Scarcely ever. The light also appears to incommode it; for it sleeps during great part of the day, and only goes out in quest of food at night.

Q. What does the squirrel live upon?—A. On acorns, beech-mast, nuts, &c. It is a little animal of an elegant and pleasing form.

Q. Is the porcupine mischievous?—A. No; but it is jealous of its liberty; and, when enraged, the wounds it inflicts, by darting its quills at the object offending it, are very dangerous.

Q. Where do the coendous live?—A. In South America: they pass a solitary life during one part of the year, and couple in the summer.

Q. How many genera are there of the seventh order?—A. Only one; the sloth, which is the most wretched of all living beings: it can neither walk nor climb without inconceivable trouble. It has the singular habit of grasping a branch with all

its paws, and in that manner going to sleep with its back downwards.

Q. Which are the genera of the eighth order?—A. The orycterops, hitherto little known; and the talou, or six-banded armadillo, which is of a very gentle disposition: the upper part of its body is covered with a solid crust or shell; but the skin of the throat and under part is perfectly uncovered and white.

Q. What are the genera of the ninth order?—A. Ant-eater and pangolin. The ant-eater is so called, from thrusting its very long tongue into the ants' nests, and presently drawing it out swarming with ants on which it feeds. The pangolin, also called the scaly lizard, is covered with a kind of armour or plates, which protect it from the attacks of even its most cruel enemies, such as the tyger and panther.

Q. What are the genera of the tenth order?—A. The hog, the tapir, and hippopotamus. The hog is an animal of great use for food, as it lives upon things that are very common, and every part of it is eaten—head, ears, feet, blood, and intestines, nothing is thrown away. The tapir is the largest animal of the new world: its upper jaw is elongated in the form of a trunk; but nevertheless it is more like the hog than the elephant, to which it is neither similar in habit nor intelligence. The hippopotamus is of a bulk which prevents its running; but it swims very well, remains as conveniently under water as on land, and feeds principally on fish: its skin is impenetrable to arrows, and frequently to musket-balls.

Q. How many genera are there in the eleventh order?—A. Only one; the elephant, an animal of enormous bulk, which is met with in the hot climates of Asia and Africa: it combines, to the greatest advantage, the sagacity of the dog, the cunning of the ape, and the sociability of the beaver. It is obedient in servitude, and generous in liberty.

Q. How many genera are there of the twelfth order?—A. Merely the rhinoceros, of which we know two species; one with one horn, and another more rare, with two. Next to the elephant, it is the most powerful of quadrupeds (except, indeed, the behemoth of scripture, or mammoth, of which we have too im-

perfect an idea to introduce it into a class); but it has neither its address nor understanding. It feeds on herbs and leaves, and neither seems to like flesh nor fish.

Q. What genera does the thirteenth order comprehend?—A. The camel and chevrotin. The principal characteristics of the camel are two fleshy humps on the middle of the back, and five stomachs: whereas other ruminating animals have but four: the fifth stomach is a reservoir which the animal fills with water, which will keep good in it for above a week. From this the camel has the faculty of transmitting it, at pleasure, into the other stomach. The dromedary is a more active kind of camel, and has but one hump.

The chevrotin is a pretty little animal of the hot countries of Asia and Africa: it leaps well, but it does not seem to hold out long in running, as the Indians catch it in the chase.

Q. What are the genera of the fourteenth order?—A. They are six: the stag, giraffe or camelopard, antelope, goat, sheep, and bull.

Q. What is the nature of the stag?—A. It is a mild and quiet animal of an elegant form, and its head is decorated with branching horns. The female, called a hind, is not so large as the male, and has no horns. The young, until one year old, are named fawns: they are extremely active, very light, and can clear a hedge six feet high; they become excessively familiar.

Q. Is the giraffe tall?—A. It is one of the tallest and most gentle of animals; but the disproportion of its legs, the fore-legs being much longer than the hinder, has probably prevented the natives of the countries it inhabits from employing it in their service.

Q. What is the antelope?—A. An animal, one species of which, called the chamois, furnishes us with the leather of that name. They live in numerous herds of many together; and while they are feeding, one always acts as sentinel: this gives the troop notice, on the least alarm, by a kind of hissing noise, and they escape in a moment by bounding from rock to rock.

Q. Is the goat an useful animal?—A. It is covered with long

hair, which is made use of in clothes, and gives a very nutritious milk, from which is made the cheese called gruyere. The male has a very strong odour, and is termed a buck; it has horns like the female, and a kind of beard: they prefer steep places.

Q. Is the sheep of equal utility?—A. Of much greater: its wool, skin, flesh, and bones, are, from custom, either requisite to our necessity or industry. The male is called a ram, which alone has horns.

Q. Is not the bull also a very useful animal?—A. It is very powerful; but seems to be ignorant of its own strength, that it may be applied for the service of man: it is used in the plough and for draught, but is no longer employed in carrying burthens. After having aided man in all his labours, its flesh becomes one of the principal supplies at his table; its valuable hide is converted into leather, and the horns to various useful purposes.

Q. Of what genera does the fifteenth order consist?—A. Of the horse, which in its natural state is jealous of liberty, proud of its independence, petulant, but sociable. Wild horses herd together. So far from losing their noble appearance and strength with their liberty, they acquire grace and sagacity. The horse is trained for show, for the manege, and for war; it is pliable, docile, and attentive to the movements required of it by its director.

WINGED MAMMIFERÆ.

Q. How is the second division arranged?—A. Into a subdivision of animals, having annexed to the fore-feet membranes in the form of wings, comprehending the cheiroptera, and of this subdivision two orders are made: the sixteenth, with incisors, cutting teeth, and grinders; and the seventeenth, which has only cutting teeth and grinders.

Q. What genera are comprehended in the sixteenth order?—A. The bat, the wings of which are membranes joining the long claws of the fore-feet: it does not appear till night-fall, when it feeds on flies, gnats, and moths; it remains torpid during the winter, and can pass many days without eating. The spectre and rhinoloppus, hitherto little known: the popistrelle and barbastelle,

both animals of the old and new world, and of great affinity to the bat; like it, they are seen only by night; and throughout the day, hide themselves in clefts of rocks, and crevices of old buildings.

Q. What does the seventeenth order consist of?—A. Only the noctilion, also very like the bat, but without incisors.

MARINE MAMMIFERÆ.

Q. How are the marine mammiferæ divided?—A. Into two subdivisions: the first has the hinder feet formed like fins; the second has no hind feet, and are termed cetaceous.

Q. How many orders are contained in the first subdivision?—A. Three: the eighteenth having incisors, cutting teeth, and grinders; the nineteenth with cutting teeth and grinders; and the twentieth with grinders only.

Q. Of what genera does the eighteenth order consist?—A. The seal, which is so formed as to be able to live alike on land and in water; it eats indiscriminately grass, flesh and fish, and sleeps so sound that the hunters approach without waking it, and kill it by repeated blows. The morse or sea cow, described by captain Cook in his last voyage as the sea horse, bears a great resemblance to the large seals; but its upper jaw is armed with two cutting teeth similar to the tusks of the elephant, only projecting downward.

Q. What are the genera of the nineteenth order?—A. Only the dægon or Indian walrus, hitherto almost unknown.

Q. The twenty first order?—A. Only the lamantin, or sea ox, an inhabitant of the great rivers of St. Domingo, Cayenne, and other parts of South America. As it cannot leave the waters it stretches out its neck and raises its head to crop the grass growing on the banks. They always go in very close herds, and are very sociable.

Q. How many orders does the second subdivision contain?—A. Two; the twenty-first, of which the animals have only cutting teeth, and the twenty-second without any teeth.

Q. What are those of the twenty-first order?—A. The dolphin which bears very little resemblance in its actual form to that

which painters and sculptors have generally assigned to it. It has two vents or nostrils together, and the eye placed near the angle of the mouth. The cachelot, the head of which is in length above a third, or nearly half that of the whole animal; its under jaw is narrow, and armed with large conical teeth. And the narwal which has two long tusks, straight or furrowed in a spiral form. They are of use to it in breaking the ice when it comes to the surface to get air.

Q. What are those of the twenty-second order?—A. Only the balinus or whale, which has the upper jaw filled with beards or horny flakes, known vulgarly by the name of whalebone. Its head likewise has two apertures, from which it throws up water.

BIRDS.

Q. How are birds divided?—A. Into two sub-classes, of which the first comprehend the birds which have the lower part of the leg feathered, and whose toes are not entirely joined by a large membrane; and the second, of which the lower part of the leg is totally bare, or which have several toes united by a large membrane.

Q. How is the first sub-class divided?—A. Into two divisions, the first of which has two toes before, and two behind; and the second three before, with or without one behind.

Q. How is the first division separated?—A. Into one subdivision comprehending the climbers. Their toes are large and strong, and there are six orders of them: the first with a crooked beak; second, dentelated beak; third, sloping beak; fourth, straight and compressed beak; fifth, very short beak; and the sixth with an arched beak.

Q. What are the birds of the first order?—A. The aras, which are distinguished from parrots by a place without feathers on each cheek. They are very numerous in southern Africa. Their plumes, which the savages use in decorating themselves, are very fine, and their habits are nearly similar to those of the parrots, but they never talk so well: and the parrots which are found in the hot climates of the old and new continent. Owing to a particular

conformation of the tongue, they can repeat some words which they are taught, but they have not any more understanding than other birds.

Q. How many genera does the second order include?—A. The toucan, which has a very light thin beak longer than its head, and ill adapted to masticating its food, so that when any thing is given them to eat, they take it with the point, throw it into the air, catch it in their beak, and swallow it whole.

The couroucous, which are generally observed in couples. When the female sits the male brings her food.

The touracos, which are the most beautiful birds that America can boast. M. de Buffon kept one in his house some time, and fed it with grapes, apples, and different fruit.

The musophagus, found in the province of Acra in Guinea. It is thought to feed on the fruit of the banana tree.

Q. Which are those of the third order?—A. Only the barbet, which inhabits the warm climates of the two continents. Those of the Indies attack the birds less than themselves, and incline in character to the shrike. Those of America, on the other hand, are always in the most solitary parts of the forest, and avoid dwellings and frequented places.

Q. What are the genera of the fourth order?—A. The jackdaw and the magpie. Of the former there are two kinds; those which keep together in couples in frequented spots and no where else, and others always solitary in the recesses of woods. They feed upon insects.

The food of magpies is the eggs of insects and ants which they find under the bark of trees and in woods. Their note is dismal: they avoid all society.

Q. What are the genera of the fifth order?—A. Only the wryneck which is to be found in almost every country, and is not common in any. They are generally met with alone, on the ground, in corn or standing oats.

Q. What are those of the sixth order?—A. The cuckoo and the ani. The cuckoo makes no nest herself, but deposits her eggs in that of another bird. It leaves our climates in autumn and does

not return to them till spring, when it is very lean. It is carnivorous, feeding on smaller animals, insects, and the eggs of other birds.

The anis have their haunts upon the borders of salt marshes and in the savannahs of Brazil. They go in flocks and live and lay their eggs several together in the same nest. Their food is grain and small insects.

Q. How is the second division arranged?—A. Into four subdivisions; the first comprehends birds of prey, which have strong and very crooked talons; the second, the sparrows, which have the claws rather curved, and the outside toes free or united only the length of the first joint; the third, the platypodes, which have the outside toes united for nearly the whole length; and fourth the gallinaceous, which have the front toes united at the root by a membrane.

Q. How many orders are included in the first subdivision?—A. Only one; the seventh containing the birds with crooked bills.

Q. Which are those of the seventh order?—A. Vultures; cowardly and cruel birds, attracted by corruption and the infection of carcases. Sometimes several of them join together to destroy a victim. They are found in both continents.

The eagle of the Alps, one of the largest birds of prey; it carries off hares and sheep. They have been seen to measure eighteen feet from wing to wing.

The eagle which from strength, courage and generosity, claims the same pre-eminence among birds, as the lion among beasts. It builds in the midst of precipices, and the clefts of rocks. The whole earth is its domain. It generally lives above a hundred years.

The goss-hawk which is of a sanguinary and untractable disposition. It picks birds before it eats them, but devours mice entirely.

The sparrow-hawk, which can be easily taken and trained to catch partridges, quails, pheasants, &c. This kind of sport termed hawking, was formerly in very high repute, and is not even at this time altogether discontinued. The sparrow-hawk attacks

straggling pigeons, and the smaller birds which go in flocks in winter.

The great buzzard, an idle bird and sedentary on the trees of the European forests, where it remains sometimes for several hours together, and which it only quits to fall upon the small game that may come within its reach.

The buzzard, which keeps among bushes, hedges and reeds. There are two sorts ; one delights in poultry, the other in fish.

The kite, which is equally cowardly, voracious and cruel. They often unite to attack one animal of their own strength. Their flight is rapid ; they rarely alight, and only approach the ground to pounce on the small game which is their food.

The falcon is a bird that pounces directly upon its prey, and carries it immediately off. It was formerly trained to the chase for princes and nobles.

The screech owl, an ominous bird which is dazzled by the light of day. It never flies out but a little before the rising, and after the setting of the sun. In the darkness of night it sees no more than other birds.

Q. How many orders are there in the second division ?—A. Eight ; the eighth beak dentelated ; ninth, beak sloping ; tenth, beak straight and conical ; eleventh, beak straight and compressed ; twelfth, beak straight and slender ; thirteenth, beak very short ; fourteenth, beak arched ; and fifteenth, beak swelled.

Q. What are the genera of the eighth order ?—A. There is only the phytolomea, which has a short blunt tongue. Its habits are little known.

Q. Which are those of the ninth order ?—A. The shrike, which though small, is very bold and even sanguinary. It sometimes attacks, and always defends itself against birds larger than itself, such as magpies and crows.

The tyrant a small mischievous bird, very much like the martin.

The martin, a little bird which only frequents these climates during some months of the year. It feeds on flies and insects.

The moucherole, or fly catcher, found in America, Africa, and in our climates in summer. It frees us from a great number of insects,

The blackbird, a native of this climate. Although it is commonly black, they are sometimes met with white, and differing only from the first in colour. It may be taught to sing, and even to imitate the human voice.

The ant-eater, which is found on the ground near the haunts of the great ants, which infest the territory of Guiana and the interior of South America ; its wings are too short for flying.

The loriot, birds that are seldom still. They suspend their nests to branches of trees, and seldom travel without two or three together. Their food is insects, but they are partial to figs and cherries.

The cottinger, whose plumage is very beautiful. The savages of Brazil make very pretty ornaments of it. These birds inhabit the banks of the Amazon river, and different countries of southern Europe ; but they are never seen in flocks.

The tanagra, somewhat resembling the sparrow, having, like it, rather an extended wing, and being only found on the new continent. It feeds on small grain and ventures very near habitations.

Q. Which are the genera of the tenth order ?—A. The cassiques which inhabit the New World, where they live in flocks. They build their nests with leaves of certain grasses interlaid with horse-hair. Four or five of these nests are sometimes seen on the same tree.

The trouppiales, which suspend their nests at the extremity of the high branches, and let them float freely in the air to secure them against the fangs of the serpents and other terrestrial animals which make war on them.

The carouges, which likewise have their nest in a somewhat singular form. It resembles the cut of a hollow globe divided into four, and sewed to a leaf of the banana tree. Their song is very pleasing.

The starling, or stare, of which our climate has the common species. They are accustomed to fly in flocks, make their nests with little care, and not unfrequently take possession of that of the woodpecker.

The grosbeaks, birds spread over different countries. The form

of the beak is similar in all, but their manners sometimes vary. Those of our country are taciturn and solitary.

The bullfinch, which has an agreeable plumage and very sweet song. It is reared with great facility. During the summer these birds remain in the woods, and in the winter overrun the plains in great numbers.

The sparrow, which also comprehends the canary, goldfinch, linnet, &c. because their form is nearly the same, and they differ only in colour of plumage and song. They are very common in our climate, and consequently known all over the world.

The yellow-hammer, of which we have several species in this country, known by the name of cirebunting, greenfinch, and ortolan. Their song is by no means unpleasant, though rather sharp, and their flesh is by many thought a great dainty.

Q. Which are the genera of the eleventh order?—A. The gracula, amongst which we must notice the mocking bird, on account of its talent for whistling, singing and speaking. It has a more free pronunciation than the parrot, and is very fond of shewing what it can do.

The raven, whose habits are not social, but they nevertheless have their good qualities. They take great care of their young, and benefit by the lessons of those who teach them to talk. We are assured that their life extends beyond a hundred years.

The rollers, which every year take a trip from Sweden to Africa, fly very high, and are more wild than either the jay or the magpye. Their plumage is very beautiful, being an assemblage of the finest shades of blue and green mixed with white and relieved by darker colours.

The birds of paradise, whose elegant plumage might well be sufficient to fix the attention of man without the attributes of imaginary virtues. They are found in the islands of Arou and in the Indies, among the aromatic herbs on which they feed.

The sitelle, which dies in the country that gives it birth; its excursions extend only from one tree to another, and it constructs its nest in the trunk. When the aperture is too great, it narrows it by a kind of masonry.

The ox-pecker, which is very fond of certain worms or larvæ of insects hatched under the epidermis of oxen, wherein they live, until their metamorphosis. It places itself on the back of those animals, and penetrates the skin with its beak to get out the worms. From this it takes its name.

Q. Which are the genera of the twelfth order?—A. The tomtit, a very active and lively kind of bird: suspending themselves and groping every where, they feed upon insects and small worms, have an inclination to cruelty, and sometimes pick out the brains of their weaker companions in slavery.

The lark, which includes several birds very common amongst us, and extremely good eating; such as the lark, titlark, marsh-lark, skylark, known by the melody of its notes; and the wren, one of the smallest birds of these climates. It carries its tail turned up like that of the cock.

The fine beaks, in which is comprehended the nightingale, whose song is so delightfully sweet. Nightingales may be taught to repeat certain sounds, and even Latin and Greek. They have great confidence, and on that account are easily taken. They quit us at the approach of winter.

The motacilla, which haunts the sides of brooks, and delights in following the plough to pick up the worms on the fresh turned glebe.

Q. Which are those of the thirteenth order?—A. Two; the swallow, which are dispersed in all countries according to the seasons. They are great travellers from their facility in flying, and destroy immense numbers of insects, on which they feed.

The swift, also called the flying-toad, on account of its hideous appearance. Morning and evening it goes in search of the insects on which it feeds; much light incommodes it greatly.

Q. Which are those of the fourteenth order?—A. The hoopoe, which is found in all countries, where it rarely remains. The different seasons successively witness its arrival and departure. Its principal food is insects.

The creeper, a little bird, not uncommon in these parts, and which travels little. They adhere to walls and in holes of trees,

and are seen almost in every place, where there are insects, in search of food.

The colibris, generally rather larger than the humming-bird, and inhabiting the same climates; their plumage is excessively brilliant.

Q. Which are the genera of the fifteenth order?—A. Only the humming-bird, found in the hot climates of the new continent. They are more beautiful than butterflies, and like them go from flower to flower. They are as remarkable for diminutiveness as for colour. According to Acosta, one of these birds with its nest weigh together 24 grains. The Indian girls adorn themselves with them, and wear them as pendants to the ears.

Q. How many orders has the third subdivision?—A. Five; the sixteenth, dentelated beak; seventeenth, strait and compressed beak; eighteenth, strait and depressed beak; nineteenth, strait and narrow beak; twentieth, arched beak.

Q. Which are those of the sixteenth order?—A. They are two: the calaos, with an enormous beak, of more trouble than use, which gives them an uncouth appearance.

The mornot, whose flesh is dry and not good eating. It deposits its eggs in the hole of the tatou, or some other quadruped.

Q. Which are those of the seventeenth order?—A. Only the kingfisher, among which is included the martin-fisher, one of the most beautiful birds of this climate for the neatness, richness and splendor of its plumage. It builds its nest in the banks of brooks or rivers, in the holes made by water-rats or cray-fish. It deepens them itself and surrounds the entrance with masonry.

Q. Which are those of the eighteenth order?—A. The tody only, which is a native of the new continent. They feed on worms and insects, and some of them warble very prettily.

Q. Which are those of the nineteenth order?—A. The manakins, ordinarily found at sunrise in flocks, but during the heat of the day, shelter themselves in the forests, and separate until the morrow.

Q. Which are those of the twentieth order?—A. There is but

the bee-eater, one of which is not uncommon here: it makes its nest at the bottom of a hole, which it digs itself with its feet and beak, and the young which it brings up do not disperse.

Q. How many orders does the fourth subdivision comprehend?

—A. Only the twenty-first, the birds with swelled beaks.

Q. Which are they?—A. The pigeon, which is universally known. There are many foreign species, more beautiful than, and equally productive as, our domestic pigeon. This includes the turtle-dove, the emblem of tenderness. Their manners and inclinations are so similar to those of the pigeons, that they have been known to unite and breed together.

The grouse, which are generally well flavoured, but do not survive the loss of liberty, and therefore can only be had from the chace.

The partridge, which also includes the quail, a somewhat similar bird: but the two species have a near resemblance in manner and organisation.

The tinamous, peculiar to the hot climates of America. They perch on trees, where they pass the night, and sometimes stay there during the day. Their flesh is very palatable.

The tridactylous, which have a bare place near the eyes, and but three toes to each foot. They travel into different climates.

The peacock, which unites the most beautiful plumage with the most disagreeable voice. Its flesh is only good while young: it becomes hard and very dry when old.

The pheasant, among which is the cock, known every where, and which appears a native of the vast forests of the East Indies. In general, the pheasant cannot endure a domestic state. It is, however, preserved with success, in places called pheasant-walks.

The pintado, a bird pretty widely spread amongst us. Its flesh is good. It is hunted with sticks; when domesticated, it exercises a kind of authority over its companions in slavery, and is the terror of the turkeys, even stronger than itself.

The turkey, one of the most useful birds in our poultry-yards. It appears to have been unknown before the discovery of the New World, where its species is extremely numerous. It ruffles and

spreads out its feathers on seeing or hearing any strange object, or sound.

The hocco, a peaceable and inoffensive animal, commonly inhabiting the mountains of America. They are either insensible of danger, or will not endeavour to protect themselves against it.

The penelope, which has feathers upon the head, raised in a tuft, or bending towards the beak. Their habits are but little known. The gouan likewise has very stubborn feathers on the head, either inclining to the beak, or raised into a tuft. It is black, mixed with brown, rather spotted with white, and is good eating.

Q. What is the classification of the second subdivision?—A. It is divided into two, the first of which have their toes before, and one toe, or point behind; and the second, two, three, or four toes of great strength.

Q. How is the first division arranged?—A. Into three subdivisions, the first of which comprehends waterfowl, which have the toes before entirely united by a membrane; the second, waterfowl, have four toes united by a large membrane; and third, the shore-birds, toes joined at the base by a membrane.

Q. How many orders are there in the first division?—A. Six, the twenty-second, beak crooked; twenty-third, dentelated; twenty-fourth, strait and compressed; twenty-fifth, strait and narrow; twenty-sixth, arched; and twenty-seventh, swelled.

Q. Which are the kinds of the twenty-second order?—A. The flamingo, more common in the hot than in the temperate climates of the Old and New World. It fixes its nest in the salt marshes, and feeds on eggs, fishes, shell-fish, and aquatic insects.

The albatross, an inhabitant of the southern seas. They skim the surface of the water, and never fly higher, except in boisterous weather. They rest and sleep on the water, and feed on small marine animals and dead fish.

The pelican, which has a pouch under its throat, and but three toes on each foot; their haunts and manners are but little known.

The petrel only comes ashore to lay its eggs. It has the faculty of taking its repose on the waves, in perfect ease, amidst the most violent tempests. When it is surprised in its nest, it emits

an oil, produced from its digestion, and throws it far enough to incommode the intruder.

Q. Which are those of the twenty-third order?—A. The duck, of which the domestic sort has become of great utility in our farm-yards. Wild ducks pass part of the day on the water, at a distance from the banks, and as night approaches, quit it for the meadows and sowed lands to seek their food. They make their nests, and spend the summer in the southern regions of Europe.

The swan, which is one of the same species, flies and swims with great ease. It has as elegant an appearance on the water as awkward on the land. Its life appears to be very long.

The harle, is met with in the north of Europe, on the sea and on ponds, but it is rather scarce, and is never seen but in winter. The flesh is dry and unpalatable.

The prion has a claw, instead of great toe, on each foot. It feeds on shell and other fish.

Q. Which are those of the twenty-fourth order?—A. The shear-bill, which cuts the surface of the water, and ploughs in its flight, with the lower part of its beak plunged into it, so as to slide under the fish, and catch it as it goes. It has, from this circumstance been, by some authors, termed the water-cutter. It is peculiar to the American seas.

The diver, which is not able to fly, but swims with extraordinary ease; when pursued, it dives under water, and does not rise within a great distance of the place where it went down.

The grebe, which inhabits salt and fresh water, and feeds on fish and sea-weed. Those which frequent the sea fix their nests in the clefts of rock, at its bank; while the fresh-water-grebes build them with reeds and rushes interwoven.

The guillemot, which has a rather elevated and pointed beak, three toes on each foot, and very short wings.

The alca has likewise very short wings, three toes on each foot, and very elevated and furrowed beak.

The penguin is not unlike the booby, but has some pinion feathers in its wings. They swim in the midst of the floating ice

of the southern ocean. Their skin is so thick, that it is not easy to cut off the head with a stroke of the sabre.

The manchot, a stupid bird, which has not power to fly, but swims very well. It never comes ashore but to lay its eggs.

Q. Which are those of the twenty-fifth order?—A. Only the sterna, which is found in every climate, cutting the water in its rapid flight, and carrying off the lesser fish that are near the surface. Although they can swim very well, they seldom do it.

Q. Which are those of the twenty-sixth order?—A. Merely the avosetta, which arrives on our coast in April and November, and often takes its leave the next day. It is difficult to catch, and seems common to no place in particular.

Q. Which are those of the twenty-seventh order?—A. Only the mauve, very common on our coasts. They are seen in great flocks fighting for the remnants of carcasses floating on the water; devour whatever they can get, fresh or putrified meat, fish scales, and even the very bones.

Q. How many orders are contained in the second subdivision?—A. Three, the twenty-eighth, crooked; twenty-ninth, dentelated; and thirtieth, straight and compressed beak.

Q. Which are those of the twenty-eighth order?—A. The man-of-war bird, of rapid flight, and which passes over an immense tract of sea. It travels night and day, and only stops on those seas which afford it ample provision. It is very voracious, and the fish which go in shoals cannot withdraw from its attack.

The cormorant, a bank bird, found on almost all the seas of the old and new continent. It feeds on fish, of which it destroys an immense quantity. Its flesh is by no means good.

Q. Which are those of the twenty-ninth order?—A. The booby, so called because it suffers itself to be caught by the hand, without endeavouring either to escape, or to defend itself. It can only take flight from an elevated point, from which it goes to skim the water, and take such fish as swim near the surface. It seldom leaves the vicinity of the bank.

The phæton, which rarely quits the tropics, and therefore is

likewise called the tropic-bird. Its flight is rapid and powerful, and it besides has the faculty of resting upon the water.

The anhinga, an inhabitant of the coasts of South America and Senegal. It swims with only its head out of water, and at the least suspicion of danger plunges entirely under.

Q. Which are those of the thirtieth order?—A. Only the pelican, which swims and flies well. It is sometimes found in our countries, but in general it prefers the hotter climates of Egypt and Barbary. They also have a pouch under the throat.

Q. Into how many orders is the third subdivision divided?—A. Seven; the thirty-first, beak crooked; thirty-second, straight and conical; thirty-third, straight and compressed; thirty-fourth, straight and depressed; thirty-fifth, straight and narrow; thirty-sixth, arched; and thirty-seventh, swelled.

Q. Which are those of the thirty-first order?—A. The kamichi, which makes war on the reptiles infesting the vast countries of South America: its manners are gentle, and its disposition feeling. The male and female never separate, and if one dies, the other enjoys no more happiness: its regret only ends with its life.

The giarole, whose beak is short and straight for a great part of its length. Its haunts are little known.

Q. Which are those of the thirty-second order?—A. The agami, or trumpeter, which goes in flocks in the higher forests of South America. It is easily tamed, and entertains the greatest affection for its master. It seems to have more instinct than any other bird, and less disinclination to the society of man.

The vaginalis, the upper part of whose mandible is partly inclosed in a sheath. It has but three toes on each foot; its habits of life are unknown.

Q. Which are those of the thirty-third order?—A. The cranes, natives of the north, whence they come to pass the autumn in these climates, and winter in Egypt. They direct their flight very high, and shape their course in nearly the form of an isoscele triangle. Their food is grain and insects.

The stork, which successively inhabits Europe and Egypt. Its

industry and utility made it respected by the antients, and by some modern nations.

The heron, a lonely and not an industrious bird. Its haunts are near marshes and brooks, where it feeds on frogs and fish.

The open-beak, so called, because its two mandibles are always separate from each other at one part of their length.

The rail, which commonly dwells on the banks of ponds or marshes. Almost all other birds put the head under the wing when they sleep, the head of this remains extended.

The oyster-bird, found on the banks of the sea, and never near fresh water. It acquires its name from feeding principally on oysters and sea shell-fish.

Q. Which are those of the thirty-fourth order?—A. The savacon, by some called the spoon-bill, on account of the shape of its beak. It perches on aquatic trees, where it waits for the fish on which it preys. It falls on it by diving and rising again without making a stop on the water: and the spatula, which is rarely met on shore, because it prefers the sides of the sea and rivers of almost all Europe, where it finds ample provision amongst fish, worms, and aquatic insects.

Which are those of the thirty-fifth order?—A. Only the woodcock, which inhabits during summer the summits of the Alps and the Pyrenees, and affords abundant sport in the winter. It is found in both worlds, and is very common in Europe.

Q. Which are those of the thirty-sixth order?—A. The jabiru, the most powerful of bank birds. It attacks and destroys the reptiles which abound on the sides of the marshes and rivers of the New World.

The ibis, to which the Egyptians paid divine honours, because those birds destroy the crocodile's eggs, and many reptiles, which, but for the ibis, would infest Egypt when the Nile returned within its bed.

The curlew, a bird common to all countries. In Europe they only frequent the coasts, commonly fly in flocks, and run with great agility. They feed on land-worms, insects, and little shell-fish.

The longshanks, a bird, whose legs are very slender and long. It

is found in Egypt and several other countries, but no where in plenty. Its walk is uneasy, but it flies with great facility.

Q. Which are those of the thirty-seventh order?—A. The water-hens, amongst which is included the sultana-hen of Buffon. Its carriage is noble, its form beautiful, and its plumage brilliant. Almost all the water-hens frequent banks, and some are met with in the hot climates of both continents.

The fulica, which passes great part of the day on the water, and seldom comes ashore; it hides itself in the day time among the rushes, and only flies towards nightfall. Its young throw themselves into the water, dive, and swim, the instant they are out of the shell.

The iacana, also at Brasil, where they are found, called surgeons, because their nails cut like daggers and needles. They have a small, yellow, and sharp spur, of the nature of a horn, placed on the front part of the wing, as a weapon of defence.

The lapwing arrives in those parts at the beginning of spring, and quits them at the end of autumn. They feed on worms, and as they uniformly go in great flocks, soon devour all the worms of a district, and are often obliged to change their country.

The plovers, equally common on both continents, are only seen in these parts towards the spring and autumn. They pass the hottest season in the northern, and the winter in the southern climates. Their name is derived from the French word pluvier, which signifies rainer, as they generally come during the autumnal rains.

The bustard makes no nest. At the beginning of spring they couple; the female makes a hole in the fields among the corn, and deposits two eggs. In their passage they only rest on high places, as it is not without great difficulty they rise from the ground.

Q. How is the second division of the second subclass arranged?

A. Into one subdivision, including the running birds, which have not the toes joined at the base by a membrane.

Q. How many orders has this subdivision?—A. Three; the thirty-eighth, strait and depressed beak; thirty-ninth, arched; and fortieth, swelled beak.

Q. Which are those of the thirty-eighth order?—A. The

ostrich, the largest of all birds, but it is unable to fly. It feeds on dates, fruits, herbs, and roots, and swallows sand and other hard substances. It inhabits Egypt, Arabia, and even Asia, but is not common. It is hunted by dogs.

The tonyon has but three toes on each foot, and a protuberance, which answers the purpose of a pouch. It runs so fast that dogs cannot keep up with it.

Q. Which are those of the thirty-ninth order?—A. The casewary, found in the East Indies and Java, from which the Dutch brought the first to Europe. It has the same attribute for voracity, and facility of digestion, as the ostrich; lives in the same zone, is also deprived of the power of flying, and kicks like the horse.

Q. Which are those of the fortieth order?—A. Only the dronte, or dodo, a very heavy and ill proportioned bird. Its body is massive, is with difficulty supported by two thick and very short legs, and surmounted by a grotesque head. It has wings, but they are too short to fly with.

OVIPAROUS QUADRUPEDS.

Q. How are oviparous quadrupeds divided?—A. Into two classes. The first comprehending those with, and the second those without tails.

Q. What does the first contain?—A. Two kinds; the tortoise, which is covered with a strong plate, or shell, and the lizard, which has no shell. The tortoise has always been considered an emblem of inactivity, on account of its slow, and apparently painful walk. They have a hard and heavy cover, which goes round their whole body. It is born with them, and they never lose it. It is their asylum and defence against their enemies. They have no teeth, but the scolloped bones which compose the upper jaw, are so hard, that they can easily break the most compact substances. The females deposit their eggs in great quantities on the sand, and cover them slightly, so that the sun may warm and hatch them. There are sea and fresh-water tortoises, and others that live on high and dry lands. The sea-tortoises feed on the

herbage above and under the water : it finds its food in a kind of meadows which are at the bottom of the sea, along many of the islands of America. Some of these tortoises weigh from three to four hundred weight, and produce from fifteen to twenty quarts of oil. The fresh-water tortoise is found on the banks of almost all the rivers of the hot and temperate climates. In the southern departments they are caught in gardens at the side of brooks and of ponds. They are of great use, from the quantity of snails, worms, and insects which they devour. The land-tortoise always inhabits gardens, fields, and forests, and feeds on fruit, leguminous herbs, roots, and insects.

Lizards in general are at the side of water ; some there are, however, which prefer old walls. They sometimes frequent inhabited places, which has acquired it the name of the friend of man ; others prefer desert places. Our lizards shed their skin during the fine weather. They are more common in hot than in cold countries, sometimes become familiar, and may always be handled with impunity, and without any risk. Among the different species of those animals are the crocodile, which inhabits the great rivers of the torrid zone. It keeps on the banks of the river, or concealed between two streams, and lays in wait for the animals which come to quench their thirst, and which have great difficulty in making their escape. They are found in Egypt, America, and Asia, on the banks of the Niger, Nile, and Amazon rivers. It has many enemies, and on the coast of Guinea there are negroes so bold as to attack it, body to body, and put it to death.

The salamander, to which have been attributed many qualities that it does not possess, and, among others, that of extinguishing fire : this peculiarity it has, that if one of its paws is cut off, another comes exactly like it. They are found throughout almost all the new continent.

The cameleon, which has long been taken as an emblem of those men who can flatter all opinions, and conform to all dispositions, because it was thought to have no proper colour, and always to take that of the neighbouring objects. It is found in Africa,

at Mexico, and can live, like some other lizards, a year without eating, which was the cause of its having been said to live on air.

The dragon, which by means of wings formed by a membrane adjoining its sides, can transport itself from one branch to another of the tree it dwells in. It is very different, to look at, from that winged monster spoken of by the poets, which killed its victims with a look, and united the agility of the eagle, the strength of the lion, and the size of the serpent. It is found in Asia and Africa, and lives on ants, butterflies, and insects.

Q. Which are those of the second class?—A. They are three kinds; the frog, tree-frog, and toad. The frog is known every where, and in fine summer evenings fills the air with its hoarse sounds, which is called croaking: they spend the winter in some shelter at the bottom of the water, where they lay torpid: they move nearly four hours after the heads are cut off: their general food is insects, spiders, and little snails.

The tree-frog, distinguished from frogs by little viscous lumps on their toes, which are useful to them in clinging to branches of the trees on which they hop or jump, in a manner not unlike that of birds, and hunt insects, and leap on them with great agility. Only one of them is a native of Europe, and is found in France and Germany.

The toad is looked upon as the most ignoble of beings, on account of its gross and disgusting look, but not the most mischievous: it appears they live above forty years. They are met with in many countries; and in America, after a rain, the earth is entirely covered with them. The nearer they approach hot and humid climates, the more offensive and dangerous they appear.

Q. Which are the animals that, by their conformation, seem to hold a middle place between oviparous quadrupeds and serpents?—A. The biped reptiles, of which there are two kinds; the taper biped and the stheltopusik, which are very little known. The former has two feet before, and the latter two feet behind.

SERPENTS.

Q. What are serpents?—A. Animals without either feet or

snakes, which are met with on the two continents: they pass the winter in a state of lethargy and torpor. At the commencement of the summer they shed the old, and get a new skin. The duration of their lives has not been exactly ascertained; but it appears to be rather long. When part of their tail is cut off, it almost always grows again.

Q. How are serpents divided?—A. Into eight kinds.

Q. Which are those of the first kind?—A. The snakes, in which is included the viper, as ferocious and dangerous as the common snakes are mild and innocent: it inhabits the southern departments of France, and many parts, in particular the dry, stony, and chalky soils of England, where it is well known on account of its dangerous venom. On each side of its jaw it has one, two, and sometimes three or four teeth, about three lines long, white, pellucid, crooked, and very sharp, which are called the canine teeth. The poison is contained in a vesicle, placed at each side of the head, and being pressed by the motion of the jaw, it traverses the penetrating tooth from the base to the summit, and filters itself into the wound. Tobacco kills them.

The asp, chosen by the unfortunate Cleopatra as her means of death after the victory of Augustus. It is found in Egypt, where it is used in many of their preparations. The Venetians derive it from thence for the preparation of their theriaca.

The common snakes are very clearly distinguished from vipers by the fine colours with which nature has adorned all the parts of their bodies. They may be rendered tame: they have been brought to know the voice of their mistress, and obey her commands. They spend the winter in the earth, and only come out with the return of summer.

The Esculapian serpent, diffused over almost all the hot and temperate climates of Europe: it is so gentle, that it suffers itself to be handled and caressed by children.

The ladies' serpent, whose beautiful colours, and elegant and pleasing forms, have fixed the attention of the Indians. The females of the Malabar coast take it in their hands, and fondle and

caress it; and, when the freshness of the atmosphere appears to oppress it, put it into their bosoms.

Q. Which are the serpents of the second class?—A. The boa, among which are the most powerful and largest of the serpent tribe. They are not venomous; and when they are destructive, it is only to satisfy a voracious appetite. The divine boa is, among serpents, what the lion is among quadrupeds: they have been found as much as thirty feet long; and, when pressed by hunger, neither mountains nor rivers can stop their progress.

Q. Which are those of the third kind?—A. The rattle-snakes, so named on account of their tail being terminated by a great piece of a scaly nature, or by several great pieces jointed one into the other, and which being moveable, make a rattling noise. The boiquisa, the most dangerous of rattle-snakes, inhabits almost all the countries of the New World, where it is much dreaded. The noise of its rattle is like that of the rubbing of parchment, and may be heard at the distance of sixty feet. Notwithstanding its noise, it is not easily avoided, as it goes so rapidly, springing from branch to branch, and from the points of the rocks where it lives.

Q. Which are the snakes of the fourth kind?—A. The Angues, which are quicker in their movements of every description than almost any other reptile: they can likewise go backward, but have not two heads as has been said. What contributed to the belief of it is, that the tail is very thick and blunt, and that the spots upon it may at a certain distance be taken for eyes, nostrils, and mouth.

Q. Which are those of the fifth order?—A. The amphisbæna, whose body is composed of rings which give it the faculty of bending every way, and to creep with almost equal swiftness forwards or backwards: from this is derived the word amphisbenous, signifying a double walker. As ridiculous absurdities have been said of this as of the former; they are said to have two heads, and that when they were separated from the body, the parts mutually looked for each other and reunited.

Q. Which are those of the sixth kind?—A. The cæcilia

so named on account of the smallness of their eyes, which occasioned a belief that they were blind.

Q. Which are those of the seventh order?—A. The langahas, greatly dreaded by the inhabitants of Madagascar; and, in fact, the form of their teeth, which resemble those of the viper, must make it presumed that they are venomous.

Q. Which are those of the eighth sort?—A. The acrocordus, which are much larger than the anguis. Their swallow is small; they have no venomous incuventions but a double row of teeth to each jaw. Their tail is very narrow, and the thickest part of their body is at the anus, the aperture of which is very small.

Q. Are there not snakes that have several heads?—A. There have been snakes, born with two heads at the same extremity of their body; but they are merely monsters which this class is no more liable to than that of other animals; and there is no species which engenders and regularly produces snakes with either many heads or many tails: such stories are only the chimeras of imagination always eager for the marvellous.

FISHES.

Q. How are fishes divided?—A. Into two sub-classifications; the first of which comprehends cartilaginous fishes, the solid internal parts of whose bodies are cartilaginous; and the second bony fishes, the internal solid parts of whose bodies are bony.

Q. How is the first sub-division arranged?—A. Into four divisions, the characteristics of which are, the first having neither branchial opercule nor branchial membrane; the second, a branchial membrane, but no branchial opercule; third, a branchial opercule, and no branchial membrane; and fourth, a branchial opercule and branchial membrane.

Q. How are the divisions separated?—A. Every division is divided into four orders; in the first are the fishes without a lower fin, and which are called apodal; in the second order are those which have two fins under the throat, and are called jugular; in the third, those which have one or two fins under the throat, called thoracics; and, in the fourth order, those which have one or two fins under the abdomen, and are called abdominal.

Q. How many kinds does the first division contain?—A. Four; the petromysons, of the first order, to which this name, signifying stone-sucker, has been given, on account of the faculty they possess of attaching themselves by means of their lips to rocks, slimy bottoms, and sunken wood: they have, like the cetaceous fish, an aperture at the back of the head. The lamprey is in this class.

Of the second and third orders we hitherto have met with none.

The ray, a fish of the fourth order, found only in the sea, especially, according to the different times of the year, towards the zones, because they prefer the vast regions of the ocean to feed their voluminous bodies: they often pursue with speed the fishes weaker than themselves, and, cutting the waters, fall unexpectedly upon them like the birds of prey which precipitate themselves from on high. One of the species of this kind is the chagrined, or shagreen ray, from which we get the skin known by the name of shagreen. The torpedo is also in this class, and is well known on account of its power of giving a strong shock to the arm which lays hold of it, as well as to the animal that attempts to devour it.

The squalus, a fish of the fourth order, in the species of which we find the shark, which attains the length of thirty feet, and sometimes weighs upwards of twelve hundredweight: it likewise possesses strength and voracity. Its French name requin, is a corruption of the latin word requiem, repose, and was given from the terror of the navigators whose ships they pursued, in the hope of swallowing whatever might fall under their murderous teeth. It can swallow a man whole by means of its throat, which extends to six feet in width. It is armed with six rows of dentelated teeth: its flesh is hard and ill flavoured, and skin best known in trade by the name of the sea-dog skin.

Another species of this genus, again very remarkable, is the saw-fish, the snout of which is terminated by a very firm, long, flat, and narrow extension: it is very hard, and armed with teeth also extremely strong, which makes it a terrible weapon, somewhat resembling a rake, or rather a large and strong saw, from whence it derived the name it bears. It attacks, and very often kills, the whales, to which it may be called an implacable enemy.

The aodans, fishes of the fourth order, whose name signifies toothless: they have been long confounded with those of the squalus genus; are inhabitants of the Red Sea, but are hitherto very little known.

Q. How many kinds are contained in the second division?—

A. Three; the lophy, a jugular fish, whose excessively large head, and extremely large aperture of throat, have given it the name of the sea-frog. Having few means of making war openly against other fish, it employs cunning, and hides itself in the mud in the midst of sea-weeds: it only suffers its filaments to be seen, and it moves them like worms, or other allurements; and when the prey has descended within the reach of its monstrous throat, it thows itself upon it: it is found in all the European seas. The balistus, a thoracic fish, the greater portion of which are inhabitants of the equatorial climates; their colours are very brilliant: they feed on the crab, mollusca, and polypi; and appear to swim with difficulty. The thick, hard, and tuberculous skin which envelopes its tail, probably takes from its facility in moving. The chimæra, abdominal fish, which owe their name to their remarkable conformation: their agility and whimsical kind of movements, the manner in which they show their teeth, and that of their moving in different directions every part of their snout, have likewise occasioned it to be called the sea-monkey: their long tails, and the length of the first radiations of their fins, made the ancient poets say that it had the head of a lion and tail of a serpent.

Q. How many sorts are contained in the third division?—A.

Two; the polyodon, an abdominal fish, also called sea-leaf-dog. The word polyodon signifies having many teeth, and this characteristic distinguishes them from other fish of the same order. The name of sea-leaf-dog was given it from its great resemblance to that species of the squalus, called the sea-dog, and the flattened prolongation of the snout, almost as long as the head, body, and tail together, and is formed something like a spatula.

The acipenser, an abdominal fish, and among which is included the sturgeon, which furnishes a wholesome and abundant food.

The acipenser-huso, or isinglass fish, which is scarcely ever met with but in the Caspian and Black Seas, supplies us with the isinglass, so great an article of commerce.

Q. How many kinds are there in the fourth division?—A. Eleven: the ostracion, covered with a dark shell which entirely incloses it, and which has made some call it the trunk-fish: they in general have little flesh, but it is in several kinds, well tasted. It is only to be found in the seas of the hot climates of both continents.

The tetrodons, apodal fish, which have received that name signifying four teeth, on account of the particular conformation of their jaws, which are each separated into two dentelated parts, to which the name of teeth has been assigned. There is one species called the electrical leodon, because it gives strong shocks to those who lay hold of it. That electric property, which we have seen belongs to the torpedo, likewise belongs to other kinds of which we are about to treat.

The ovoidis, apodal fish, which derive their name from the formation of their bodies, which have some resemblance to an egg; they have only two pectoral fins, as small as the wings of a common fly.

The diodons, apodal fish, having a strong resemblance to the former, but with jaws of a single piece forming one tooth above and one below; thence comes their name which means two teeth. The numerous prickles almost the whole surface of their body is covered with, has occasioned them to be compared to porcupines and hedge-hogs.

The spheroidis, apodal fish, is so called from their almost perfect spherical form, from which it only varies by two very marked projectors, in each of which is placed an eye: its nostrils are situated between the eyes and the aperture of the mouth.

The syngathus, apodal fish, having neither tongue nor tooth: they have a breastplate, which does not however impede their movements. As they have but little flesh, and do not lose it easily, and in agitating themselves bear great similitude to a worm, they are used as baits.

The hippocampus, comprised in this species, has a head in form rather resembling that of a horse, and the remainder of the body like a caterpillar: from its form it deives its name, which signifies horse caterpillar.

The cylopterus, thoracic fish, whose two under fins, united and rounded at their junction, make a pretty good representation when unfolded, of the form of a shield, or rather of a disk, which gives them their name, meaning disk-bearer: they are found in many seas, but especially in the Southern Ocean.

The lepadogaster, thoracic fish, very like the former: their lower fins joined together makes the form of a conch, whence the name.

The macroryncos, abdominal fish, so named to designate the make of their snout, which is not only pointed, but very long.

The pegasus, abdominal fish, having pectoral fins, conformed and extended so as to support them some time in the air. One of these species is called the dragon pegasus, and another the flying pegasus.

The centriscus, abdominal fish, very like a kind of tortoise called tortoise luth. They are mostly covered with a breastplate more or less strong, which gave rise to the comparison.

Q. How is the second sub-classification divided?—A. Into four divisions, the characters of which are, the first having a branchial opercule, and a branchial membrane; the second a branchial opercule without a branchial membrane; the third, a branchial membrane without a branchial opercule; and the fourth without either branchial membrane or opercule.

Q. How are these divisions managed?—A. Like those of the first sub-classification; each into four orders, of which the first comprises the fish without lower fins, and are called apodals; the second, those which have one or two fins under the throat, called jugulary; the third are those which have one or two fins under the throat, and are called thoracic; lastly, in the fourth, are those which have one or two fins under the abdomen, and are called abdominal.

Q. Which are those of the first order of the first division of bony fish?—A. The Cæcilis, apodal fish, as well as the follow-

ing, and which have no fins whatever. They are so called, because they seem to be wholly deprived of sight.

The monopterus, which name signifies having but one fin : for they in fact have but a small fin at the tail.

The leptcephalus, which have no fin at the tail nor any pectoral fins. They have but one dorsal and one fin at the anus, both very long but very narrow.

The gymnotus, one species of which termed the electrical gymnotus, gives, like the torpedo, a powerful shock on being touched. It is at Cayenne and Surinam, where it comes from, called the electric eel.

The trichurus, a flat fish, the tail of which is very slender and without fins. By striking the water with its two great lateral surfaces, it can throw itself above the water of the rivers and lakes, and sometimes into the boats of the fishermen.

The monopteros, shining with the colour of gold and silver, which is diffused over the little scales of their skin.

The ophisuros, for a long time called sea serpents, from the likeness of their tail to that of a serpent.

The triurus, whose name intimates having three tails, because the dorsal fin and those of the anus and tail are so near together and so disposed, that these fish seem as if they had three tails.

The apteronotos, fish of two colours, of a black more or less deep, and a bright white.

The regalec, called also king of the herrings, because they are found in the numerous shoals of those fish, like them, are silvered and are much larger.

The odontognathos, whose two jaws are disposed in a particular manner. The lower jaw is longer than the upper, and much raised against it when the mouth is entirely shut, so that in this position it seems almost vertical.

The murena, in which species is the eel known every where ; but what is most remarkable about it is, that it has the power of leaving the water and going into the meadows in search of little worms, on which it feeds. Another species, called the conger, grows to the length of eighteen feet ; it is voracious, and to sa-

atisfy its wants, it lays in ambush at the mouths of great rivers, and preys upon the fish on their way to or from the sea.

The amodytes, or launce, of which we know another species, the bait amodytes, because many of the larger fish being fond of its flesh, it is used as a bait in fishing for them.

The ophidus, found in the Red and Mediterranean seas. They are shaded with silver mixed with flesh-coloured tints, relieved with blue and varied by a great number of little spots.

The macrognathus, whose name signifying long jaw, points out the great length of the upper jaw of those fish.

The xiphias of which there are two kinds, the sword-fish, on account of the prolongation of its upper jaw in the form of a two-edged sword or sabre, a terrible weapon to which this great animal adds both strength and courage, and often uses it against the other cetaceous kind which it puts to flight; and the second species, which on account of a prolongation of its jaw nearly similar, is called the sword; but it is not sharp, and on the contrary is round and covered with a shagreen skin much more rude than that of the sword fish.

The anarhicas, the species of which are very ferocious and formidable. One is called the sea wolf, and the other the panther; although they have no swords like the former, the number, shape, and hardness of their teeth are means of destruction more powerful than those of the xiphias.

The cornephorus, which have received this name meaning hair-carrier, because their second dorsal fin is terminated by filaments resembling hair.

The stromateus, of which there are two species, both ornamented with brilliant but different colours. One has its upper part blue, lower part white, and round the lips red: the other is of a gold colour above, and silver underneath.

The urombus, which are found in Carolina, and whose lateral faces are rhomboidal, which is the reason of their having the generic name they bear.

Q. How many kinds does the first division of the second order of osseous fishes consist?—A. Ten; the murenoides, which have

both jaws filled with a double row of teeth; they are of an ash-coloured grey, which is lighter towards the head and on the belly.

The callyonymus, or dragonet, intitled to their name from their beautiful shades relieved by the most lively colours, such as yellow, blue, green, &c. One of the species is named lyre callyonymus, by reason of a dorsal fin, the rays of which decrease in the proportion of strings, calculated by their length to effect the most perfect harmony in music.

The callyomorus, very like the former, but less beautiful in colour.

The uranoscopus, whose name signifies looking to heaven; but not only their eyes are placed on the upper part of the head, but turned so, that when these animals are at rest, their pupils are directed perpendicularly towards the skies.

The trachinus, or weaver, also termed sea-dragons, on account of the splendour of their colour joined to the power of making severe wounds by arms almost inevitable. It has been compared to the fabulous dragon, which attached to the magicians' car, dazzles and charms while it inflicts death.

The gadus, in the kind of which are two species very well known: the cod found at Kamtschatka and in the Channel; but the most esteemed and best are about the bank of Newfoundland, and there it is the ships of almost all nations succeed in taking them. The other species is the whiting, which is caught on the European coasts almost all the year: its flesh is always delicate and easy of digestion; but it is larger when the herrings have deposited their spawn, and it has had the opportunity of feeding upon it for some time.

The batrachoides, which derive their name from a Greek word signifying frog; a vague resemblance to that animal has given them the name.

The blenny, neither so numerous, so good, nor so large as the gadus, but it possesses great agility and cunning either in seizing its own prey or escaping from its enemies.

The oligopodus, to which this name was given, to point out

the diminutiveness of their pectoral or thoracinary fins, and the only species of which known, and named *veliferus*, has two immense fins, which as they unfold present a great surface, and have great resemblance to a sail.

The *kurtus*, whose name signifies hump-backed, because, in fact, these fish have on the back an elevation resembling a hump. Their scales are like plates of silver, and the back is ornamented with gold spots, which renders their attire magnificent.

Q. Which are the most remarkable kinds of the third order of the first division of osseous fishes?—A. The *cepola*, of which there are two species, one whose different names of fillet, flame, sword, &c. designate a very long body, flat sides, flexible, rolling with facility round a cylinder, appearing and disappearing in the midst of the water like a light flame, or yielding to every motion of the waves, attain the summit of the masts, and give way to every current of the atmosphere; and the second, the names of which of sea-serpent, red-serpent, and serpentiformed, indicate the resemblance of its form to that of serpents.

The *tænoidus*, whose eyes are so small that they are barely distinguishable, but which in other respects approach the former by their undulations, swiftness, and agility.

The *gobius*, which have not been endowed by nature with terrible arms, but an instinct so extensive as to enable them to escape their enemies by all sorts of devices and cunning. Their colours too are not of the brilliancy of many other fish, but their shades are still pretty.

The *tunny*, a fish, interesting from their rapid course, long voyages, chases, combats, and many other habits. Amongst the different species is the *thon*, which is often seen to unite in numerous shoals, bound with agility, spring with force from the surface of the water, where they either maintain their combats or their games. When they voyage, they form a kind of parallelogram, which appears on the top of the water following a ship sometimes for a great distance, and all at once dispersed by a loud discharge of artillery, or sudden clap of thunder. Another species of this sort also, very well known, the *mackarel*, is not so

large as the tunny. It is found in the frozen as well as in the hotter seas: it passes the winter with its head plunged into the mud, and leaves nothing out but the tail, which is kept strait perhaps by being benumbed.

The caranx, whose name, of Greek derivation, signifies head, obtained the name from the form of that part, and to announce the sort of power they exercise over a great number of fish.

The caesios, the colours of which are a most delightful sky blue, a yellow band above, and the belly of a brilliant and silvery white; in short, gold and silver, sky blue, yellow, and black, are diffused over its scales with the utmost magnificence and variety.

The coris, whose head is surmounted and enveloped with a kind of helmet formed by a large plate of scaly substance. The first ray of the dorsal fin is once or twice as long again as the others, and seems to serve as a plume to its helmet.

The gomphony, the snout of which is very like a nail, which has occasioned it to be thus denominated. There are two species, the blue and the variegated.

The nason, a brown-grey, and remarkable for the singularity and form of its head, on which is a protuberance almost cylindrical, which has obtained it the name of the unicorn and little unicorn.

The osphonemus, remarkable for their make, size, and excellence of flesh. Their height is very great in proportion to their other dimensions, and they furnish a meat equally abundant and agreeable.

The trichopodus, whose head seen in profile, has some resemblance to the human face. The lower jaw projects, and is rounded so as to form a kind of chin; its forehead is convex, and the whole face without a scale, and covered with great plates seems covered with skin: the resemblance is however by no means complete.

The plectorhincus, whose name expresses the numerous folds of their snout. Their appearance is beautiful and varied.

The bostrychus, whose little barbs on the upper jaw facilitate

their distinction from several other fish which they resemble in other particulars.

The echineis, or sucking fish, one species of which named the remora, has been the subject of many fables as ridiculous as they are extraordinary. It has been said, and Pliny repeats it, that when this fish, which is not above a foot long, fastens itself to a ship, it is immoveable even in the midst of the most violent tempests. This fish was also supposed to possess the faculty of arresting the course of justice, and a thousand other powers, the fatal parts of which were compensated by others as useful; as drawing out by its mere approach all the gold which might have fallen into the deepest well.

The coryphæna, or razor-fish, the most magnificently attired of any fish hitherto discovered in the sea; covered with large and polished scales, that reflect with lustre the rays of the sun and shine with all the colours of the diamond and the most precious oriental jewels. They surround ships in great shoals, and approach sufficiently near that the richness and variety of their shades may be clearly distinguished.

The cottus, or bull-head, almost all the species of which have but dark and dirty colours; but it has been made amends to them by a faculty granted to a very small number, that of uttering sounds, which indeed are not only far beyond the melodious songs of many birds, but even the expressive cries of almost all quadrupeds.

The scorpion, a fish which may be called monstrous, and it is probable that the poets, fabulous mythologists, and painters, took it as a model for their phantoms, shades, and demons, with which they surround their enchanters and magicians.

The centronotus, which their smallness alone can save from the larger fish, in the midst of which they very often are, for their only arms are little darts which they have at some parts of their bodies. But the little nourishment they afford to other fish or sea animals is their best security.

The dactylopterus, great flying-fish, their fins serve them as wings to raise them into the air; but the membrane of which

those wings consist getting dry in the scorching atmosphere of the country they inhabit, they drop again into the sea, where they repair by their immersion the deficiency of their wings. This property of flying has obtained them the names of sea-falcon and sea-swallow, and it is often serviceable in enabling them to escape from a great number of fish which pursue them.

The mullet, so well known of old, on account of the splendour and beauty of its colour. It was very dear amongst the Romans, who made it an object of luxury. Their beauty has been the occasion of their captivity, for they are kept in ponds and rivers as ornaments to them. They are found in many seas; the Channel, Baltic, Atlantic, &c.

The macropodus, the beautiful colour and light motions of which has made it a matter of research to the Chinese, who cultivate beautiful fishes like beautiful flowers, and they have used great care in depicting it.

The labrus, or wrasse, a fish of neither magnitude, strength, nor power, but which has received from nature pleasing proportions, active motions, and means of rapid progression. It glitters also with splendid colours disposed in drops, stripes, rings, and waves. It is found in many seas; amongst the ice of Norway, and on the scorching banks of the East Indies, in the main ocean, and at the mouth of rivers.

Lastly, the ophiaphalus, whose name signifies serpent's head, which is found in the rivers and lakes of the coast of Coromandel; they either creep in the mud or plunge boldly forward,

MOLLUSCA.

Q. What are the molluscæ?—A. They are animals whose bodies containing no osseous parts, are soft and covered with a very tender envelope called a mantle.

Q. How do they change their positions?—A. The greater number creep or draw themselves on a disk or kind of glutinous foot, which serves them to attach to the body upon which they move, and some of them have a foot by which they can make a spring.

Q. What are the tentaculi of molluscæ?—A. A kind of flex-

ible horns, never fewer in number than two, and rarely more than four, and which the animal can lengthen or shorten at will; more frequently indeed they are a kind of hollow tube, which can be drawn in and shut intirely up within themselves.

Q. Have they any eyes?—A. The naked kind; that is to say, those which have no shell, have eyes extremely well made; but the eyes of others are very imperfect. Some likewise have a mouth which is in one kind marked by a little cleft, and in another prolonged in the form of a trumpet.

Q. What is the form of the shell?—A. Those which have shells are born with them, and the shell afterwards enlarges and increases by the successive formation of internal beds, which are always a little larger than those preceding, and are produced by a continual transudation of a viscous liquor from the skin, and particularly from the mantle of the animal, the body of which is always humid. This liquor coagulates, dries, and afterwards acquires a consistency.

Q. Where do they live?—A. The greater part in the sea; some are, however, met with in fresh water, and even on the land, in damp or shady places. The snail is of this description: it is commonly found in gardens, particularly after heavy rains.

CRUSTACEOUS ANIMALS.

Q. Which are called crustaceous?—A. Animals covered with a coat, hard, flexible, and divided by joints termed articulations, wherefore their bodies and limbs are said to be articulated.

Q. How are the eyes placed in crustaceous animals?—A. The eyes of some are raised on moveable pedicles, and are then called pediculous; as the crab and cray-fish: others have eyes fixed, not raised on pedicles or sessils, and are on that account called sessiculous: such as prawns and wood-lice, which make two very distinct orders of these animals.

Q. Does the skin of crustaceous animals grow like the shell of molluscæ?—A. No; their skin becomes harder and harder; the consequence of which is, that as the animal increases it can no longer yield and accommodate itself to the new bulk effected by

this increase, and it is obliged to strip it totally off at certain periods of its life to form another more suitable to its increased dimensions.

Q. Where do the crustaceous kinds live?—A. For the most part either in salt or fresh, running, or stagnate waters.

Q. Where do they deposit their eggs?—A. Some fasten them to their tails, and in that case carry them always naked; these are the first order in which is the crab and cray-fish; others carry them either under the belly or tail, or fastened behind, but always shut up in a pellicle forming a kind of bag; these are the second crustaceous order in which are the prawn and wood-louse.

ARACHNOIDES.

Q. What is the external formation of the arachnoides?—A. Their skin is almost wholly soft, feet articulated, and eyes in the head, as soon as they are produced.

Q. What is the mouth?—A. They have a pair of mandibles and a pair of very small jaws: some of them have indeed, instead of a mouth, nothing but a little trunk or kind of sucker.

Q. Where do they live?—A. Some on land, some in water, and others on different animals whose substance they suck. They are in general carnivorous, and live on the prey or blood they suck.

Q. What is the derivation of the word arachnoides?—A. From the Greek signification of a spider, because the spider included in that class being the best known of any animal in it, served to denominate the class.

INSECTS.

Q. Which are the animals called insects?—A. They are those which undergo one or more changes of form, and which in their perfect state have eyes and antennæ in the head.

Q. What are antennæ?—A. A kind of horns which insects have; the butterfly has antennæ.

Q. How are insects brought forth?—A. They come out of

the egg in the form of a worm, a different form to that which they must assume to be in their perfect state, and without certain organs which they must have afterwards. They are then termed larvæ. The greater part of these larvæ have a variable number of short feet; but some have none.

Q. Do insects remain long in the state of larvæ?—A. Longer than in their perfect state; and during that state they change their skins several times as they approach maturity. When the larvæ have acquired their last increase, they undergo a transformation and take the state of a nymphæ or chrysalis.

Q. How are insects when changed into nymphæ?—A. They are mostly in a state of immobility, inclosure and occultation of parts, which appear like a state of death. The chrysalis takes no nourishment, and has generally almost an oval form. After an indefinite length of time, according to the species, they undergo another transformation which makes them a perfect insect.

Q. Are insects in their perfect state very different to what they were before?—A. From creeping insects which they were, they become winged and flying; the most brilliant state of their life, during which they seem all pleasure and gaiety.

W O R M S.

Q. What are the external characteristics of worms?—A. They have a long soft body divided by transverse wrinkles which they have the power of contracting at pleasure. They have no articulated feet, and undergo no transformation.

Q. Have they any eyes?—A. Some few of them have eyes, but the greater part are without.

Q. How do they go forward?—A. They creep by successively contracting all the parts of their bodies, by clinging with some of their wrinkles, and then elongating those that do not cling.

Q. Do worms die from their bodies being cut in pieces?—A. No; they have the property of regenerating their mutilated parts. Some when divided succeed in repairing and cicatrising the cut extremity of either part of the body, the result of which is two worms that live apart.

Q. Where are worms found?—A. Some are constantly naked

and live either in the water or in the ground, or in the bodies of different animals : others again live in cases or tubes of their own formation, from which they go out and return as they choose.

RADIARIES.

Q. Which are the animals termed radiaries ?—A. Their bodies have neither head, eyes, nor articulated feet, but having a disposition towards a radiating form, are called radiaries. They have a mouth underneath, but it is with great difficulty that some slight indications of their existence can be discovered, which has caused them for a long time to be confounded with the polypi.

Q. What external parts are to be remarked in the radiaries ?—A. A mouth often armed with teeth and often also a distinct anus. In some the body is covered with an opaque coriaceous skin strewn nearly over with articulated points and tubulous suckers ; in others a soft skin without points.

Q. Where are they met with ?—A. In the open sea. They have generally but little sense of feeling ; but their soft parts are very irritable and liable to contraction.

POLYPUS.

Q. What is the formation of the polypus ?—A. They have a soft and most frequently gelatinous body, without either head or eyes, and an intestinal duct, the entry of which is both mouth and anus.

Q. How do they live ?—A. They are all aquatic, and appear to derive their nourishment from suction and absorption, which is made around the alimentary canal of matter often found digested there.

Q. How do they reproduce ?—A. Several produce buds, which are sometimes taken for eggs, and which in the greater part separate, but very tardily, and often not at all ; so that the polypus, at first simple, afterwards becomes compound. Others multiply by a natural scission of the body, and have the property when cut of forming as many new polypi as they have been divided into parts.

Q. What is a polypier ?—A. It is a name given to the

dwellings of the polypi, which are attached underneath it. They are formed insensibly by the great multiplicity of the polypi, and by the accumulation of cells which the polypi make. They are sometimes of a stony, sometimes horny, sometimes spongy, or sometimes of a gelatinous substance. The class of polypi is the last of the animal kingdom, and comprehends the least perfect of the whole.

PHYSICS.

Q. What is physics?—A. Physics in general is the science of all that passes in nature: it is divided into physic, properly so called, and chemistry. Physics, properly speaking, only refers to the action of bodies acting in their mass.

Q. What are the general properties of bodies?—A. Properties are certain constant manners of acting in bodies: and those are called general properties which appertain to all bodies.

Q. Which are those general properties?—A. Extent divisibility, figurability, impenetrability, porosity, rarefractibility, condensibility, compressibility, elasticity, dilatibility, mobility, and immobility. They belong to all bodies without exception, but in different degrees.

Q. What is the extent?—A. The property which all bodies have of a length, width, and thickness.

Q. What is divisibility?—A. The property of being divided into different parts. We can conceive it possible with suitable instruments and organs to divide a body however diminutive; and there are bodies in which the property is carried to a very great degree. Perfumes are great proofs of it. A grain of musk left in a room which admits fresh air every day, creates an unpleasant smell for ten years. Experience has also proved, that by passing an ounce of gold through the filing and flatting machine it may be divided into 67,616,000 parts of a line each.

Q. What is figurability?—A. The property of being of some figure or other. All bodies are terminated by surfaces; these surfaces necessarily have a certain arrangement one with another; this arrangement it is which is termed figure: all bodies therefore have a figure.

Q. What is impenetrability?—A. The property of occupying one place at a time, and by which they reciprocally drive away each other.

Q. What is porosity?—A. The property of a vacuum between their particles. The pores of some bodies are very apparent, and of others imperceptible; but experience proves that all have them, and in very great quantities.

Q. What is rarefractibility?—A. The property of augmenting the bulk of bodies by the action of heat. The air possesses that property to a very high degree.

Q. What is condensibility?—A. The property of diminishing the size of bodies by cold. The heat which had dispersed their particles having subsided, they resume their original state.

Q. What is compressibility?—A. The property of reducing bodies by pressure, to occupy a less bulk. In fact, all bodies being porous, that is to say, having a vacuum between each particle, if these particles are brought nearer they will occupy less room. All bodies are, therefore, compressible; but some, such as liquids, in a very trifling degree.

Q. What is elasticity?—A. The property which every compressed body has of making an effort to regain its first state. Some bodies are very little elastic; others, such as marble, ivory, and iron, are elastic in a very great degree.

Q. What is dilatibility?—A. The property which all bodies have of increasing their bulk by the force of their spring, as soon as they cease to be withheld by obstacles. This property must not be confounded with rarefractibility; dilatibility is produced by the reaction of bodies; rarefractibility by heat.

Q. What is mobility?—A. The property of being transported from one place to another by means of sufficient force.

Q. What is immobility?—A. The property of resisting a change of place; that is to say, when bodies are still, they resist being moved, and when in motion they resist being still.

Q. What is motion?—A. The state of a body in the act of being transported from one place to another, either in totality or only in parts.

Q. Are there different sorts of motions?—A. Yes; absolute motion and relative motion; simple motion and compound motion; rectilinear motion and curvilinear motion; reflective motion and refractive motion.

Q. What is absolute and relative motion?—A. Absolute motion is the change of situation of one body, in regard to all the bodies near it; and relative motion is the change of situation which happens to one body, relatively to certain other bodies, and does not happen to all the bodies.

Q. What is simple and compound motion?—A. Simple motion is that of a body directed only towards one single point: and compound motion is the motion of a body forced to move itself by several powers, which act upon it at the same time, and in different directions.

Q. What is rectilinear motion?—A. Rectilinear motion is made in a right line, and curvilinear motion is on a curved line.

Q. What is reflective and refractive motion?—A. Reflective motion is that of a body which meets with an obstacle invincible to it, and which makes it rebound from the shock. Refractive motion is that of a body the direction of which is changed by its successive passage in two fluids of different densities.

Q. What is meant by the laws of motion?—A. Certain constant rules according to which all bodies move. There are three for simple motion; and for compound motion only one, of which all the others are but consequences.

Q. What are the laws of simple motion?—A. Whatever body is put into motion, must continue to move in the direction, and with the degree of velocity, it has received, if its situation is not changed by any new cause. The changes which happen to a body are always proportionable to the cause which produces them. The reaction is always equal to the action or compression.

Q. What is the law of compound motion?—A. A body set in motion by several powers acting at one time and in different directions, either remains still or takes a movement, according to the relative state of the powers amongst themselves for velocity, and a mean direction between that of the powers which it obeys.

Q. Cannot compound motion be effected in various ways?—

A. Yes; in a right line, if the body is obedient to the two powers which persevere in the same direction, whether they do not change, or whether they experience equal or proportionate changes on both sides; or in a curved line when the tendency of the powers changes; if one becomes stronger or weaker, while the other does not change; or if both changing they yet do not change in proportion.

Q. What is called force?—A. The cause which impresses or tends to impress a motion on the body where it acts.

Q. Are there not many kinds of force?—A. Three; motive force, that of one or more bodies employed to move another; dead force, which acts against an obstacle invincible to its power, and which consequently makes no motion, but has simply a tendency to move; and active force, that of a body in motion acting upon an obstacle that gives way.

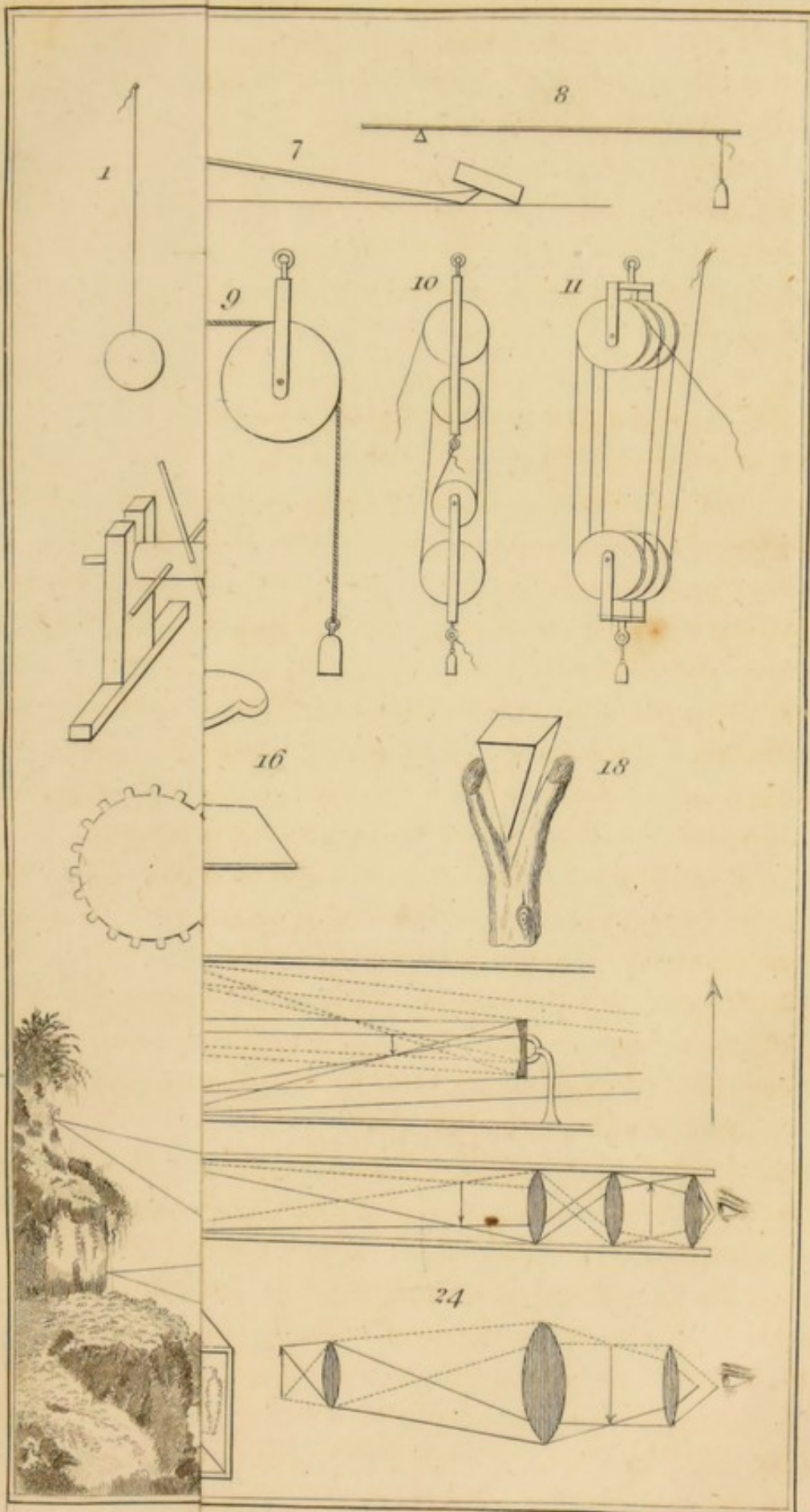
Q. What is called central force?—A. Two forces which continually impel a motion, one from, and the other to; and which give it a motion in a curved line: for the sake of distinction the first is called centrifugal force; the second centripetal force.

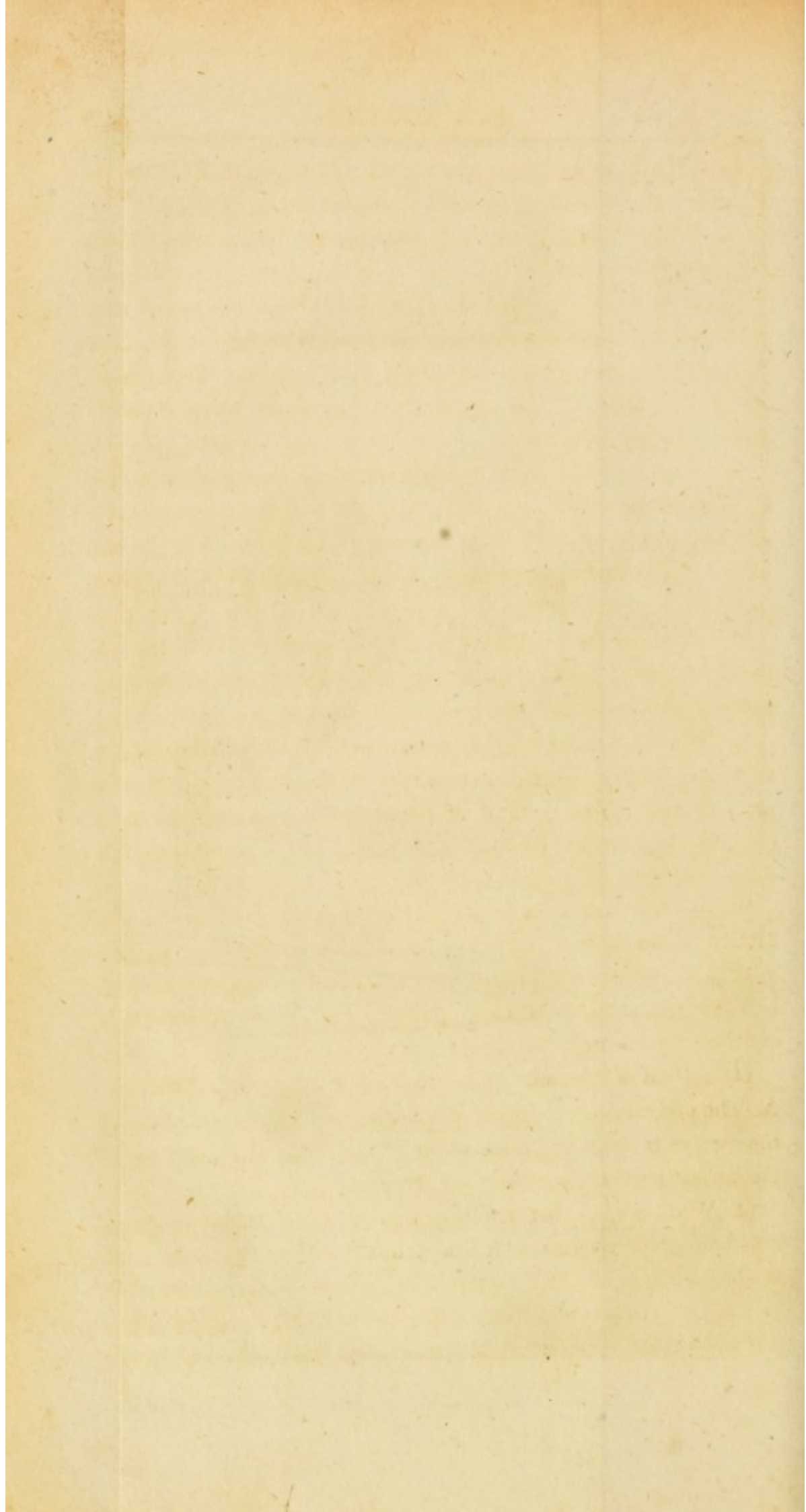
Q. What is gravity, or the gravitation of bodies?—A. The force by which all bodies tend towards each other: it is likewise termed attraction.

Q. What is called the weight of bodies?—A. The force by which bodies have a tendency to descend by a perpendicular line to that point of the surface of the earth to which they correspond; it is a consequence of general gravity.

Q. What is oscillation?—A. The motion of a heavy body attached by a thread or wire to a fixed point, round which it describes an arch by the action of its weight; in this case the body is termed a pendulum, its centre of gravity the centre of oscillation, and the fixed point centre of motion. Plate 6, fig. 1.

Q. What is the motion of projection?—A. That of a body thrown out of the perpendicular to the horizon, and on which the weight acts: such is that of a bomb, stone, &c. The force which throws the body is called the projectile force. Fig. 2.





Q. What is hydrodynamics?—A. The physical action of fluids: it comprises two parts, hydrostatics and hydraulics.

Q. What is hydrostatics?—A. The science which refers to the weight and action of fluids.

Q. Which are the bodies styled fluids?—A. They are substances the parts of which are moveable amongst themselves, have no, or nearly no cohesion one to the other, and all moving independently; such are air, water, &c. The fluids produce different and curious phenomena.

Q. Which are the most remarkable of these phenomena?—A. The ascension of water in pumps, mercury in the barometer, and the formation of water-spouts, a phenomena owing to the action of one fluid upon another, and to the pressure of the air on other fluids.

Q. What is the areometer?—A. It is a glass instrument divided into equal parts of its length, and which plunged into the fluids, serves to declare their specific weight. Fig. 3.

Q. What are called capillary tubes?—A. Narrow tubes which immersed into a liquid at one of their extremities, have the property of making the column of liquid introduced into their interior, rise or fall out of its level. The cause of this phenomenon is not agreed upon.

Q. What is hydraulics?—A. The science which relates to the motion of the fluids. According to the principles of this science it is, that means are found of conducting water from one place to another by canals, aqueducts, pumps, and other hydraulic machines, either to make fountains or for other uses.

Q. What is the cause of the rise of the water of fountains?—A. The pressure exercised on the fluid either by the elevation of the reservoirs from which the water comes, or by the elasticity of the air compressed by hydraulic machines.

Q. What is the construction of pumps?—A. Pumps are composed of a hollow tube well united in the inside, called the body of the pump, in which is inserted a stopper or piston which is set to work by means of a metal stem, to the extremity of which is fixed the handle, a lever, or some other machine: to that is

joined a rising tube to conduct the water to the height desired; and lastly suckers.

Q. Are there not several kinds of pumps?—A. Forcing pumps, fig. 4. lifting and sucking pumps, fig. 5. and pumps both forcing and sucking, fig. 6.; all the rest are merely varieties of the same thing.

Q. What other advantages do we derive from hydraulics?—A. It has taught us to employ water to effect very great powers; as in all water-mills, and machines worked by a water-wheel, the lower part of which introduced into a running water produces a power often greater than that of four horses, and which moreover is uniform and unremitted. The same effect may be produced by the weight of water falling from an elevation upon a similar wheel. The first is termed an undershot, the latter an overshot wheel.

Q. What is mechanics?—A. A science which explains the laws of equilibrium and motion of solid bodies. It is divided into two branches: the statics, which consists in the equilibrium of bodies, and dynamics, which relates to the motion of bodies.

Q. What is meant by a machine?—A. Any instrument intended to transmit the action of a force to a point not in its direction, or to change the direction of that force.

Q. Are there not several different machines?—A. They are distinguished into simple and compound machines.

Q. Which are the simple machines?—A. They are seven in number: the lever, pulley, turner, cog-wheel, inclined plane, vice, and wedge.

Q. What is a lever?—A. An inflexible rod, straight or curved, moveable round one of its points and made fast by means of an invincible obstacle termed the basis, fig. 7, 8.

Q. What is the use of the lever?—A. To raise considerable burthens, and in general produce very great exertion with little strength: it is also made use of in scales of every description.

Q. What is a pulley?—A. A wheel hollowed in the edge of its circumference to receive a rope, and transversed at its centre by an axle whereon it can turn in an holdfast.

Q. What is the pulley for?—A. To change the direction of a force, or to produce a great effect by a small force when several pulleys are made use of, some of which are fixed and the other moveable.

Q. What is a muffle?—A. A system of several pulleys collected in the same holdfast, either on particular axles or on the same axle, fig. 10, 11.

Q. What is the turner?—A. The turner, also called the roller, and more commonly called capstan, is a machine composed of a cylinder moveable on its axis, round which is twisted a rope fixed to it by one of its extremities, and which is attached by the other extremity to the resistance desired to be brought up; the cylinder is turned by men either by means of a wheel furnished with jaunts or felloes, to which they cling by means of great levers placed at the head of the cylinder, fig. 12, 13. This machine too has great power and is employed in cranes for working stone quarries, &c.

Q. What are called cog-wheels?—A. Wheels furnished at their circumferences with teeth so disposed that the teeth or cogs of one entering into the intervals of the other, the first communicates to the second the motion it receives itself. Two wheels are commonly placed on one beam, one of a smaller diameter than the other called a pinion, fig. 14.; the jack is a machine composed of cog-wheels; it is very common and of great power. Masons use it for raising enormous stones, and carpenters for their carriages, fig. 15.

Q. What is an inclined plane?—A. Every plane which forms a sharp angle with the horizon. It is made use of to facilitate the descents of very heavy burthens, and to raise them with greater facility, as in the rail-ways now used in many parts of England.

Q. What is the vice?—A. An upright cylinder surrounded by a projecting ridge adhering and rolling spirally on the surface of the cylinder. The distance between the two consecutive revolutions of the ridge is called the height of the foot of the vice. The piece into which the vice enters is called the screw; its ca-

vity is furnished with another projecting ridge so as exactly to fill up the intervals between the projections of the vice, fig. 16.

Q. In what is the vice employed?—A. Most frequently to make great pressures; very often to secure different pieces in a solid manner; and sometimes also in communicating to a dented wheel a rotatory motion on its beam; in this case it is called an endless vice, fig. 17.

Q. What is the wedge?—A. Ordinarily an instrument of wood or iron, with a sharp ridge introduced into a cleft to widen or separate the two parts of a body; knives, hatchets, &c. may be considered as wedges. The face which receives the effort is called the head of the wedge; the edge by which it commences to enter is called the cutting edge, and the name of slides is given to those faces by which it compresses the bodies it widens, fig. 18.

Q. What are aeriformed fluids?—A. Those which like the air are often without colours, invisible, and always very elastic; they are likewise called gas, are many in number, and distinguished into two kinds, permanent and non-permanent.

Q. What is meant by permanent and non-permanent gas?—A. By permanent gas is meant those which do not become liquid from cold; and by non-permanent gas those which the cold liquifies. Such is the vapour from water.

Q. Which are the most useful and most diffused aeriformed fluid?—A. The air, a permanent, heavy, compressible, elastic, and invisible fluid; it completely surrounds the earthy globe, round which it forms an envelope called the atmosphere.

Q. What is a pneumatic machine?—A. An instrument composed of one or two attracting pumps, by means of which a vacuum can be made in any vessel whatever; that is to say, can take away the air from the interior of that vessel which is commonly a glass bell, called the recipient.

METEORS.

Q. What are meteors?—A. Phenomenons produced in the at-

mosphere by the exhalations incessantly rising from the earth. They are divided into aqueous, luminous, and ignited meteors.

Q. Which are the different aqueous meteors?—A. Nine; the evening dew, morning dew, white frost, fog, rime, clouds, rain, snow, and hail.

Q. What is the evening dew?—A. A kind of humidity often perceptible on the clothes during an evening walk.

Q. How is it produced?—A. The sun warms the air and earth during the day, but when it sets, the air gets cold sooner than the earth; the heat then leaves the earth to diffuse itself equally in the air, and draws with it watery particles which meeting our clothes produces thereon the damp of the evening dew.

Q. What is the morning dew?—A. Little drops of water found on the grass and on plants in the morning at sun-rise. There are two sorts, one which comes from the air, and the other from the plants themselves.

Q. How are these two sorts of dew formed?—A. The aqueous particles of the evening dew arise during the whole night; but at sun-rise, the air, dilated by the warmth, can no longer sustain them, and deposits them in drops which form the falling dew. The other is occasioned by a perspiration of the plants themselves on which a considerable quantity sometimes collects: to convince ourselves we have only in the evening to cover any plan whatsoever, say a cabbage, with a bell; in the morning we shall find the cabbage under the bell covered with drops like those which were uncovered, and the bell itself will have received the falling dew.

Q. What occasions white frost?—A. When the nights are long and cold the air and earth have time to get so cold as to permit the dew to freeze; the little icicles which are formed are very narrow and near to each other, which makes them appear white and creates white frost.

Q. Whence proceeds fog?—A. By a concurrence of circumstances there rises a great quantity of aqueous particles, which having assumed the form of the grosser vapours extend into the atmosphere and disturb its transparency.

Low and damp places, such as marshy grounds, rivers, &c. furnishing a greater quantity of the watery particles, are more liable to fogs than dry and high lands.

Q. What is rime?—A. Rime which is also called hoar is that great quantity of little icicles which we see in winter on the branches and leaves, and on the hair and clothes of travellers. It is formed by fogs, which in winter are more frequent than in the hot seasons, and which deposit themselves, and are frozen on exposed bodies.

Q. How are clouds formed?—A. By fogs which have risen into the atmosphere, and which approach and condense by the impulse of the winds. They float at different heights in the air with which they are in equilibrium. As the air is lighter in proportion to its distance from the surface of the earth, none but the light clouds can sustain themselves at a certain height. The thick clouds which are ready to dissolve in rain are commonly very low.

Q. How is rain formed?—A. From the accumulation of clouds forced by the winds or dilation of air to unite in drops, which then becoming too heavy to be supported in the air, fall in larger or smaller rain; for if the condensity of clouds is made speedily and in a region a little higher than the atmosphere where the air is more in a state to support them, the drops assume greater bulk, and consequently acquire greater weight and velocity and form heavy rains.

If, on the contrary, this condensity of clouds is made slowly and the aqueous particles unite by a feeble dilatation of air, the drops are then very small and in great number, fall slowly, and form an extremely fine rain, which is termed drizzling.

Q. What is snow?—A. An assemblage of small and extremely fine icicles, formed by a congelation of clouds accomplished at the moment of their condensation and before the watery particles could unite in drops. These little icicles uniting in great numbers, and having many voids between, form but very light flakes, which reflecting the light from every part appear of the most delicate white.

Q. How is the formation of hail?—A. By drops of rain, which

passing through the cold regions of the atmosphere, congeal as they fall. So they should never be larger than drops of rain: but should it be cold enough to freeze the particles of water it may meet with, or if several stones unite, they acquire the bulk and force of those hailstones which are sometimes as large as a walnut or an egg. On this account it is that hail always causes more havoc than rain; the drops of which, instead of uniting as they fall, are on the contrary divided by the resistance of the air.

WIND.

Q. What is wind?—A. A movement of the translation of the air, whereby a certain portion of the atmosphere is pushed from one place to another with a greater or less velocity, which occasions its force, and in a variable direction according to which its names are different. The cause of wind is not ascertained.

Q. What are the names of the wind?—A. The four principal are the north, south, east, and west, derived from the four principal regions of the world from whence they appear to blow.

The north wind is generally the coldest, because it comes to us from the icy zone.

The south wind is the hottest, because it comes from the quarter of the torrid zone, a country much hotter than our own, and brings many clouds, owing to its passage along the Mediterranean.

The east wind is the driest, because it comes from the great continent of Asia, where there are but few seas.

The west wind is the most humid, and often brings rain, because it comes from the Atlantic ocean.

Q. What are whirlwinds?—A. Those impetuous winds which meet with thick clouds that oppose their passage, close them and make them come to the earth turning round.

Q. What does a red colour dispersed here and there in the clouds denote?—A. It marks a great condensity of air, and announces wind.

SOUND.

Q. What is sound?—A. A vibratory movement impressed on a sonorous body communicated by the air to a membrane of the ear, named the tympan, or drum.

Q. Is sound long in being transmitted from one place to another?—A. The velocity with which sound is conveyed is reckoned at 1038 fathoms in a second; and experience has proved, that it is uniform, and that the direction of the wind and strength of sound change nothing of its speed.

Q. What is that which occasions echos?—A. When sound meets an obstacle, such as a house, wall, rock, &c. the air being perfectly elastic, reflects sound, and seems to produce one like it called echo, which varies the direction according to the disposition of the obstacle; so that sometimes the person who speaks does not hear the echo, and others again hear the echo without hearing the person speak, fig. 19. If there are several obstacles placed at different distances, then each obstacle produces an echo; and thus it is that some echos will repeat what has been said three, four, or even more times over.

WATER.

Q. Is not water in many different states?—A. Yes; first as a liquid, then as a vapour, and lastly, in a congealed state.

Q. What are the properties of water in a liquid state?—A. Pure liquid water is tasteless, visible, transparent, colourless, without smell, almost incompressible, and very little elastic; it penetrates a great number of bodies, dissolves many, is necessary to vegetation, and to our very existence.

Q. How do we obtain water?—A. By two means; from the atmosphere from rain, snow, hail, &c. and from the bowels of the earth by springs and fountains, which form rivers and rivulets, and afterwards fall into the sea.

Q. Will you explain how springs and fountains are formed?—A. The water from rains penetrates the earth, and flows through gravel, sand, and mountains, where it finds subterraneous grottos

hollowed in rocks impenetrable to water, or furnished with a bed of clay, which retains it. The water is amassed in these grottos and forms considerable reservoirs under the earth. When it finds some issue or place that the water can penetrate, it insinuates itself therein, removes little by little what impedes its passage, and makes an aperture where the spring bursts out.

Q. Do springs dry up?—A. There are some which, during a long drought, give less water, or even dry up entirely; but there are many on which dry weather appears to have no effect, owing to the reservoir whence they flow being capable of containing water enough to supply it during all the drought without receiving any increase.

Q. What happens when water passes from the state of liquid to that of vapour?—A. It increases greatly in bulk, and becomes a very elastic fluid, which warmth greatly extends, and makes it occupy a space from 12 to 1400 times greater than it occupied in its liquid state. It is restrained by obstacles, and makes very great efforts to overcome them; and it is upon this principle that the fire engines are constructed where vapour will raise above 40,000 cwt.

Q. What occurs in the change of liquid water into ice?—A. It becomes cold, its parts adhere strongly to each other, and form a solid body. In this change it augments a little in bulk, and on that account it is that when water congeals it frequently breaks the vessels in which it is contained.

FIRE.

Q. What is fire?—A. Nothing but a burnt body, the parts of which disunite and vanish in smoke, flame, vapour, &c. but the cause of this burning is a real matter which cannot act without being excited. There is scarcely any body but can be changed by fire: gold itself melts in it.

Q. Are there not different methods of exciting the action of fire?—A. Yes; the shock or friction of solid bodies is the method we most frequently make use of.

Fermentation and effervescence produce a great heat and

sometimes flame; hay put up before it is dry will ferment and heat till it takes fire. The rays of the sun concentrated by a concave mirror can inflame the bodies exposed to it, (some have supposed that it was by this method that Archimedes set fire to the enemy's fleet before Syracuse,) and when collected by a glass has produced the greatest heat known: it is by this method that the diamond is burnt.

Q. Which is the method to extinguish fire?—A. By depriving it of air, which is done by immersing the flaming body in water, or throwing a great quantity of water upon it; for if but little water were thrown upon it, its action instead of being diminished would be augmented.

L I G H T.

Q. What is light?—A. Light is a fluid perpetually elastic, which when it acts upon our eyes, produces brightness and enables us to see objects by giving colour and splendour to all the productions of nature; but we do not yet perfectly know how it acts, nor how its action is propagated.

Q. Which are the sciences that refer to the effects of light?—A. Optics, catoptrics, and dioptrics.

Q. What is optics?—A. That science which refers to the effects of direct light; that is to say, the vision of objects by rays direct and immediately from those objects to our eyes.

Q. What is catoptrics?—A. The effects of reflected light; that is to say, of light sent back by the bodies whereupon it falls.

Q. Which are the best bodies to reflect light?—A. Mirrors; there are several kinds: the plane, convex, and concave mirrors, and the compound mirror from the other kinds.

The plane mirror is that used in the ordinary purposes of life.

The convex mirror makes objects appear less than they are.

The concave mirror equally shows objects behind and before it, according to their distance, and is the only one which can concentrate the solar rays so as to make them into an ardent fire.

Compound or mixed mirrors are cylindrical and conical,

Q. What is dioptrics?—A. A science relative to the effects of refracted light, or light which passing obliquely from a transparent body or fluid into another of a different resistance, suffers a small change in its direction.

Q. What is called a lens?—A. A convex glass swelled in the middle, worked in such a manner that it is thicker in the middle than towards the sides. They have the property of enlarging objects to the sight, and of concentrating luminous rays to make a burning fire.

Q. What is a concave glass?—A. That which instead of being swelled out in the middle is on the contrary hollow, so that it is thinner in the middle than towards the sides. It makes objects appear less than they are, and disperses rays of light instead of collecting them.

Q. What produces colours?—A. Light.

Q. How many colours are there?—A. Seven primitive colours: red, orange, yellow, blue, indigo, and violet. All the other shades are but mixtures or modifications of these.

Q. Why are not white and black reckoned as colours?—A. Because black is the absence of all colours, and white the union of all.

Q. How is it arranged to ascertain the seven primitive colours?—A. A ray of light is received on a prism of glass which decomposes it, and displays these seven colours in a band of magnificent splendour.

Q. Which are the luminous meteors?—A. There are two very remarkable: the iris, or rainbow, and crown, or halo.

Q. What is the rainbow?—A. The fine arch shewing the seven primitive colours, often seen in rainy weather in that part of the air opposite to the sun.

Q. How is this bow formed?—A. By the drops of rain which breaking the rays of the sun, shew the seven primitive colours the same as in a glass prism.

Q. What say the Scriptures of this arch?—A. That God of his infinite bounty gave it to us after the universal deluge for a sign that man should no more perish by waters.

Q. How is it that the rainbow, merely a natural phenomenon, should not have appeared prior to the deluge?—A. There is no doubt that Noah had often seen it before the deluge; but God adding, as in the sacraments, grace to nature, fixed a token of his alliance, and therefore called it his bow, and said he would set it up in the heavens.

Q. What are crowns?—A. Coloured circles sometimes perceived round the sun and the moon, and which denote that their rays are refracted or broken by the vapours which form clouds.

Q. What instruments are optical?—A. The principal are the polemoscope, optic, dark chamber, telescope, spectacles, and microscope.

Q. What is the polemoscope?—A. An instrument by means of which objects may be seen which are hidden from the direct sight; the principal piece in it is an inclined mirror, fig. 20.

Q. What is an optic?—A. A box wherein objects having sufficient light, are shewn in magnified and diminished forms by means of mirrors and convex glasses.

Q. What is called a dark chamber?—A. A room closely shut in all its parts except a hole made in a shutter of the window and in which is a convex glass; by this means external objects are shown in a reverse but distinct situation, and with their natural colours upon a white surface placed in the room at the focus of the glass, fig. 2.

Q. What is a telescope?—A. An instrument composed of a tube in which convex, concave, and sometimes mirror glasses are disposed so as to bring to view very distinctly objects at a great distance. They are used for examining the stars, fig. 22. those intended for terrestrial objects bear the name of spectacles, magnifying glass, &c. fig. 23.

Q. What is a microscope?—A. An instrument which by means of many lenses combined together, makes very diminutive objects appear very large, and distinctly shews objects not perceptible to the naked eye, fig. 24.

ASTRONOMY.

Q. What is astronomy?—A. The knowledge of the motion and revolution of the stars, whereas cosmography only tells us their number and disposition. It is said to owe its origin to the Chaldeans.

Q. Which is the motion of the stars?—A. There are many systems on that motion, and in particular two principal systems, those of Ptolemy and Copernicus.

Q. Which is the Ptolemean system?—A. Ptolemy supposed the earth to be immoveable in the midst of the world, and that all the stars turned round about it to give it light, which would require an inconceivable velocity on the part of the stars, for they would be obliged to go at least 1500 millions of miles in a second of time.

Q. Which is the Copernican system?—A. Copernicus thinks that the earth has a rotatory movement upon its axis; this is called diurnal motion, which it performs in twenty-four hours, and does not exact such prodigious velocity from the stars; he then supposes the sun to be the centre of our planetary system, that the earth turns round it in the space of a year, in its annual motion, by which it describes the ecliptic, and which explains all the astronomical phenomena that cannot be accounted for by the other system: further, that the moon turns round the earth in an orbit obtained by the earth in its annual motion round the sun, that the other planets move in the same manner with their satellites in more or less time round the sun, and that the whole is terminated by the heaven of fixed stars.

Q. Which of the two systems is adopted at the present day?—
A. The Copernican corrected by Newton. Kepler and many other celebrated astronomers, who conceive that the fixed stars are at different distances from the sun, and attributing to them a rotatory motion upon their axes conceive that they may be suns to many other planetary systems, perhaps much more considerable than our own; for their distance from the earth is so great, that it has not yet been possible to determine their size, which is however believed to be enormous.

T I M E.

Q. How is time divided?—A. The sun being that star most easily observable by us, has served for the division of time according to the antient æra, into ages, years, months, weeks, days, hours, and minutes.

Q. What is an age?—A. That time which comprehends a space of one hundred years.

Q. What is a year?—A. The space of twelve months.

Q. What is a month?—A. The space of four weeks and some days.

Q. What are the names of the months and number of days in each?—A. January 31 days, February 28 or 29, according as the year is a common or bissextile or leap year, March 31 days, April 30, May 31, June 30, July 31, August 31, September 30, October 31, November 30, December 31.

Q. What are common, and bissextile or leap-years?—A. The common year has 365 days and bissextile 366: they happen every fourth year, and three are left out in 400 years.

Q. What is a week?—A. The space of seven days.

Q. What is a day?—A. The natural day is the space the earth takes to go round the sun, and the civil day is twenty-four hours.

Q. What are the names of the days of the week?—A. Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday; names taken from those of the planets to which they were sacred. Sunday was dedicated to the sun, Monday to the moon, Tuesday to Mars, Wednesday to Mercury, Thursday to Jupiter, Friday to Venus, and Saturday to Saturn.

Q. Do all nations reckon their days in the same order?—A. No; the Christians begin with Sunday, the Jews with Saturday, and the Mahometans with Friday.

Q. How is the civil day divided?—A. Into two parts: night and day. It is divided also into four parts, morning, noon, evening, and night.

Q. What is the proper day?—A. That space of time between sun-rise and sun-set.

Q. What is the night?—A. That space of time which passes between the setting and rising of the sun.

Q. What is dawn and twilight?—A. Dawn is the light preceeding the rise of the sun; and twilight, that which follows its setting.

Q. How many hours has the day, properly so called?—A. Twelve.

Q. And the night?—A. Twelve.

Q. Is that always equal?—A. No, it changes with the seasons, for the day is at one time longer, and at another shorter, and at others again the same length as the night.

Q. What is an hour?—A. The space of sixty minutes, each divided into sixty seconds.

Q. What is a season?—A. Our division of the year is separated into four parts, according to the different degrees of warmth.

Q. What are the names of the seasons?—A. Spring, summer, autumn, and winter.

Q. How long does each season last?—A. Three months.

Q. When does spring begin?—A. In March.

Q. When summer?—A. In June.

Q. When autumn?—A. In September.

Q. When winter?—A. In December.

Q. What is meant by the equinox?—A. That period at which the days are of equal length with the nights.

Q. When does that happen?—A. Twice a year, the first day of spring, and the first day of autumn.

Q. What is the solstice?—A. Each of the two periods when the days neither appear to get longer or shorter. There are two solstices: the summer solstice, at the commencement of summer; and the winter solstice, at the beginning of winter: the word signifies the sun's station, because at that period the sun neither appears to advance from the south, nor the north side, and consequently seems to stop.

Q. When is the longest day?—A. In the summer solstice, after which a little decrease begins.

Q. When is the shortest day?—A. At the winter solstice, after which it begins to increase a little.

Q. Is this change the same in all parts?—A. No, it varies according to situation of climate, in respect to the sun's course. In some countries night and day are always of the same length; in others there is night only for one hour in summer; and under the poles the night lasts six months, and the day six months.

Q. What are called dog-days?—A. The hottest days in the year, from the 21st July to the 1st September. The reason of their being so called, is that the great dog, or dog-star, rises and sets during that time, so near the sun, that it is hidden in its rays.

Q. Did the Romans reckon their months as we do?—A. No, they at first had but ten, and afterwards added two; but they always began the year in the month of March.

Q. Who were the reformers of the old calendar?—A. Julius Cæsar, forty-six years before the birth of our Saviour; and Pope Gregory XIII. 1682 years after the birth.

Q. What is an olympiad?—A. An interval of four years; the ancient Greeks made use of that manner of reckoning, because they celebrated every four years near the city of Olympia, feasts and games instituted by Hercules, in honour of Jupiter.

Q. What is a lustrum?—A. The space of five years.

Q. What is a jubilee?—A. The celebration of a remarkable event, a century, half a century, or a quarter of a century past.

Q. What is an indiction?—A. A space of fifteen years. It is an expression only used in reference to the Roman calendar.

Q. What is an epoch?—A. That also is a mode of reckoning, but which does not designate any fixed duration. It marks the time which has passed from one remarkable event to another. It is, for example, an epoch, from the creation to the deluge of the world. The event itself is likewise an epoch; thus we say the birth of Jesus Christ, and the destruction of the temple and city of Jerusalem, are epochs.

THE FRENCH ERA.

Q. What occasioned a new era in France?—A. The revolution,

which hurled the lawful sovereign and his family from the throne, and changed the form of government.

Q. What end was the new era to answer?—A. It is difficult to conceive, unless it was by confusing and adding intricacy to dates of records, to prevent the verifying of those horrid and unparalleled excesses, which would hand their authors and actors down to posterity with well-merited ignominy and detestation.

Q. When did the first day of this era commence?—A. On the 22d September, 1792, of our new style, the day of the foundation of the republic.

Q. How is the republican year divided?—A. Into twelve equal months, of thirty days each; after the twelve months follow five days to complete the common year, and sometimes six, according as the position of the equinox requires it, so as to keep up the coincidence of the civil year with the celestial motions. These days belong to no month.

Q. How are they called?—A. Complementary days; and the year which has six of them is termed the sextile year: it happens every fourth year, like the bissextile in the old calendar, and there are three omitted in four hundred years.

Q. What are the names of the republican months?—A. Vendémiaire, Brumaire, and Frimaire, for autumn. Nivose, Pluviose, and Ventose, for winter. Germinal, Floreal, and Prairial, for spring. Messidor, Thermidor, and Fructidor, for summer.

Q. How are these months divided?—A. Into weeks, like the former.

Q. What is the new division of the day?—A. The day, from midnight to midnight, is divided into ten parts, which are called hours.

Q. How is the new hour divided?—A. Into ten equal parts, each part into ten others; and so on to the smallest commensurable portion of duration.

Q. What is the hundredth part of an hour?—A. A decimal minute, and the hundredth part of the minute is called a decimal second.

Q. What was the new era in France?—A. The revolution.

NEW MEASURES.

Q. How are the new measures formed?—**A.** From the size of the earth itself.

Q. How is that?—**A.** That the principal measure may be fixed and invariable, the ten-millionth part of the distance from one pole to the equator has been taken, which makes the forty-millionth part of the whole circumference of the earth; it is named metre, a word derived from the Greek, signifying measure, and is made the unit of length, and all other measures are deduced from it.

Q. Which are the different units of measure?—**A.** Metre is, as we have seen, the unit of lineal measure; litre, is the unit of the measure of space; gram, the unit of weight; or, the unit of surface; stere, the unit of solid measure; and franc is the money unit.

Q. How are the other measures deduced from metre?—**A.** The litre is equal to a cube of the tenth part of a metre in length, width, and depth.

The gram is equal to the weight of a cube of pure water, of the hundredth part of a metre in length, width, and depth, and to the temperature of the dissolvent ice.

The ar is a surface of ten metres long, by ten wide, which make a hundred square metres.

The stere is equal to a cube metre; and the franc is equal to a piece of silver of nine-tenths, fine, weighing five grams.

Q. What proportion do the new measures bear to the old?—

A. The metre is nearly three feet, eleven lines, and a half; and the litre, a little more than a pint. The gram, about nineteen grains. The ar, about twenty-five square fathoms and a half. The stere, about two feet and a half, and the franc, about ten pence farthing, sterling.

Q. What is the division of the new measures?—**A.** They decrease and increase in a decuple value: that is, they are divided into tenths, hundredths, thousandths, &c. and are composed by adding ten units to make one ten; ten tens to make one hundred; ten hundreds to make one thousand.

Q. How are decreasing measures expressed?—**A.** By preceding the name of the principal unit by the words deci, centi, milli, which denote that they are tenths, hundredths, and thousandths of that unit.

Q. How are the measures composed?—**A.** By putting before the name of the principal unit, the words decca, hecto, kylo, myria, which mark that they are equal to ten, a hundred, thousand, and ten thousand of those units.

Q. Give me some decreasing and compound measures?—**A.** The word decimetre expresses the tenth part of a metre; centimetre, the hundredth part; millimetre, the thousandth part. The word decametre expresses ten metres; hectometre, a hundred metres; kilometre, a thousand metres; myriametre, ten thousand metres, and the same for the other measures.

Q. Are moneys expressed in the same manner?—**A.** No; the franc is likewise divided into tenths and hundredths, but its tenths are named decims, and hundredths, centims.

Q. What advantage is proposed by the new measures over the old?—**A.** That they should be the same in all countries, whereas the old frequently differ in different cities. That they are divided all in the same way, and greatly simplify calculation.

Q. Is this measure universally adopted?—**A.** No; but as it begins to be adopted generally by French writers, it is useful to be acquainted with its signification, to facilitate that class of reading.

ECLIPSES.

Q. What is an eclipse?—**A.** A total, or partial privation of the light of one star, caused by the interposition of another, which passes between the luminous star and that which receives the light.

Q. How many sorts of eclipses are there?—**A.** Principally two, those of the sun and moon. The other planets are also often eclipsed, but they are not so easily observed.

Q. When do eclipses of the sun happen?—**A.** When the moon is between the sun and the earth: in that position, it intercepts wholly, or in part, the rays of the sun; so that we then have more or less darkness. When the eclipse is total, we see the stars, as at night. Plate 5. fig. 3.

Q. What occasions eclipses of the moon?—**A.** The position of the earth between the moon and the sun. We may easily conceive that the rays of the sun being intercepted by the earth, the moon cannot be enlightened, which prevents our seeing it; for we only perceive it by the light it sheds itself. Plate 5. fig. 4.

FLUX AND RE-FLUX, OR EBB AND FLOWING OF TIDES.

Q. What is the flux and re-flux?—**A.** A periodical and regular motion of alternate rising and falling observed in the waters of the great seas.

Q. How is flux and re-flux performed?—**A.** The waters during about six hours rise considerably: this is called the flux, or flow; they remain some minutes without variation, and go down for about six hours, and this is called the re-flux, or ebb; they then rise and fall again, and so continue. The name of tide is also given to the flux and re-flux; and high-water is the name given to the sea at the flux, and low-water to that at the conclusion of the re-flux.

Q. What is the cause of this phenomena?—**A.** The moon, which by its attraction makes the sea swell successively at every place which the moon passes, and causes the flux in that place, as well as in the place exactly opposite to it on the earth, and forms the re-flux, or ebb, for the places which are between them. So we remark that the tides are higher at the full and new moons than at the quarters, because being of the same side with the sun, or directly opposite to it, the action of the sun adds to the effect of the moon, and at the time of the equinox, the sun being nearer the moon than in the solstices, when it is wide of it, either right or left, the tides are the strongest of the whole year.

Q. Does the flux happen at the very instant of the passage of the moon over the meridian?—**A.** No, because the resistance and balance of the waters creates a delay of nearly three hours.

ADAMANT, OR LOADSTONE.

Q. What is adamant?—**A.** A stone, having a near resemblance to iron, which metal as well as stone, it has the property of

attracting, and attaching itself to them with greater or less adherence? This property is termed magnetism: in some adamant it is so strong that it will sustain the weight of fifty or sixty pounds.

Q. What is there to observe in adamant?—A. Two opposite points by which it acts the most powerfully, and which are styled the poles, because when the adamant is suspended in such a way that it can move freely, it turns these two points, each towards one of the poles of the earth, and as each of these points always takes a direction towards the same pole, that which tends towards the south is termed south-pole, and that towards the north, north-pole.

Q. Do load-stones attract each other?—A. They attract each other when they approach by different poles, that is, when the south pole of the one is presented towards the north pole of the other, and they repel each other when the south pole of one is towards the south pole of the other, or vice versa. The adamant can also communicate its property to iron and steel.

Q. How is that done?—A. There are different methods, the basis of which is to rub the iron in a certain manner against the load-stone, and according to the method employed, the iron acquires a virtue more or less strong. It is enough even to let fall a bar of iron vertically upon it to give a slight inclination to attract.

Q. How are the load-stones named which are made in that manner?—A. Artificial loadstones, and the other, natural load-stones. The artificial load-stones have often greater power, and communicate their virtue more readily than the natural load-stones.

Q. Is the load-stone put to any use?—A. It is used in the compass.

Q. What is a compass?—A. A box, in which is placed freely upon a pivot, a magnetic needle, attached under a round leaf of iron, or pasteboard, on which is traced the thirty-two points of the wind, and the circumference of which is divided into 360 degrees. This box being suspended on four pivots, which let it move in every direction, always remains horizontal, notwithstanding the different motions of the ship on board which it is made use of.

ELECTRICITY.

Q. What is electricity?—A. The property which certain bodies have, when they are properly disposed, of attracting and repelling light bodies which approach them, to emit luminous rays, produce brilliant sparks, give very sharp pricks to those who come near, cause violent commotions or shocks, and set fire to spirituous or inflammable vapours and liquors.

Q. What are these effects owing to?—A. They appear to be, owing to a matter in motion, as well within as without the electrified body, and this matter is termed electric fluid, and forms two currents; the one leaves the electrified body to bear upon the neighbouring bodies which are not so, and is called effluent matter; the other goes out of the non-electrified bodies to bear upon the electrified body, and is called affluent matter. When these two currents meet, they strike, inflame, and produce what is called an electric spark.

Q. What are the means employed to produce electric virtue in bodies?—A. There are two; the first is to rub them either with the naked hand, or with some animal or metallic substance; the second is to bring them very near to, or in contact with, a body newly electrified. Almost all bodies are electrifiable by one of these two means; but the most easy to electrify by friction is glass, sulphur, sealing-wax, skins of animals, &c. These bodies are styled idio-electric. The bodies which electrify best by communication are called unelectric; they are metallic substances and water.

Q. What is meant by isolating a body?—A. Only to let it communicate with bodies, which not electrifying well by communication, do not make it lose its virtue. The bodies employed to isolate, are the idio-electric bodies, and principally glass and silk.

Q. Which are the instruments used in producing electric phenomena?—A. Glass-tubes, or sticks of sealing-wax; globes, cylinders, or plates of glass; sulphur or sealing-wax, made to turn between cushions, to which is more particularly applied the name of an electrical machine; substances metallic, or full

of humidity, which conduct the electricity from an electrified body, and which are termed conductors; electric bottles called Leyden phials; electric batteries, which are assemblages of great electric bottles, and give shocks sufficient to kill animals, and melt wires of metal, and which thereby serve to explain the effects of thunder.

Q. What is thunder, and how is it produced?—A. We know that the electric virtue is excited in bodies by two methods, friction and communication; therefore, in stormy weather, when it is not uncommon to see the winds and clouds going in opposite directions, one part of the atmosphere slides over the other; the air, which is an idio-electric body, becomes electric by rubbing against itself, or against the terrestrial objects which it meets in its course, and communicates its electricity to the cloud it carries: this cloud, in which electricity is amassed, becomes a great electric body, and must produce all the effects of those bodies which we electrify. If, then, it meets another cloud not electrified, there goes from it a lightning, which is but the light of a great electric spark, accompanied by a loud noise. We do not hear when the shock takes place in a part of the atmosphere too far from us; but if it is near us it makes a dreadful noise, especially when repeated by the echoes which the surrounding clouds and mountains form, and which produce that kind of rumbling frequently heard after a clap of thunder. If this electric cloud, instead of communicating a spark against another cloud, comes in contact with a terrestrial object at a suitable distance, that is the thunderbolt which shatters and overthrows whatever it strikes.

Q. What is a lightning conductor?—A. Nothing but a metal rod terminated in a point, and which placed at the top of a house leads into the earth.

Q. What effect have these conductors?—A. These metallic points have the property of drawing out, by degrees, the electricity of the clouds, and conducting it into the earth. The clouds above it cannot then produce any more sparks; but as this point can only act near, it has no effect upon the very distant clouds.

WATER SPOUT.

Q. What is a water spout?—**A.** A terrible phenomenon which causes great ravages. Water spouts in general begin by a cloud which appears very little, but afterwards increases considerably, and in a very short time becomes a heap of vapours resembling a large and very thick cloud which elongates in the form of a column, occasions a noise very like that of a sea much agitated, emits lightning, and sometimes even thunder, often scatters round it a great quantity of hail or rain, sinks ships, and overthrows trees, houses, and every thing exposed to its shock. The sailors who know the danger they undergo, if within its reach, make every exertion to get away from it; and when they cannot avoid approaching it, endeavour to burst it by cannon shot before they come within its range.

Q. What is the cause of this phenomenon?—**A.** This too is electricity; for we have said that electric bodies attract light bodies which are not at too great a distance. If, then, an electric cloud passes near enough to the surface of the sea, it attracts the water which takes a little elevation, and lets out a great quantity of aqueous particles, and they form this column of vapour. When the water is by degrees elevated, or that the cloud is sufficiently lowered, it excites a flash between the cloud and the sea, and the lightning strikes whatever is within its reach. As these spouts always cause great commotions, it is not surprising that the result of them is often hurricanes, rain, hail, &c.

FALLING STARS.

Q. What are falling stars?—**A.** Little clouds containing exhalations, which becoming warm, take fire of themselves, and, as they burn slowly, appear in the atmosphere like a flying rocket, because the air gives them a resistance which makes them rather recoil: this fire often dissipates itself in the air, sometimes it reaches the earth, and then in the place where it falls is found a white and viscous matter as from glue, the combustible matter having been entirely consumed.

EARTHQUAKES.

Q. What is an earthquake?—A. A motion caused by a sudden inflammation of some sulphureous and bituminous exhalations which are in the subterraneous grottoes not far from the surface of the earth. In the southern countries these earthquakes frequently occur.

Naturalists likewise attribute them to the action of the water and the air, which is very probable. To comprehend it well, it is necessary to observe that the surface of the earth is like a crust, under which there is an infinity of cavities and channels capable of containing a considerable quantity of water and air, which being rarified and dilated by the heat of subterranean fires, escape with violence from those cavities, and by their efforts cause rude shocks.

Q. What are volcanoes?—A. Subterraneous places, whence issues continually a very thick smoke and flame, which sometimes occasion great fires on the earth: they are very numerous; but the most considerable are Etna in Sicily; Vesuvius, in the kingdom of Naples; and Hecla in Iceland.

CHEMISTRY.

Q. What is chemistry?—A. A science of the action of particles of bodies upon each other; that is, a science which relates to the decomposition and recomposition of bodies.

Q. What is analysis?—A. The manner of decomposing a body.

Q. What is the synthesis?—A. The method of recomposing.

Q. How are bodies divided in chemistry?—A. The division actually followed, separates them into eight classes: in the first, are the simple or indecomposed bodies; in the second, burnt bodies; in the third, salifiable bases; in the fourth, salts; in the fifth, metals; in the sixth, mineral compounds; in the seventh, vegetable compounds; and in the eighth, animal compounds.

Q. Which are the simple bodies?—A. Light, caloric, oxygen, mercury, hydrogen, carbone, phosphorus, sulphur, diamond, metals. Among those bodies which may be called elements, as far

as they have been decomposed, none of those are found that were formerly called the four elements, air, earth, fire, and water ; and we shall see that in fact they are compounds, and consequently that they are not elements.

Q. What is light?—A. A light fluid, often produced by combustion, of a velocity 900,000 times more rapid than that of sound, traversing transparent bodies, and reflected by opaque bodies. Light is the cause of colour, and is obedient to attractions.

Q. What is caloric?—A. That also is a light fluid, and produced by combustion. It is the substance of heat which penetrates all bodies with more or less facility, and occasions their being distinguished, as good or bad conductors of heat.

Q. What is oxygen?—A. A principle existing in the air, of which it forms the respirable part, and which is likewise necessary to combustion ; for combustion is but the combination of oxygen with the body which burns ; and as the oxygen gas which composes air is a dissolution of oxygen in caloric where the combustion takes place, the oxygen, in combining, lets the caloric with which it was combined escape, and produces heat. The pure oxygen gas, employed in blowing fire, produces the greatest heat known. The oxygen, by combining with bodies, makes them acid, which occasioned it to have the name it bears, and which signifies generator of acids.

Q. What is mercury?—A. The other principle which is found with oxygen in the atmospheric air ; it is there in the state of a gas, and is not respirable alone, but serves to moderate the action of the oxygen which, when it is respired alone, produces in a short time inflammation of the lungs.

Q. What is hydrogen?—A. One of the principles of water (as its name, which signifies generator of water, denotes) ; likewise often found in the form of gas, and known in that state by the name of inflammable air ; on account of its lightness, it is made use of to fill balloons, which do not rise until inflated by a gas which makes them occupy a great bulk with little weight, and which, by rendering them lighter than the air, necessarily makes them ascend.

Q. What is carbone?—A. The combustible principle which exists in coal, where it is already combined with a little oxygen for which it has a very powerful attraction.

Q. What is phosphorus?—A. A principle not found pure naturally, but which art easily obtains. It is solid, transparent, and brilliant, in the dark, somewhat like yellow wax, and breaks with cold; but being very ductile in hot water, it is commonly moulded into little sticks as big as the barrel of a quill. It easily takes fire in the air, on which account great precautions are necessary in making use of it.

Q. What is sulphur?—A. The only simple body which nature affords us abundantly pure, and the first known of all, because it is frequently on the surface of the earth. It is solid, of a particular yellow, and melts, burns, and becomes fetid when heated.

Q. What is diamond?—A. The hardest body that is known; it burns by very strong heat, and dissipates in air. Modern chemists look upon it as a pure carbon, because its results are the same as those of coal when it is burnt.

Q. What are metals?—A. They also are simple bodies; but their importance and utility make them a particular class, which is, as we have seen, the fifth, where they are specified.

Q. What are burnt bodies?—A. Combustion being the combination of a body with oxygen, the burnt bodies are those which proceed from the combination of oxygen with another body: they are divided into oxydes and acids.

Q. What are oxydes?—A. Bodies combined with too little oxygen to become acids. There are many oxydes, and amongst these bodies is water. Water is an hydrogen oxyde; that is, a combination of oxygen with hydrogen: this combination is effected by burning the hydrogen gas.

Q. What are acids?—A. Bodies produced by the entire combination of a basis with oxygen. These bodies have a sharp savour, destroy certain colours, and change a great number.

Q. Which are the principal acids?—A. Carbonic acid, produced by the combustion of coal; phosphoric acid, by that of phosphorus; sulphuric acid, vulgarly called oil of vitriol, by that

of sulphur; nitrous acid, or aqua fortis, the basis of which is mercury; and muriatic acid, whose basis is not known, &c. There are some also whose bases are metals; such is arsenical acid, and many others.

Q. What are called salifiable bases?—A. Substances which, united to acids, form salts; they are distinguished into earths and alkalies.

Q. What are earths?—A. Substances insipid, or with little taste, insoluble, or nearly so, often dry, arid, and sometimes soft to the touch.

Q. What is the name of these earths?—A. Silicious, a derivative from *silex*, a sparkling stone, of which it is the basis; *alumen*, a derivative from *alum*, of which it is the principal basis, and abounding in argillaceous and potter's earths, in which it is found intermixed with others; *glucine*, derived from a Greek word signifying sweet sugared, because it gives that savour to the salts which it forms: *zircon*, from the jargon; *magnesia*, from an antient comparison with adamant; *calx*, a substance well known, from the use that is continually made of it: its name comes from the French word *chaud*, heat, which it excites, as from that which is employed to obtain it.

Q. What are called alkalies?—A. Substances acrid, soluble, changing certain colours, and dissolving animal matter.

Q. How many alkalies are there?—A. Five; *barytes*, signifying heavy, which it in fact is; *pearl ashes*, sufficiently known by its frequent use, and extracted from wood ashes washed with soapsuds, and calcined; *kali* or *soda*, having many of the properties of *pearl ashes*, and extracted from sea-weeds, which are burnt on the banks; *strontian*, at first confounded with *barytes*, and less common than the two preceding; *ammoniac*, also termed *volatile alkali*, in opposition to the four others which are fixed alkalies: it is in fact very volatile. This alkali is the basis of the salt known by the name of *sal ammoniac*.

Q. What are salts?—A. Substances proceeding from the combination of one or more bases salifiable with an acid: they are very numerous, and are susceptible of crystallisation; that is, of

taking, from the time of their formation, a regular form, which varies according to the different kinds of salts. The sea, or kitchen salt, proceeds from the combination of kali with muriatic acid, and is named on that account muriate of kali: it crystallises itself into cubes, which, by taking the necessary precautions, may become very large.

Q. How are the salts named?—A. From the acid whence they are formed, joining thereto the name of the salifiable base; thus the name of sulphurate of calx, given to plaister, indicates it to proceed from the combination of sulphuric acid with calx; that of nitrate of pearl-ash, given to saltpetre, indicates it to be the result of a combination of nitrous acid with pearl-ash; and so the others: the advantage of this nomenclature is very obvious.

Q. How many metals are there?—A. At present twenty-one are known. This number is very different from that of the seven metals named before, because they are not distinguished into metals and demi-metals, or perfect and imperfect metals.

Q. Which are these twenty-one metals?—A. Arsenic, tungsten, molybdena, chrome, titanium, uranum, cobalt, nickel, manganese, bismuth, antimony, tellurium, mercury, zinc, tin, lead, iron, copper, silver, gold, and platina. They are here classed according to their facility to oxyde, or to combine with oxygen, which materially changes their state and properties, as is seen by the rust of iron, which is an oxydation of iron; verdigris, an oxydation of copper, &c. Arsenic is the most easily oxydable; it cannot be had without great difficulty in the metallic state; and the least oxydable is platina. The others are ranked between these two, as we have already said.

Q. What are mineral compounds?—A. The mixtures and combinations of many substances in the bosom of the earth. They are formed by the substances we have just enumerated, and which are found there more or less pure; that is, mixed with a greater or less quantity of other matters unconnected with them.

Q. What are called vegetable compounds?—A. The different vegetable substances, composed of principles or simple bodies,

united two to two, three to three, or even a greater number, and which form products that are extracted, without altering them, under the name of sap, mucus, saccharine acid, lees, or starch, oil, gum, rosin, balsam, colouring matter, &c. They likewise produce chemical phenomena, amongst others fermentation.

Q. What are animal compounds?—A. Animal substances; such as blood, bile, bone, &c. composed of many principles united, and which make much ammoniac when decomposed, which is the cause of the offensive smell of animal substances in putrefaction. Animals likewise suggest many chemical phenomena; respiration, digestion, &c. are chemical phenomena, for air is decomposed in the lungs, and it is very clear that aliments are so by digestion, since vegetable matters which we eat change into blood, bile, bone, &c. which did not exist in the vegetables.

Q. What is the philosopher's stone?—A. The pretended or secret art of converting metals into gold.

PRINCIPLES OF HISTORY.

Q. What is history?—A. The faithful recital of the most considerable events, chronologically arranged.

Q. What advantage is derived from history?—A. That of knowing what the passions of men, and particularly of princes, can do; the great interests of states; effects of ambition, flattery, and vain glory. It likewise distinguishes the times and countries, when and where the facts happened, and the different empires which have appeared on the earth.

Q. How is history divided?—A. Into sacred and profane history. Sacred history is the history of religion before the birth of Jesus Christ. The name of ecclesiastical, or church history, is given to it when it treats of the establishment of the Christian religion, or of the empire of Jesus Christ.

In respect to profane history, it is divided into antient and modern history. The antient gives us details of events which happened from the creation of the world to the birth of our Lord; and modern history, the occurrences from the birth of our Saviour to the nineteenth century.

SACRED HISTORY.

Q. Which history is the most necessary?—A. Incontestably, sacred history, of which the Holy Ghost is the author: it is the history of the very God, his omnipotence, his wisdom, his providence, his justice, and his mercy.

Q. Whence is the knowledge of this history derived?—A. From the Bible, the most antient book in the world. This is the book in which we learn that there is but one only God; that he is eternal, and that the world is his work.

Q. What was the order which God pursued in the creation of the world?—A. God created the world in six days. The first day he created earth, and light. The second day, the firmament, which he named Heaven. The third day he separated the earth from the waters, and made grass and trees. On the fourth, he made the sun, moon, and stars. On the fifth, he made the fishes and birds. And lastly, on the sixth, he produced the terrestrial animals, and made man.

Q. What was the name of the first man?—A. Adam. God wishing to give man a help-mate like himself, threw him into a deep sleep, during which time he formed woman. He brought her to him, and on seeing her, Adam said—This is now bone of my bones, and flesh of my flesh. He gave his wife the name of Eve, because she must be the mother of all men living. Adam and Eve were created in a state of innocence, and placed in a delightful garden, called Paradise, in which God permitted them to eat of all the fruits, except that of one single tree.

Q. Did Adam and Eve obey the order of God?—A. This prohibition did but excite their desires: Eve was deceived by the evil spirit, disguised under the form of a serpent, which persuaded her to eat of the forbidden fruit, as it was pleasing to the sight; she afterwards prevailed on Adam to eat some, and they both fell into the same disobedience.

Q. How did God punish them for that disobedience?—A. God drove them out of Paradise, and condemned them, as well as their posterity, to labour, to the miseries of this life, and

to death. They were from that time subject to all the disorders of the passions, and inclined to evil.

Q. Did God, in punishing them with so great severity, leave them no hope?—A. God, who had not spared the rebellious angels, and who had precipitated them into the abyss at the instant of their sin, had compassion for our forefathers. He promised them a mediator who should repair the injury which had been done to him, and by whom men might effect their salvation; and it was with a view to the future merits of the promised messiah, that the saints of the old law were justified and saved. The children of Adam transmitted to their posterity the consoling promise of a messiah, which was the desire and hope of nations.

Q. What became of Adam and Eve?—A. Driven out of Paradise, they established themselves eastwards. They had many children, of which the scripture names but three: Cain, Abel, and Seth. But Cain, jealous of seeing that God regarded Abel's sacrifices more favourably than his, killed his brother. Cain during his whole life bore the chastisement due to his crime, and was himself killed by Lamech, one of his descendants.

Q. Which was the third son of Adam?—A. Seth, who comforted his father for the death of Abel, and flight of Cain. His son Enos was the first who called upon the name of the Lord by a particular worship. The posterity of Seth remained faithful to the Lord, notwithstanding the general depravation. Enoch was miraculously taken out of the world, which was not worthy to possess him; and a distinction was then made between the children of God and the children of men: that is, between those who lived piously, and those who lived without restraint and without law. Men soon became more and more corrupt, and iniquity covered the face of the earth.

Q. What is there remarkable in the lives of the first men?—A. Their longevity, for the greater part lived from eight to nine hundred years. If those men turned their attention to different arts, it may be supposed they must have made great progress in them, from the ability, in so long a space of time, to acquire great experience.

Q. Did God give no check to the corruption of mankind ?—A. God meditated an universal punishment, whose remembrance he wished never to become extinct among men ; it was that of the deluge, the memory of which has remained with all nations, and is attested by monuments even yet subsisting on the highest mountains.

Q. How much time elapsed between the menace and the effect ?—A. The space of one hundred years ; for God, who would save Noah and his family, ordered him to build very leisurely an ark, so that men were long invited to repentance. But they saw the work raised, and remained in their unbelief.

Q. How did the deluge happen ?—A. When the ark was completed, God commanded Noah to take into it two pairs of all animals which did not ruminate, and were then called unclean, and seven pairs of ruminating animals, to shut them up in it with himself, his wife, his three children, and their wives. God himself covered over the door of the ark with pitch, and sent down from heaven, during forty days and forty nights, rains so abundant that the waters rose fifteen cubits above the highest mountains of the globe. They covered all the earth during a hundred and fifty days.

Q. How long did Noah and his family remain in the ark ?—A. A whole year, because the waters only retired by slow degrees. Noah, wishing to assure himself of the state of the earth, sent out a raven, which flew about until the waters were dried up. He also sent out a dove, which returned, finding no place of rest ; and again he sent out a second dove, which brought him back an olive branch. He afterwards again sent out the dove, but it returned no more. At last Noah himself went out of the ark, offered God a sacrifice of thanksgiving, and sacrificed clean animals to him. God blessed Noah and his family, and ordered him to repeople the earth. Noah divided it among his three children, of whom Shem had Asia, Ham Africa, and Japheth Europe and the islands.

Q. What singular event happened shortly after the deluge ?—A. The confusion of tongues, which took place at the building of the tower of Babel. The men which had hitherto lived in one same

country, in the environs of the Euphrates, would secure themselves against another deluge, and leave an extremely high monument to render their name celebrated, but being unable any longer to understand each other, they gave up their enterprize, and dispersed. God brought their designs to nought by confounding their language.

The other event was the vocation of Abraham.

Q. What do you understand by the vocation of Abraham?—A. God seeing that the deluge had not corrected men, and that they were as perverse as before, wished to form a people peculiar to himself from amongst all those nations which honoured him. He called Abraham, who had served him faithfully, and commanded him to go out of his country and quit his kindred.

Q. Did Abraham obey the voice of God?—A. He, without delay, left his father's house, and withdrew at first to the country of Canaan, which God promised to give to his posterity. He took with him Sarai his wife, and Lot, his brother's son. He frequently changed his place, for the purpose of providing for his flocks, and always dwelt in his tents, considering himself every where as a stranger.

Q. Did God bless Abraham?—A. God shed all his benedictions upon him. He became very rich in flocks, in silver, and in gold. He treated as an equal with the kings, who sought his alliance.

Q. With all his wealth, what did Abraham want?—A. A son, who might be heir to his goods, and to the promises of God. Sarai, his wife, was barren and very old. Although he had had Ishmael by his slave, that Ishmael could not be his heir; it must be born of him and Sarai; this miraculous child being born, was named Isaac, that is, the child of joy.

Q. What became of Ishmael?—A. Sarai having perceived that Ishmael ill-treated Isaac, prevailed on her husband to send him away with his mother, making him some presents. They withdrew into a distant country, and from him the Arabs believe they derive their origin.

Q. What became of Isaac?—A. Isaac had scarcely attained his twentieth year, when God would try the fidelity of Abraham. He

commanded him to go and himself to sacrifice this only son on a mountain a far off which he pointed out to him.

Q. How did Abraham act in so delicate a conjuncture?—A. He obeyed the word of God, and was ready to immolate his son, by whom God had promised to render him father of his people, when the angel of the Lord said : Abraham, lay not thine hand upon the lad, for now I know that thou fearest God, seeing that thou hast not withheld thy son, thy only son from me. God loaded him with blessings, and assured him that all the nations of the earth should be blessed in him.

Q. Who was the wife of Isaac?—A. Abraham would not make an alliance with the daughters of the country of Canaan ; he sent Eliezer into Mesopotamia to seek out a wife for his son. Isaac espoused Rebecca, the daughter of Bethuel, who was sister to Laban. They were twenty years without having children, but God heard their prayer ; Rebecca became pregnant, and brought forth twins, which were Esau and Jacob.

Q. What do you know of the life of Esau and Jacob?—A. One day when Esau, returning from the chase, was extremely weary, he sold Jacob his birth-right for a dish of lentiles. Jacob, by the advice of his mother, clothed himself in Esau's dress, and by that artifice took away the benediction of his father Isaac, who wished him the dew of heaven, and the fecundity of the earth. Esau expecting to receive this benediction, which was promised him, broke out in lamentation from the thought of having been supplanted. Isaac touched with his cries, blessed him also, but subjecting him to his brother. Esau from that moment conceived an implacable hatred against his brother. The latter, to avoid his anger, withdrew into Mesopotamia, to the house of Bethuel, on the pretext of going there to take a wife.

Q. Who were the wives of Jacob?—A. Jacob, after having served his uncle Laban seven years, to obtain in marriage Rachel, his second daughter, took to wife without knowing it, Leah his eldest daughter ; and he could not obtain leave to espouse Rachel whom he loved, but upon the condition that he should serve seven years more. Jacob had of his wives twelve children. They are

called patriarchs, because they were the stocks of the twelve tribes of the Jewish nation. Their names were Ruben, Simeon, Levi, Dan, Juda, Naphtali, Gad, Asher, Issachar, Zebulon, Joseph, and Benjamin. The two last were the only children that Rachel had.

Q. Which is the most celebrated of these patriarchs ?—A. Joseph. His brothers hated him on account of the predilection his father had for him. Having accused them before Jacob of an enormous crime, they at first let him down into a well without water, from which they shortly after drew him up again to sell him to some Ismaelitish merchants. These conducted him to Egypt, and sold him to Potiphar, a man of great charge at the court of Pharaoh. Joseph pleased his master, who entrusted him with the care of his house, but afterwards had him thrown into prison. What irritated Potiphar against him was his wife, whose passion Joseph had constantly refused to gratify. She accused him in her anger before her too credulous husband, with having solicited her to commit a crime against his bed.

Q. What became of Joseph ?—A. Pharaoh, king of Egypt, was informed of the gift which God had given Joseph of interpreting dreams : he ordered him to come, and demanded the meaning of the dream he had had, and which threw him into such uneasiness. Joseph gave him the interpretation ; he informed him that there would be seven years of great fruitfulness, which would be followed by a dreadful famine ; and he advised him to provide against the time of dearth, by amassing in granaries as much corn as possible. Pharaoh, full of admiration at his wisdom, called him Saviour of the World. He charged him with the execution of this great design, and gave him, to that effect, a full authority over all Egypt.

Q. What happened to the brothers of Joseph, and to Jacob their father ?—A. When the great dearth had arrived, the sons of Jacob came into Egypt to buy corn ; they addressed themselves to Joseph, who recognized them, but did not make himself known. Not seeing Benjamin with them, he treated them as spies, interrogated them as to the state of their family, and ordered them to bring

their younger brother, who they said was with their father. Benjamin was brought into Egypt. When Joseph saw him he prepared a feast, after which he made himself known to them. I am Joseph, said he, fear not. He embraced them all, and told them to make haste, and carry the news to their father, and bring him back with them. Jacob arrived in Egypt with all his family: Joseph went to meet him, and both father and son wept for joy. The land of Goshen was assigned them to dwell in, and they felt not any of the rigours of the famine. Jacob lived in Egypt seventeen years continually blessing the Lord, and his body was carried into the land of Canaan, as he had desired. Joseph died at the age of one hundred and ten years, during twenty-five years of which he had commanded over the whole of Egypt, always conducting himself as a faithful minister.

Q. What happened to the descendants of Jacob after the death of Joseph?—A. A new king of Egypt was in fear of the Hebrews, because they multiplied exceedingly, and conceived the design of destroying them. After having oppressed, by subjecting them to very painful labours, he ordered the midwives to destroy all the male children of the Israelitish women: these women, however, who feared God, spared them. Pharoah commanded that the children should be thrown into the Nile. One of them was saved from the waters by Pharoah's daughter. She perceived on the bank an ark of rushes, and having ordered it to be brought away, saw a little child in it who cried. The sister of the child who was by the side of the river proposed to go and fetch it a nurse from among the Hebrew women; she informed its mother who came quickly; Pharoah's daughter commanded her to nurse that child, promising to reward her well. When he was grown, Amram its mother and nurse went to carry it to its liberatress, who adopted it, and always looked upon it as if it had been her own son. It was she who gave it the name of Moses, and brought it up in the King's palace.

Q. What did Moses when he became older?—A. Moses was forty years old, when seeing an Egyptian who ill-treated a Hebrew, he killed that Egyptian. He was then without doubt impelled by the spirit of God. He quitted Egypt, and went into the land of

Midian, when he married Zipporah, daughter of Jethro. His occupation during forty years was to feed his father's sheep. He one day took his flock towards the mountain of Horeb. God on that day appeared to him in the midst of a flaming bush, which did not consume, and acquainted him that he had chosen him to deliver the Hebrews from the tyranny of Egypt. Moses at first excused himself, but ceased to resist God, after he had changed the rod he had in his hand into a serpent, and back again into a rod. Moses then went into Egypt to comfort his oppressed people, and intimate to Pharoah the orders he had received. He prayed him to let the Hebrews go into the desert to sacrifice to the Lord, and afterwards commanded him in the name of God. To manifest to him that it was the Lord's will, he did many miracles by stretching out the miraculous rod, but nothing could touch the hardened heart of Pharoah. God inflicted Egypt with ten great plagues.

Q. Which were the ten great plagues that Egypt was struck with?—A. Moses extending his rod over the Nile, the waters of that, and every river, and reservoir in Egypt, were changed into blood. All Egypt was filled with frogs. The Egyptians were incommoded on all sides by little sharp insects. Every place was covered with very troublesome lice and flies. The murrain exterminated almost all beasts. The men were covered with boils and blains. An universal hail-storm broke all that was exposed to its violence. Locusts devoured every thing that remained green throughout the country. The Egyptians were in thick darkness, which lasted ten days.

Q. What did Pharoah then say and do?—A. He had recourse to Moses, and promised all that he demanded on being delivered. Moses prayed, and the scourge instantly ceased at his servant's prayer. But Pharoah did not fulfill his promise, and refused to let the children of Israel go.

Q. Which was the tenth plague?—A. The death of all the first-born of Egypt. All the first-born of men and beasts perished. Pharoah at length gave over his resistance to the orders of God; he was even the first to pray Moses and Aaron to go out with the children of Israel. The Israelites had, during the night, eaten the pascal lamb, with the ceremonies which had been pre-

scribed to them, and God had so disposed the minds of the Egyptians in favour of his people, that they lent the children of Israel jewels of gold and silver, and raiment, thinking that they would be but three days in the desert sacrificing to the Lord. Laden with the spoils of Egypt, the Israelites at length went out to the number of nearly six hundred thousand fighting men, with their wives and children.

Q. Did the Israelites return into Egypt after they had been three days in the desert?—A. No, the Israelites, conducted by the Lord, who during the day walked before them in a column of cloud, and during the night in a pillar of fire, to lighten them, arrived near the Red Sea, where they encamped. Pharaoh, who was furious at the Israelites having escaped out of his hands, pursued them with a numerous army. He was just up with them, when God commanded Moses to stretch out his hand over the sea: the waters at the very instant divided, and raised themselves up on each side like a great wall, and all the children of Israel passed the sea perfectly dry. The Egyptians followed them in this new route, but Moses stretched his hand again over the sea, and the waters which were divided immediately united, and overwhelmed Pharaoh and all the Egyptians in the Red Sea. Not one man of the whole army escaped. The Israelites celebrated this great miracle by a song which Moses composed.

Q. With what were the Israelites fed in the desert?—A. With quails and manna. They went out every morning before sun-rise to collect the manna, and on the eve of the Sabbath collected sufficient for two days, and it then did not corrupt. In places where there was no water Moses brought it out of the rocks, by striking them with his rod.

Q. Were the Israelites looked upon with favour by the people in the neighbourhood of the desert which they inhabited?—A. The Amalekites, knowing that the children of Israel were fatigued with the journey they had made, and that they were without arms, fell all at once upon them. The Israelites, headed by Joshua, resisted them, and fought so courageously, that they obtained a complete

victory over their enemies. During the battle Moses held up his hands clasped towards Heaven.

Q. What did God effect for his people, either by himself or at the interposition of Moses?—A. God gave his law to his people on Mount Sinai. A thick cloud covered this mount, at the foot of which were the Israelites. From the summit of the mountain rose out a flame like that of a flaming furnace. While the lightnings flashed and the thunder rolled, the people seized with dread heard the ten commandments which God gave from his own mouth. Moses remained on the top of the mount alone with God forty days; God declared to him his will, and gave him two tables on which the law was written. But when he came down from the mountain he heard a great noise; it was the people of Israel who not seeing their chief return, and having obliged Aaron to make a golden calf, adored that idol and sent out cries of joy. When Moses had seen the golden calf, round which the ungrateful and idolatrous Israelites were dancing, he threw the holy tables on to the ground and brake them. He likewise brake the idol in pieces, and reduced it into powder, and threw it into the water to give it them to drink. He then commanded those of the tribe of Levi to revenge the irritated Lord, and for that purpose, to take their swords and kill all they should meet in the camp through which they were to pass. He then told them that by this effusion of blood, they had consecrated their hands to the Lord. God relented at the punishment of his people, and still more from the prayers of Moses, who offered his life with the guilty to wipe it away. He gave him new tables, upon which he had himself engraved the ten commandments. Moses fitted up the tabernacle according to the orders he received for it. The tabernacle being finished he set to work at the ark. The ark of the covenant being completed, he caused a table to be made of shittim wood, covered with plates of gold, and which was destined to receive the bread of offering. A golden candlestick was made of seven branches, above which were seven lamps of the purest gold. Two altars were next built, that of incense and that of burnt offering. All that God had ordered Moses to do for his worship being finish-

ed, the tabernacle was put in order and consecrated to God. Moses then regulated the quality and form of the clothes of the high-priest and Levites.

Q. Were there not some Israelites which were at that time punished by God?—A. There was always upon the altar some fire which the priests kept up. It was from this holy fire that they were to fill their censers. Nadab, and Abihu the eldest son of Aaron, took a different fire to offer their incense to God: they died in the tabernacle in presence of the Saint of saints; a fire which God threw out against them devoured them. A Jew, in a transport of anger, blasphemed the holy name of God; the blasphemer was brought to Moses who, after having consulted God, had him led out of the camp, that the people might stone him. God had commanded the Israelites a little while before to do no servile work upon the Sabbath day. A man violated the sanctity of that day consecrated to God by gathering straw; God was consulted, and the offender was afterwards led out of the camp and stoned. God struck Mary the sister of Aaron with a leprosy, which in an instant eat away her whole body, because she had murmured against the great authority of Moses. She was seven days before she was cured, and would not have been cured at all had not Moses prayed for her. Moses sent a man from every tribe to survey the land of Canaan, and to bring of its fruits for the purpose of judging of the excellence of that land. Ten of them on their return struck terror into every heart, by saying that if the land were fertile, it was inhabited by a formidable nation. The Israelites therefore resolved to elect a chief and return into Egypt. Moses and Aaron prostrated themselves before God. Moses then told the Israelites, from God, that as a punishment for their murmurs they were condemned to wander in the desert for forty years; that only their children under twenty years of age should enter the promised land, with the exception of Caleb and Joshua, who had opposed the murmurs of the people. The ten who were sent were at the same hour struck with death. Korah, Dathan, and Abiram, who were Levites, murmured against Moses, and pretended that they as well as Aaron, were sovereign priests. Moses re-

presented that it was God whom they attacked by their murmurs; and that they might come on the morrow with their censers, and that Aaron should likewise come with his. Korah put himself on one side, with his partisans, and Aaron on the other. God avenged himself; the earth opened under the feet of the sacrilegious faction and swallowed them up, with their tents and all that belonged to them. The Israelites murmuring that in the desert they had no bread to eat; they testified the disgust they had for manna. This food, said they, is too light, it is not sufficient for our support. To punish them, God sent those ingrates fiery serpents, which caused great desolation among them. The seditious wretches then prayed and cried aloud, and acknowledged before Moses that they had sinned. Touched with their repentance, Moses supplicated God to discontinue the scourge. God commanded Moses to make a brazen serpent, and to raise it up so that it could be seen by all. It was enough for all those who had been bitten by the serpents to look at the brazen serpent, and be healed of their wounds.

Q. Did not the Israelites give offence to the neighbouring people?—A. The Moabites were afraid, because Israel was encamped near them. Balak their king, who was in dread of it, had recourse to a prophet of the Ammonites named Balaam. This king prayed him to come and curse the Israelites; which he refused, because God had blessed them. But the prophet being avaricious, tempted by the presents he had received, and by those he was in expectation of, set out mounted on an ass, to comply with the desire of Balak. An angel opposed his passage; the ass first stopped, and then fell. The prophet, who had not seen the angel, struck him, when, by an unheard of miracle, it complained that he had struck him unjustly. Balaam pursued his journey by the permission of the angel, after having promised that he would only say what God might put into his mouth. Arrived at the camp, he poured blessings instead of curses upon the Jews. But to soften the enraged king, and to obtain the promised reward, he gave Balak abominable advice. He invited him to give the Jewish people a spectacle of the Midianite women who were idolatrous

and immoral, so that they might be guilty with them, adore their idols, and therefore that God might abandon them. What he counselled was successfully executed; but Phinehas seeing a Jew in the act of guilt with a Midianite woman, testified the indignation which he felt; filled with zeal, he ran his sword through the two criminals. God informed Moses that he would be revenged on the Midianites. He sent against them, under the conduct of the zealous Phinehas, twelve thousand men, who entirely defeated the Midianites, killed Balaam, and all the married women.

Q. Did Moses live long, and what death did he die?—A. That great man who had met with such favour from God, knew that his death was at hand; he gave his people instructions very sufficient to animate them to serve God faithfully; and after having blessed the ten tribes, he went up to the summit of Mount Nebo, from which the Lord shewed him the land of promise which he was never to enter. There he died, aged 120, without having, in so advanced an age, lost any thing of his vigour. All the people mourned for him during the space of thirty days. No person knew where he was buried.

Q. Who replaced Moses in the government of the people of Israel?—A. Joshua. The Lord filled him with the spirit of wisdom: it was with him as it had been with Moses. The people promised to obey him in every thing.

Q. What did Joshua when he took the command of the people of Israel?—A. He told the Israelites to prepare to pass the Jordan in three days.

Q. How did he effect the passage of the Jordan?—A. As soon as the priests who carried the ark had made some steps in the Jordan the water retired from one side and rose up on the other, so as to open a passage. The people passed the river without wetting their feet; the priests held up the ark until the Israelites had gone through; and when the priests were themselves upon the dry land, the waters which had been stopped resumed their course. The first city which the Israelites took possession of after passing the Jordan was Jericho.

Q. Did Joshua take that city?—A. The ramparts of Jericho

were so strong that they appeared impregnable; but God had promised Joshua that he would overthrow its walls without their being obliged to make any assault. According to the Lord's commands, the people encompassed the city for seven days; the six first days it was done in silence, but on the seventh the priests who marched before the ark sounded the trumpet, and at the instant that they had all at once set up a piercing and shrill cry conjointly with the people, the walls of the city fell to the ground. Jericho was destroyed; the army of Israel put all the inhabitants to the sword; only Rahab, a fisherwoman, and her family were saved: it was because she had prevented the inhabitants of Jericho from laying hold on the spies which Joshua had sent to reconnoitre the state of the place. Joshua expressly forbid any thing being taken that was in this city. After the ruin of Jericho, Ai was attacked.

Q. Was it easily taken possession of?—A. They were satisfied with sending only three thousand men, because that town was not so considerable as Jericho; but the Israelites were defeated, and those who were not slain betook themselves to a shameful flight. Joshua, struck with grief, complained to the Lord, who answered him, that the sins of Israel were the cause of it. It was discovered, by casting lots among the tribes, that Achan was guilty. He confessed, that in the plunder of Jericho he had taken a Babylonish mantle, with two hundred shekels of silver and a wedge of gold. He was stoned, and all that belonged to him burnt. God then delivered Ai and all its inhabitants to Joshua. Those of Gibeon, who had no hope of being able to resist the army of Israel, used stratagem to save their lives.

Q. What stratagem did they resort to?—A. They sought Joshua to demand an alliance with him; pretending they were of a very distant country. Joshua believed them, seeing that their clothes were ragged, that their loaves were reduced to powder, and their shoes worn out. He entered into an alliance with them without consulting the Lord. But three days afterwards they were found to be neighbours dwelling amongst them. The people of Israel, indignant at having been deceived, wished to exter-

minate them ; but Joshua represented that the sanctity of an oath must not be violated. Their lives were given them ; but it was on the condition that they should be perpetually slaves to Israel, that they and their posterity should be employed in cutting wood and drawing water for the use of the house of the Lord. The alliance of the Gibeonites with Joshua nevertheless irritated five kings, who came to lay siege to Gibeon, whose inhabitants had recourse to Joshua. He marched quickly against their enemies, fell upon them, and put them to the rout ; but as the close of the day was about to prevent his pursuit, Joshua commanded the sun and moon to stop ; and the sun and moon were stayed until the enemies were cut to pieces. The army of Israel obtained many more victories over the neighbouring nations. Thirty-one kings are reckoned to have been conquered by Joshua.

Q. What did Joshua with all the country that he got possession of?—A. He distributed it to the tribes with great wisdom and equity. That wise leader of Israel died in peace at the age of 110 years. A few days before his death he had conjured the Israelites never to have any other God than the Lord. It was with great reason he had the tears of all the people.

Q. How did the Jews conduct themselves after the death of Joshua?—A. Joshua and Caleb being dead, they abandoned the Lord, who permitted them to fall into servitude. Reduced to extreme misery, they addressed themselves to God, by whom were raised up, from time to time, judges filled with his spirit to deliver them ; but as soon as the judge was dead they relapsed into their sins, and the Lord shewed that he was angry with them. The principal judges who governed Israel after Othniel, Ehud, and Shamgar, who did nothing very remarkable, were Deborah, Gideon, Jephtha, Sampson, Eli, and Samuel.

Q. Who was Deborah, and what did she?—A. Deborah was a prophetess that God chose to judge his people. Jaben, king of Canaan, who oppressed the Israelites for twenty years, came with a numerous army. Deborah then appointed Barak chief of the troops of Israel to oppose Sisera who was general of the army of Jabin. Barak, accompanied by Deborah, went with only 10,000

men to attack Sisera. During the battle, God spread terror in the hearts of the enemies. Sisera, panic struck, took to flight. All his army was cut to pieces ; and Sisera, his strength exhausted, entered into the tent of Jahel, who told him he should be safe. He laid down on the ground, and she gave him milk to drink instead of water which he asked for. When he was in a profound sleep, Jahel took a great nail which she dug into the head of Sisera, who died instantly. After this signal victory, Deborah sang to God a song of thanksgiving.

Q. Who was Gideon, and what splendid actions did he perform ?—A. Gideon was of the tribe of Manasseh ; an angel whom he believed to be a man, announced that he was chosen by God to combat the Midianites. He made known to him the will of God by two signs. A fire came out of a stone upon which Gideon had laid some boiled flesh and loaves, and consumed the whole. Gideon put a fleece of wool upon the floor, and the dew fell upon the fleece only, and the earth round about remained dry. Another time the fleece remained dry, while all the earth was sprinkled with dew. The Lord was with Gideon, who was filled with his spirit. Aided by ten of his servants, he at first overthrew the altar of Baal, and cut up the roots of the trees which were round about it. He then delivered the people of Israel from the Midianites, having with him but 300 men. He divided them into three bands, which he placed near the enemy's camp, and gave each a trumpet with empty pitchers and lamps within them. At midnight these men, according to Gideon's order, at the same time clashed their pots which broke, and holding their lamps alight, they sounded the trumpet, crying aloud, without quitting their places, " The sword of the Lord and of Gideon." All the Midianites were then overcome with fear ; disorder got into their camp, and they killed each other. Gideon pursued the chiefs, and the others fled : the most part of them were killed. Gideon died, and left 70 sons by several wives. Abimelech, one of them, made the inhabitants of Shechem elect him their king. He massacred all his brothers on one stone ; one only, Jotham, who was the youngest of all, had the good fortune

to save himself. Abimelech governed Israel for three years, hated by the Shechemites, who revolted against him. He destroyed their city to its very foundations; more than a thousand persons took refuge in the temple of Baal, which he set on fire, and all that were in it perished. Afterwards, marching towards Thebez, because the principal inhabitants had retired there, he approached a very strong tower to set fire to it; but a woman threw a great piece of millstone upon his head, and fractured his skull. Abimelech then told his armour-bearer to draw his sword and kill him, that he might not be said to have died by the hands of a woman: he was obeyed. God, enraged against the Israelites, delivered them into the hands of the Ammonites, who oppressed them cruelly, until Jephtha rescued them from their servitude.

Q. What were his remarkable acts?—A. Jephtha was of Gilead. His brothers drove him out of his paternal house when they knew that his mother was a bad woman: he withdrew into another country, where he put himself at the head of a troop of persons who lived by plunder. The inhabitants of the country of Gilead, sharply pressed by the Ammonites, resorted to him. Jephtha only consented to come to their assistance, on condition that he should always be their chief; to which they consented. The spirit of the Lord then came upon Jephtha, who marched against the Ammonites. Being on his way, he made a vow to the Lord, if he returned victorious, to offer up a burnt-offering of the first person who should come out of his house before him after the victory. Jephtha defeated the Ammonites, killed a great number, and laid waste many of their cities. But what was his affliction on his return! It was his only daughter who, transported with joy, first came out of the house, dancing with many other females to the sound of instruments. Jephtha seeing her, was distracted. Informed of what so deeply pierced her father's heart, she exhorted him to perform his promise to the Lord; and after having passed two months on the mountains to deplore her virginity, she returned to her father, who accomplished his vow.

Q. What was the birth of Sampson, and what injury did he occasion to the Philistines?—A. The birth of Sampson son of

Manoah, was predicted by an angel to his mother, who had to that time been barren. He will be a Nazarite, said he to her, that is, consecrated to God; let him drink nothing to intoxicate him; nor eat any thing unclean; and no razor shall come on his head; he shall begin to deliver the people of Israel from the tyranny of the Philistines. When he was not yet twenty years old, he saw coming towards him, furious and roaring, a young lion; the spirit of God came over him; he had nothing in his hands; but he nevertheless tore the lion to pieces. He proposed an enigma to thirty young Philistines, and promised to give them thirty sheets and thirty coats if they explained it. They explained it, because he had been betrayed by his wife, whom he had married from among the Philistines, and to whom he had declared the meaning of the enigma. To revenge himself, he went immediately into Ashkelon, a city of the Philistines, and killed there thirty men, whose habits he took and gave to those who had explained his enigma. His vengeance was not satisfied; the corn harvest was near; he took three hundred foxes, which he tied two by two by the tails, and fastened fire-brands to them; he then loosed them in the midst of the corn of the Philistines, which was soon all burnt. Samson then retired to the top of Mount Elam, where three thousand men came to arrest him; he let them take him and bind him with two thick new cords. The Philistines sent forth cries of joy as they came before him; but he brake the cords which he was tied with, as it were a thread; and having caught up the jaw-bone of an ass which he found, slew a thousand Philistines. The inhabitants of Gaza knowing that he was in it, set a great number of soldiers at the city gates, hoping that when he should go out in the morning, they might kill him without trouble; but he was informed of their designs, and getting up at midnight, he went and took off the gates of the city with their posts and bar; and having laid them on his shoulders, carried them to the top of a mountain. But at last the Philistines made themselves masters of Samson by the treachery of Delilah. This Philistine wife whom he loved, ultimately induced him by her solicitations, tears, and caresses, to tell her wherein lay his

insurmountable strength. He told her, that if his head was shaved all his strength would go from him. While Samson was asleep upon her knees, she called for a man who cut off the seven locks of his hair. She then acquainted the Philistines, by whom he was immediately surrounded; they took him without difficulty, loaded him with chains, and having shut him up prisoner, they put out his eyes and condemned him to grind in the prison.

Q. How did Samson die?—A. On a solemn day the Philistines made a feast for the taking of Samson. The joyous banquet was given in a great saloon, where two pillars that supported the building were near together. After the banquet Samson was brought in to amuse the people who were assembled there to the number of 3000. Samson, whose hair had grown again, desired to be led between the two pillars to rest against them. He then called upon God, and praying that he would restore him his former strength, shook the two pillars, so that the whole edifice gave way, and he died there with the three thousand Philistines.

Q. How did the tribe of Benjamin become nearly extinct, and by what means was it renewed?—A. Some men not having the fear of God, so brutally outraged a Levite woman, that she died. The Levite cut the body of his wife into twelve pieces, and sent one to each tribe, who indignantly assembled and made war upon those of Benjamin. Twenty-five thousand Benjamites perished, only six hundred were saved. But the children of Israel soon repented of having extinguished one of their tribes. To renew it again, they exterminated the inhabitants of Jabesh-gilead, and four hundred virgins of that city were given as wives to four hundred Benjamites who were saved from the battle. The other two hundred carried off two hundred daughters from Shiloh one feast-day, and married them.

Q. What is the history of Ruth?—A. Ruth, a Moabitish woman, had espoused one of the sons of Naomi, who lost in the country of Moab, Elimelech her husband, and her two sons. Naomi returned to Bethlehem, and Ruth not willing to quit her, came there also. Ruth went into the field of Boaz to glean be-

hind the reapers. Boaz spoke kindly to her; he was rich, and above a hundred years old. Naomi, to whom Ruth had related how she had been accosted by him, told her that Boaz was their relation, and that she was justified in marrying him. He was to lay the following night in the barn; "You must go there," said Naomi, "and when he shall be asleep place yourself at his feet." Ruth obeyed. Boaz having awaked about midnight, she gave him to understand, that according to law he must be her husband. He married her a few days afterwards, and had a son who was named Obed. Obed was the father of Jesse the father of David.

Q. Who was Samuel?—A. The son of Elkanah and Hannah, who had been barren, and who had obtained him of God by her fervent prayers. Her parents presented her to the high priest Eli, who made Samuel a servant in the tabernacle. When he was very young, the Lord called him several times during the night by his name; he answered, Speak, Lord, thy servant heareth. God told him of the great evils with which he was about to strike all Israel, and especially the house of Eli, who had not reproved the dreadful excesses of his two sons Hophni and Phinehas. The Lord did not delay his revenge: 30,000 Israelites perished in one battle with the Philistines; the ark of God was taken, and Hophni and Phinehas were slain. At the news of the ark being taken, Eli fell backwards from his seat, and died. The wife of Phinehas being pregnant, was seized with the pains of labour, and died soon after she had brought into the world the child she bore. Samuel became high priest and judged the people after Eli's death.

Q. What did the ark of the Lord produce amongst the Philistines?—A. It was placed at Ashdod, in the temple of Dagon, and the Philistines found Dagon overthrown and in pieces. The people of the country were smitten with a shameful disease, which carried off a great number. The ark was transferred from city to city, and the hand of God every where laid heavy upon the Philistines, who therefore resolved to send it back to Israel. The Philistine princes followed the ark to Bethshemes, a Jewish city. The Bethshemites were at first filled with joy, but it was soon

turned to universal mourning. God punished their temerity for looking into the ark of the Lord, and destroyed 50,070 Bethshemites which had so satisfied their curiosity. The ark was carried to Kirjath-jearim, into the house of Abinadab, upon whom, and upon all the country, it brought every sort of benediction.

Q. Who succeeded Samuel?—A. Samuel, being old, established his children judges, but they did not resemble their father: they suffered themselves to be corrupted through avarice, which made them give unjust judgments; then the elders of Israel consequently went to Samuel and demanded of him a king. The demand afflicted Samuel, and he consulted the Lord, who desired him to do as the people required, for it was not Samuel, but the Lord, whom the people rejected; but first declare what will be the rights of the king they demand. Samuel did so; but the Israelites persisted that they would have a king.

Q. Who was the first king of Israel?—A. Saul, of the tribe of Benjamin, and son of Kish; he was the tallest and best made of the children of Israel. Saul had gone to Samuel to know from him what had become of his father's asses, for they had strayed. The Lord then made known to Samuel, that he who spoke to him was the one whom he must anoint as chief of the people. Samuel told Saul, that the asses which had been lost were found; and, on the morrow, he poured a phial of oil upon his head, saying to him, after he had kissed him: is it not the Lord who hath appointed thee to be captain over his inheritance? The Israelites assembled at Mizpeh to choose a king. Samuel drew the lot for all the tribes, and the lot fell on the tribe of Benjamin, then on the family of Matri, and lastly upon Saul, who was concealed in his house. They hastened to bring him to Mizpeh, and Samuel having told the people: see ye him whom the Lord hath chosen; all the people cried out, God save the king.

Q. What victory did Saul obtain?—A. His first victory was over the Ammonites. Nabash, their king, besieged the city of Jabesh-Gilead. The inhabitants desired to capitulate; Nabash said it should only be on condition that he should thrust out the right eye of each. Saul was hastily informed what extremity the

inhabitants of Jabesh were reduced to. The spirit of the Lord immediately came upon the new king; he assembled the children of Israel, and, with a numerous army, fell upon the camp of the Ammonites, routed them, and delivered the city. The election of Saul was then confirmed, and celebrated with great rejoicings. Jonathan, son of Saul, who was at the head of a body of a thousand men, beat the Philistine garrison which was at Gibeon. The army of Israel, and that of the Philistines, were encamped near each other; the latter was so formidable, that Saul's troops retreated, and himself decamped with 600 men who remained with him, and were all in consternation. But Jonathan said to his armour-bearer: come, let us go on to the Philistine camp, perhaps the Lord will fight for us. The advanced guards of the Philistines having perceived them, cried out to them in derision, come up to us. Jonathan and his companion immediately crept along the rocks, and soon gained the height where the Philistines were posted, and they killed many of them. Fear spread itself through their camp, and they turned their arms against themselves. Saul being informed that disorder was in the enemy's camp, pursued the Philistines, who perished in very great numbers: so it was that the Lord saved Israel. The people then heard the imprecation which Saul made with an oath: cursed be the man who eateth any food until evening, that I may be avenged on mine enemies. Jonathan did not know that his father had forbidden, under pain of death, to take food before the entire defeat of his enemies, and he nearly lost his life on account of the king's oath.

Q. What then did Jonathan?—A. Exhausted by fatigue and hunger, he dipped the end of his rod into a honeycomb, and tasted it. Saul knew that some one had violated his prohibition; and swore by the Lord, that if even Jonathan his son were guilty, he should die. Jonathan declared what he had done, and his father wished to put him to death; but the people opposed it, and he was delivered. Said they, shall Jonathan die! who hath wrought this great salvation in Israel. God forbid; as the Lord liveth, there shall not one hair of his head fall to the ground.

Q. What other victory did Saul obtain?—A. Whatever side

Saul turned his arms to, he was victorious. Samuel had just told him to march against the Amalekites, to spare no one, destroy every thing, and appropriate nothing to himself, of the spoil. Saul soon afterwards, at the head of an army of two hundred and ten thousand men, marched against that idolatrous people whom he vanquished; but consented to save the life of Agag their king, and that the best of the flocks should be spared to make a sacrifice to God. His disobedience offended God, who caused him to be told by Samuel, that he repented of having made him king, and that he rejected him. He had Agag, king of the Amalekites, brought up, and Samuel hewed him in pieces.

Q. What happened after the Lord had declared to Samuel that he would have Saul reign over Israel no longer?—A. The Lord ordered Samuel to go to Bethlehem, to offer up a sacrifice there, to celebrate a feast to Jesse, and to anoint king, him of his children whom he should show him. Samuel did as he had been commanded, took his horn of oil, and anointed the youngest of the children of Jesse, who kept his father's sheep: his countenance was beautiful and ruddy, and he was called David. The spirit of the Lord rested on David, while Saul was seized by an evil spirit which agitated him violently. The sound of the harp comforted him a little. He was told that the youth David played very well on that instrument; that he was beautiful, very strong, and fit for war; wise in his words, and that the Lord was with him. He was brought to Saul, who took an affection for him, and made him his armour-bearer. When the evil spirit laid hold on Saul, David played upon the harp, and the evil spirit left him. David fought too against Goliath, whom he vanquished.

Q. Who was Goliath?—A. A Philistine, six cubits and a span high, armed at all points. A new war having broken out between the Philistines and the Israelites, the two armies were only separated from each other by the little valley of Elah. This giant insulted the battalions of Israel: give me a man, said he, that we may fight together. The Israelites trembled with fear when they saw and heard him. Saul was informed that David had asked that he might be given up to the Philistine, and that he desired to com-

bat him. Saul ordered him to come, and, after having heard him, said—go, and the Lord be with thee. David put off the armour of Saul with which he had just been invested, and marched against the Philistine with only his staff and his sling, and said to the giant, thou comest against me with a sword, and with a spear, and with a shield; but I come to thee in the name of the Lord of hosts. The Philistine advanced, and David putting his hand in his bag, took out a stone and slung it, and struck Goliath upon the forehead with such violence that he fell upon the earth. David instantly stood upon him, and laid hold of his sword with which he cut off his head. The terrified Philistines fled, and were pursued by the Israelites, who put a great number to the sword.

Q. How did Saul acknowledge the great service which David rendered Israel by overthrowing Goliath?—A. David was presented to Saul, having the head of the formidable Philistine in his hand. Saul, in testimony of his attachment, would not let David leave him: he gave him the command of his warlike troops, and promised him his eldest daughter Merab in marriage: but he soon ceased to love him, and even entertained great jealousy against him.

Q. What was the cause of Saul's jealousy against David, and what did it lead to?—A. What excited a jealousy in Saul which nothing could extinguish, was, that he heard some women who, dancing to the sound of instruments, sang, Saul hath slain his thousands, and David his ten thousands. What! said he, ten thousand to David, and only one to me. From that day he regarded David with an evil eye, and he hastened to marry Merab, whom David was to espouse, to another. Having afterwards learnt that Michal, his second daughter, loved him, he consented that he should marry her when he had killed a hundred Philistines: his design was, that he might fall in the battle he should give them. David killed two hundred Philistines, and Saul saw himself, as it were, forced to give him Michal to wife; but his aversion towards him who had become his son-in-law only augmented. His dislike and animosity became so violent, that he several times attempted his life while he was playing the harp before him,

and sent men into his house, in the night, to kill him. He only escaped this danger by a stratagem of Michal, who, after having put a statue in his bed, assisted him to get out of the window. Jonathan, the son of Saul, who loved David as much as his father hated him, apprised him that he no longer had any safety except in flight.

Q. Where did David retire to, and what was his conduct, being no more in the country of Israel?—A. David and Jonathan having embraced each other, shedding many tears, David went to Nob where the Lord's tabernacle was. He was without arms, and knew not where to get subsistence. Ahimelech the high priest having at that time no bread, and seeing the son-in-law of the king in urgent necessity, gave him to eat of the bread of the offering, which it was alone permitted the priests to eat; he moreover returned him the sword of Goliath which was in the tabernacle; he was ignorant that David fled. Saul was so enraged against Ahimelech, that having made him come with all the priests of his household, he had them all massacred by Doeg, who afterwards went to Nob, by Saul's orders, to put all to the sword. Abiathar, the son of Ahimelech, was the only one who escaped the carnage: he fled to David, who was overwhelmed with grief at the news. Being with Achish, king of Gath, where he had taken refuge, he was apprehensive lest he should be arrested; he found no other means of leaving the house of Achish but by counterfeiting madness. Having returned again into the country of Israel, he kept himself concealed either in caverns, the depth of woods, or on the hills. His family discovered where he was, and came to look for him; and he was soon after joined by many of the unfortunate people who were unjustly oppressed, so that he put himself at the head of about six hundred men. Saul did not cease seeking to destroy him; but God did not give him into his hands, although he several times delivered Saul over to David, who always respected him as the Lord's anointed. Saul being in the desert of Engedi, entered alone into a cavern in which were David and his people. David advanced, without making any noise, behind the king, and contented himself with cutting off the

skirt of his coat, which he afterwards shewed to Saul when he was at a certain distance. David spared him a second time : knowing that he was come into the desert of Ziph, with three thousand men, in search of him, he went with Abishai to Saul's camp, and advancing up to the tent where the king slept, and all his people about him, and only taking his lance, which was at his bolster, and his cruse, he went to a height a short distance from the camp, and loudly called to the people of Saul, saying : behold the king's spear ! and let one of the young men come over and fetch it. Saul saw, by these two circumstances, that he was wrong ; that David, far from hating, had a sincere affection for him ; but David, to secure himself from the pursuit of this prince, so subject to the spirit of jealousy, entered into the service of Achish king of Gath. Achish, who was acquainted with his valour, and that of his people, gave him the city of Ziklag for his residence, and even confided to him the guard of his person. David being absent from Ziklag, the Amalekites surprised the city, pillaged it, and brought away with them all those that they found there, killing no one. He was deeply afflicted with this disaster, and went with his six hundred men after the Amalekites, and found them in diversion and rejoicing at the rich booty they had made. He killed them all but four hundred, retook those they had carried off, and acquired very precious spoils. Amongst the captives which he brought back were his two wives, Achinoam and Abigail.

Q. Who was Abigail ?—A. She had been the wife of Nabal, a very rich but avaricious and brutal man, to whom David had sent ten of his people to intreat him to give them some provisions ; they represented to him that they were in need of them, and not only that they had never touched any thing that belonged to him, but further, that they had prevented him from being wronged. Nabal refused what they had asked in an insolent manner, and spoke of David with much contempt. David, to whom this answer was brought back, immediately marched towards Nabal's house, resolving to exterminate his whole household : but Abigail, learning from one of the servants in what manner those sent by David had been received, had the prudence to prevent the

misfortune with which she foresaw they were menaced. She made haste to have all sorts of provisions carried to David, and afterwards presented herself before him, and falling at his feet, she perfectly appeased him by the wisdom of the discourse she made use of. When Nabal had been apprised by his wife of the danger they had run, his dread was such that he became motionless, and dying six days afterwards, David married Abigail without delay.

Q. How did Saul die?—A. After having committed a great sin, and in a battle against the Philistines: they were encamped at Shunem, and the Israelites were posted at Gilboa. Saul was overcome with fear from the army of his enemies. He consulted the Lord, who neither answered him in dreams, nor by the priests nor prophets. He disguised himself, and had recourse to a witch, to whom he said, let me see Samuel. The woman consulted a devil, and uttered a great cry, knowing then that he who interrogated her was Saul; but quieted by his swearing to her that no harm should happen to her in consequence, she told him that she saw Samuel: the king too perceived him, and heard his voice. Samuel told him that the Lord, offended with him because he had refused to obey him, would give his kingdom to David his son-in-law; that the Israelites should be delivered into the hands of the Philistines, and that he would die on the morrow. The battle was fought, and the Israelites were put to flight. Saul was dangerously wounded by an arrow, and his armour-bearer not being willing to kill him as he desired; that he might not be killed by the Philistines, he put an end to himself by falling upon his own sword. The Philistines who afterwards came to the mountain of Gilboa to strip the dead, there found the bodies of Saul and of his three sons. An Amalekite who came from the army, brought David the king's diadem and bracelets. He told him that Saul being wounded, had intreated him to take his life, and that he killed him. The Amalekite flattered himself that he should obtain a reward, but he was deceived. David called one of his people and commanded him to kill him, because he did not fear to lay his hands on the Lord's anointed. He then wept bitterly for the death of Saul, and that of Jonathan his friend.

Q. Was David acknowledged king after Saul's death?—A. He was anointed king at Hebron by the tribe of Judah; but Abner, general of Saul's army, had Ishbosheth, the son of Saul, proclaimed king. All the tribes acknowledged him, but after that Joab, who commanded the troops of David, had, from a spirit of revenge, taken away Abner's life, and Ishbosheth had been killed by two assassins, all the tribes submitted to David, and he was confirmed king of Israel.

Q. What did David after his consecration?—A. He took from the Jebusites the fortress of Zion, and established his residence there. He obtained two victories over the Philistines, which rendered him formidable to all the neighbouring people. He afterwards caused the ark of the covenant, which was placed at Kirjath-jearim, to be transported to Jerusalem with the greatest pomp. It was conducted into the house of Obed-edom, and David seeing that God had blessed Obed-edom and all his family, on account of the ark, during three months that it had been with him, had it carried into his house in the most solemn manner; it was placed in the tent which David had fitted up for that purpose in his palace. When the ark was being transported from Kirjath-jearim, God had struck Uzzah with death, as he was neither Levite nor priest, for having had the temerity to put his hand to support it in a moment when he was afraid lest it should fall. This impressed all the people with the fear of the Lord. When the ark was transported from Obed-edom into the house of the king, David clad in a robe of fine linen, danced before the ark to demonstrate his joy. Michal who perceived him, blamed him in her heart, as if he had done a thing unworthy of his dignity as king; she had no children to the time of her death, because she had turned into derision what the king did only from religion. David made known to the prophet Nathan the desire he had formed of building a temple in honour of God: the prophet told him on behalf of God that his design was laudable, but that this honour was reserved for his son. The king acknowledged that he was unworthy of it; but he prepared from that time the materials necessary for the temple which his son was

to build. He consecrated thereto the gold and brass that he took from his enemies, after having conquered them.

Q. Was David always virtuous and happy?—A. This prince rendered himself very guilty in the sight of the Lord; he sincerely repented a year afterwards, and although God had forgiven him his iniquity, he punished him severely.

Q. What sin did David commit, and how was he punished for it?—A. David having remained at Jerusalem, while Joab made war against the Ammonites, he perceived from the terrace of his palace a woman who was bathing, and he took no care to stifle an impure desire which he conceived. It was Bethsheba, the wife of Uriah who was then in the army, and having committed adultery with her he ordered Joab to send him Uriah, who was sent accordingly. The king, after having informed himself from him of the state of the army, invited him to go in and repose in his house; he hoped thereby his crime would be concealed. But Uriah did not accept of this invitation, saying that it was not fit that he should rejoice at home, while the ark of God, and Israel and Juda, remained undertents. David having been apprised that Uriah, instead of going to his house, had passed the night before the palace gate, made him eat that day at his table, and sent him back to the army with a letter for Joab. It was couched in these terms: Set ye Uriah in the fore-front of the hottest battle, and retire ye from him that he may be smitten and die. So unjust an order was executed to its very letter. Uriah was killed in a sortie that the besieged made. David was acquainted with it by Joab, and a few days afterwards he ordered Bethsheba to his palace and married her.

Q. How did David acknowledge his sin?—A. It was the prophet Nathan who brought David back to himself, a year after his crime. He made him sensible of its enormity, by proposing to him a parable of a rich man, who having a great number of flocks and herds, took the little ewe lamb, which was all his joy, from a poor man who had but one, to give it to be eaten by a stranger who came to lodge with him. David was indignant against so guilty a man. And Nathan said unto David, thou art the man. The prophet then reproached him with his ingratitude towards the

Lord, and made known to him the misfortunes which were about to befall him from his own house. David said with a breaking heart, I have sinned against the Lord. Nathan answered: The Lord hath put away thy sin, thou shalt not die: but the child which is born to thee, from the wife of Uriah, shall die; the child was attacked by a violent malady, and notwithstanding the prayers which David addressed to the Lord, it died on the seventh day. David was afterwards comforted for his loss, when Bethsheba had a son named Solomon, signifying beloved of God; but some time afterwards the death of Amnon, by Absalom, threw that prince into deep affliction, which lasted all his life.

Q. On what occasion, and how did Absalom kill his brother?—

A. Absalom and Amnon were sons of David, but not by the same mother. Amnon passionately loved Tamar, one of his sisters; he violated her, and as soon as he had assuaged his criminal passion, took an aversion to her. Absalom immediately resolved to revenge this outrage which Amnon had committed against Tamar, his maternal sister; but he dissembled for two years the mortal and increasing hatred he had conceived. No favourable opportunity presenting itself, he sought one. He obtained of David, though with some difficulty, that all his brothers should assist at the feast which he was to give on the day of his sheep-shearing. They all repaired to Absalom's house, where a princely festival was got ready, but in the midst of the banquet his officers executed the order which he had given them to kill him he hated: they assassinated Amnon. The other children of the king, seized with horror, hastened to mount their mules and fly. At the news of the death of Amnon, David and all his servants burst into tears. Absalom, to avoid his father's anger, withdrew to the king of Geshur, where he staid three years, after which the king permitted him to come to Jerusalem, but with orders never to appear before him. It was not till two years afterwards, that from the reiterated prayers of Joab, he consented to see the traitor Absalom. David embraced him, and restored him to his favour, but he soon had occasion to repent of it.

Q. Why?—What more did Absalom?—A. The ungrateful son

sought to dethrone his father, and take away his life. He was beautiful, and no one in Israel was better made than him. He appeared magnificent in every thing, and shewed great affability to those who wanted audience of David to terminate their differences. Why am I not appointed judge in Israel, said he, that I might do justice to all? When Absalom had gained the affection of the people, by thus robbing David of their hearts, and that the provinces were disposed to revolt, he went to Hebron, under the pretext of acquitting himself of a vow, and took with him two hundred men from Jerusalem. He had taken care to engage on his side Ahitophel, who was of the king's council. The number of the rebels having been considerably increased, he had the trumpet sounded, and those of his partisans whom he had sent into every tribe, published that Absalom reigned in Hebron. All the cities of Israel rose at the cry. A courier brought information to David that all Israel followed Absalom. Let us go, said the unhappy king, and fly hence, for fear we should fall into Absalom's hands. David went out on foot with all his household, only leaving in his palace some of his concubines. He was accompanied by his servants, and six hundred men of the city of Gath, who were attached to his service. He proposed to them to withdraw : but Ittai, their commander swore that he and his people would not leave him till death. Arrived at Kidron, he passed the brook, and ascended mount Olivet, walking bare-footed, and shedding tears the whole way. Hushai, one of his counsellors, came to meet him when he was going up mount Olivet; he told him that he could only be of use by tendering his services to the new king, for the purpose of rendering non-effective the counsels of Ahitophel. Hushai accordingly returned to Jerusalem, presented himself to Absalom, and promised to serve him.

Q. What was Absalom's next act?—A. That abominable son, by the counsel of the infamous Ahitophel, publicly dishonoured the wives whom his father had left in the palace. Ahitophel then advised Absalom to pursue David immediately with twelve thousand men; and to fall upon him at once while he was exhausted with fatigue, and afflicted; but Hushai, who was consulted afterwards,

and who foresaw that David would infallibly perish if that advice were followed, professed a contrary opinion. He represented that David being a great officer, and his followers valiant warriors, whose hearts were incensed, they might strike some desperate blow, which would, perhaps, succeed; that it were much more prudent of Absalom to assemble Israel, and put himself at the head of the army; that by attacking David thus, his little troop would be overwhelmed by numbers, and not a single man of the whole could escape. This appeared the wiser, and prevailed, which so enraged Ahitophel, that he left Absalom's court, and hung himself in despair. Hushai, however, informed David of what was going on in the council of Absalom. At this news the king thanked the Lord, decamped, and passed the Jordan. He had then time to recollect himself, and to recruit his army. The battle was fought not long afterwards in the forest of Ephraim, and all the troops heard what David said to his generals Joab, Abishai, and Ittai: "Deal gently with Absalom."

Q. Who gained the battle?—A. David's army cut that of Absalom's to pieces, and so this battle was decisive.

Q. What became of Absalom?—A. He fled; but passing under a large and very bushy oak, he was entangled in the branches; and as his mule continued its course, he remained suspended. A soldier came to tell Joab, who reproached him that he had not run him through. Though, said the soldier, I should receive a thousand shekels of silver in mine hand, I would not put forth my hand against the king's son. Joab was not checked by this answer; he went to the place where the oak stood, and after having pierced Absalom with three darts, ten young men of his company finished him. The king had been prevented from finding him in the battle. When he heard the news of the victory, he immediately demanded if his son Absalom was alive, and when he heard of his death, he burst into tears, saying, Oh! my son, Absalom! my son, my son Absalom! would to God I had died for thee! Absalom! my son, my son!

Q. What happened to David after Absalom's death?—A. All Israel returned to obedience, and he gave great proofs of his mild

ness. He even pardoned Shinei, Saul's relation, who had loaded him with injuries, cursed, and thrown stones at him.

Q. How did God punish the enumeration which David got made of its subjects, by a spirit of pride?—A. God told David by the prophet Gad, Choose either a three years' famine, war, during which thy enemies shall triumph three months, or a plague for three days. He preferred the plague, and it raged violently three days, so that seventy thousand Israelites died. David cried to God that he had sinned, and the plague was stayed in Israel.

Q. What was the last action of David?—A. Adonijah, the eldest of his sons, wanted to reign: he gave a great banquet, during which he was saluted king by all the guests. David knew it, and instantly had young Solomon, his son by Bethsheba, anointed and crowned; the trumpet was sounded, and all cried, God save king Solomon. The year following David knew that his death was at hand; he called his son Solomon to him, to whom he gave excellent advice, and wished him wisdom; he then died in a happy old age, after having undergone a long repentance, loaded with riches, and full of glory.

Q. What is known of king Solomon?—A. He put to death Adonijah, who still evinced his desire of reigning, and had Joab killed at the foot of the altar, knowing that he had an understanding with Adonijah. When he was confirmed on his throne, he particularly asked of God wisdom that he might well govern his people. This demand was pleasing to the Lord; he shewed his wisdom by his decision, and by the peace which the Israelites enjoyed during his reign. His wisdom was admired by the Queen of Sheba. It was Solomon who built the magnificent temple of Jerusalem. But this prince, who had been so favoured by God, made a dreadful deviation from virtue. He gave his heart up to the love of women, of whom he married a great number who were idolatrous; he sacrificed to their false deities, and built them temples. God was offended against Solomon, and told him that he would divide the kingdom of Israel, which happened under the reign of his son Rehoboam. He died after having reigned forty years, whether a penitent we know not.

Q. How did the ten tribes abandon Rehoboam?—A. The Israelites demanded that Rehoboam should treat them with greater mildness than his father had done. He did not follow the advice of the elders, who told him to shew kindness to the people, but in particular to the youths. He answered that he should impose upon them a heavier yoke. The people were enraged: the ten tribes divided, and elected Jeroboam king. Rehoboam was no more king, but over the tribes of Judah and of Benjamin.

Q. How did Jeroboam act?—A. He fixed his residence at Shechem. To maintain his throne, he changed his religion, made two golden calves, which he set up, one at Bethel, and the other at Dan; and he established solemn feasts at Bethel, in imitation of those celebrated at Jerusalem. His son fell sick, and Jeroboam sent his wife to Shiloh, to consult the prophet Ahijah. The prophet hearing her footsteps, said to her, Come in thou wife of Jeroboam; why feignest thou thyself to be another? when thy feet enter into the city the child shall die; the child then died. Jeroboam persisted in his idolatry to the last.

Q. What did Rehoboam?—A. He abandoned the Lord at the end of three years, and God punished him. Shishac, king of Egypt, came to Jerusalem, and carried away the treasures of the temple and palaces. Abijah, son of Rehoboam, who reigned but three years, trod in the criminal steps of his father: but his successor was Asa, his son, whose reign was long.

Q. What did Asa?—A. What was pleasing to God: he broke the idols, and led his subjects to rely upon the Lord. He defied the Ethiopians, who came to make war upon him, because he offered up fervent prayers to God; but he did not persevere in the confidence he placed in God. He left the kingdom of Juda to his son Jehoshaphat.

Q. What revolutions happened in the kingdom of Israel?—A. Nadab, son of Jeroboam, succeeded his father, and was as wicked as him. Baasha assassinated him, and reigned twenty-four years, walking in the same path as Jeroboam. He was succeeded by his son, who was killed by Zimri, who reigned only seven days. He set fire to his palace, in which he was burnt, seeing that he was

about to be taken by Omri, who reigned twelve years. Ahab, his son, succeeded him, and was much more wicked than his father.

Q. What then was Ahab guilty of?—A. He married Jezabel, an idolatrous princess, and declared enemy to the servants of God. He adored the idol Baal, and built it a temple in Samaria. Jezabel made a massacre of all the prophets she could find. At that time there was a great drought in the kingdom of Israel, accompanied by a famine, which lasted three years and a half. The prophet Elijah, however, dared to go before Ahab, and reproached that impious king for having abandoned the way of the Lord to follow Baal. He said to him, assemble the prophets of Baal, and the children of Israel, on mount Carmel. They came by the king's order. Elijah then, addressing himself to the people, said, that the God who should hear the prayers of his worshippers, and make fire descend from heaven, and consume the victim, should be acknowledged the God. The people answered, be it so. The four hundred and fifty prophets of Baal invoked their God, without avail, during several hours; but when Elijah said, Lord, hear me, the fire fell from heaven upon the burnt-offering, and consumed it. At this prodigy the people cried, the Lord he is the God! Elijah said to the people, take these prophets, and let not one of them escape. They were all put to death. He then assured them that an abundant rain should soon fall from heaven; and the event verified the words of the prophet.

Q. What then did Jezabel?—A. She fell into a great fury, and swore the destruction of the prophet, but he had taken flight. That wicked woman's malice was never equalled; knowing that Ahab regretted that Naboth would not sell him his vineyard, which was the heritage of his forefathers condemned Naboth to die, upon the deposition of two false witnesses, so that Ahab could get possession of the vineyard which he desired. Ahab died of a wound by an arrow, which he received in a battle against the Syrians. Ahaziah, his son and successor, was impious like him. Jehoram, who was king of Israel after Ahaziah, made war upon the Syrians. Jehu drew out of him an arrow which had pierced him through and through, and Jehu was made king.

Q. How did Jehu conduct himself?—A. He pursued the king of Judah, who was with Jehoram, and died of a wound which he received. Having seen at a window Jezabel, whose face was painted, and head decked out, he ordered her to be thrown out: she was trampled under foot by horses, and dogs eat her body. He commanded seventy sons of Ahab, who were at Samaria, to be killed, and their heads to be sent him in baskets; ordered, under pain of death, all the priests of Baal to appear on a certain day in his temple, because he designed a sacrifice to Baal. They came there, and were all killed. In the place of the temple of Baal, which was destroyed, a draught-house was built.

Q. Who succeeded Aza, king of Judah?—A. Jehoshaphat, who walked in the steps of David, and laboured to bring his subjects back to the worship of the true God. The alliance which he made with Ahab had nearly been his destruction. He was pleasing in the sight of God, and did not destroy the high places consecrated to him, although the law forbid him from offering up sacrifices out of the temple.

Q. Who was Jehoram?—A. The son of Jehoshaphat, whom he succeeded in the kingdom of Judah. He put all his brothers to the sword, and imitated the impiety of Ahab, whose daughter Athalia he had married. He carried the inhabitants of Jerusalem into idolatry. The Philistines and the Arabs entered into the country of Judah, pillaged his palace, and made his children captives, with the exception of Ahariah, the youngest of all. He died of a disease which made his bowels come out of his body. His son Ahaziah was his successor.

Q. How did Ahazia, king of Juda, conduct himself?—A. Athalia, his mother, led him into wickedness. After reigning a year he perished by an arrow shot at him by Jehu.

Q. Who succeeded Ahazia?—A. Athalia. She killed all the princes of the royal house, that she might reign alone in Judah. But Jehosheba, the wife of the high priest, Jehoiada, had saved Jehoash, who was only a year old, from the massacre. After Athalia had reigned six years, Jehoiada brought the little Jehoash into the temple, put the diadem upon his head, delivered the law into his hand, and anointed him: and all the Levites cried God

save the king. Athalia ran into the temple exclaiming treason, but she was taken out by force and killed by the sword.

Q. Did Jehoash conduct himself properly?—A. So long as he followed the counsels of Jehoiada, who died at the age of one hundred and thirty years; but after his death, great people besought Jehoash that he would permit idolatry to be re-established. He was so weak as to grant their request, and they adored idols: but the high priest, Zechariah, son of Jehoiada, having reproached the people with their iniquity in violating the commandments of the Lord, he was knocked down with stones in the porch of the temple. As he was dying he said, The Lord look upon it, and requite it. A year afterwards the Syrians plundered Jerusalem, and indignantly outraged Jehoash. That prince, who reigned forty years, was killed in his bed by two of his officers.

Q. Who was Jehu's successor?—A. His son Jehoahaz. He walked in the ways of Jeroboam. Hazael, king of Syria, cut his army to pieces. The Syrians carried their cruelty even to dashing the little children to pieces against the earth, and stabbing the pregnant women in the belly; but at last this prince humbled himself before the Lord, and was heard. He gave to Israel, in his son Joash, a benefactor, who delivered them from the tyranny of the king of Syria.

Q. What did Joash, king of Israel?—A. He had great veneration for Elijah, visited that prophet in the illness of which he died, and shed tears for the loss he was about to sustain by his death. The man of God predicted to Joash, that he would thrice beat the Syrians. So it happened; and he retook those places which the king of Syria had made himself master of.

Q. How did Amaziah, king of Judah, reign after the death of his father Joash?—A. Amaziah did at first what was pleasing to God; but his army having obtained a great victory over the Edomites, the success puffed him up, and corrupted his heart. He made the idols, which he had taken from those people, his gods, declared war against Joash, king of Israel, took Amaziah prisoner, and having brought him to Jerusalem, demolished part of the wall of that city. Amaziah was assassinated by a conspiracy.

Q. Who was the successor to Amaziah ?—Uziah, his son, who reigned fifty-two years. He served the Lord while the prophet Zechariah lived, and at that time succeeded in all his undertakings. Uziah then had the temerity to wish to offer incense upon the altar of incense. The chief priest Azariah represented that this office belonged to the priests, who were the children of Aaron. Uziah, who held the censer, menaced the priests, and a leprosy instantly appeared from his head to his feet ; he was driven out of the temple, and banished till death from all intercourse with men. Jotham, his son, then governed the state, and after his father's death ascended the throne.

Q. Did Jotham reign as he ought ?—A. During the sixteen years that he reigned he conducted himself according to the laws of the Lord ; but the morals of the inhabitants of Jerusalem were very disorderly.

Q. To whom did Joash, king of Israel, leave the crown after his death ?—A. To his son Jeroboam, the second of the name, and a great warrior. After his death, the kingdom of Israel was eleven years without a chief. At last Zachariah, the son of Jeroboam, mounted the throne, and was killed six months afterwards by Shal-lum, who reigned but one month. He was killed by Menallem, who succeeded him, and Pekahiah, his son, then reigned, but continued only two years.

Pekah afterwards occupied the throne for twenty years, and was slain by Hoseah. All these princes adored idols.

Q. When Jotham, king of Juda, died, who succeeded him ?—A. Ahaz, his son, who made idols to Baal, and his subjects worshipped them. His adversity only tended to harden his heart. He left the crown to his son Hezekiah.

Q. Was Hezekiah a king worthy of Juda ?—A. He relied on the Lord, opened the gates of the temple which his father had shut, and commanded the priests to purify the house of the Lord. He celebrated the passover at Jerusalem, after having destroyed all the profane authors and marks of idolatry. Hezekiah was attacked by a mortal disease. Isaiah the prophet said to him, put the affairs of thy house in order, for thou wilt die. Hezekiah prayed fervently

to the Lord, and he heard him. The prophet told him, that in three days he should go to the temple, and that the Lord would add yet fifteen years to his life. He gave him as a sign of the truth of what he told him, that the sun should go ten degrees backward upon the shadow of his dial. Hezekiah afterwards suffered himself to give way to the impulse of pride, in displaying all his rich treasures before the king of Babylon. The anger of God was raised against him, but because he humbled himself it did not burst forth under his reign. Manasseh succeeded his father Hezekiah, who had reigned twenty-five years, at twelve years old.

Q. What became of the kingdom of Israel after the reign of Pekah?—A. Pekah had been killed in a conspiracy, at the head of which was Hoshea, who ascended the throne nine years afterwards. Shalmaneser, king of Assyria, came to besiege him in Samaria, took the city, bound Hoshea, and sent him to prison: great part of the Israelites were transferred to the country of the Assyrians, and thus ended the kingdom of Israel.

Q. Was Manasseh, the son of Hezekiah, as godly as his father?—A. He worshipped idols, erected altars to Baal, and was even so impious as to place an idol in the temple of the Lord. He studied magic, and put to death the servants of God in such abundance, that the city of Jerusalem was filled with their corpses. The generals of the king of Assyria made him prisoner, and having put irons upon his hands and feet, brought him to Babylon. However, Manasseh, seeing that he was in so deplorable a state, deeply humbled himself before the Lord, and the prayer which he offered with a heart full of repentance was heard. He returned to Jerusalem, and shewed that his repentance had been sincere. He exterminated the idols, and neglected nothing to bring the people of Judah to serve the Lord. When dying, he left the kingdom to his son Amon.

Q. Wherein did Amon imitate his father?—A. In his impiety, but not in his subsequent repentance. He was killed in a conspiracy, after reigning two years. His son Josiah, who was only eight years of age, ascended the throne.

Q. Did Josiah adore idols like his father Amon?—A. Josiah always did as was pleasing to the Lord. He exterminated idolatry

from all parts, laboured to repair the ruins of the house of the Lord, and had the book of the law which Hilkiab found in the temple publicly read, and made the people promise with an oath to observe what was written in it. Josiah remained faithful to God till his death.

Q. Who reigned after Josiah?—A. Josiah had three sons, of which Jehoahaz was acknowledged king by the people: but Necho, king of Egypt, deposed him, and set up his elder brother Jehoiakim in his place. He loaded Jehoahaz, whom he took into Egypt where he died, with chains.

Q. Was Jehoiakim faithful to the Lord?—A. During eleven years that he reigned, he committed all the abominations of the Gentiles, and the Jews sacrificed to Baal and to other idols. It was in vain that Jeremiah made exhortations and menaces, and exhausted himself in lamentations on what would become of Jerusalem. The priests wished him to be condemned to die, but the senators and the people opposed it. Jeremiah took out a book in which he wrote down what he made known with a loud voice, and it was carried to Jehoiakim, who after he had read some pages, cut it with a penknife and threw it into the fire. Nebuchadnezzar entered Judea, laid siege to Jerusalem, and loaded Jehoiakim, whom he intended to bring captive to Babylon, with chains. He, however, released the prince, but he was subject as well as his kingdom to Nebuchadnezzar. Jehoiakim perished in battle, and his son Jehoiakim was put on the throne, which he filled only three months and ten days.

Q. How was Jehoiakim so short a time upon the throne?—A. The Babylonians laid siege to Jerusalem, and when Nebuchadnezzar began to batter the city, Jehoiakim went out with his mother and the officers as well of his court as of his army. He delivered himself to the king of Babylon, who made him prisoner, together with his mother, wives, nobles and officers. The poorest only of the people remained at Jerusalem. Nebuchadnezzar established Zedekiah, uncle to Jehoiakim, king over Jerusalem.

Q. How did Zedekiah live?—A. He reigned for eleven years,

an impious king ; from whose example all the people abandoned themselves to the abominations of idolatry. Having revolted against Nebuchadnezzar, to whom he had taken an oath of fidelity, that prince again came to besiege Jerusalem. Jeremiah prophesied that this city would be given up to the king of Babylon, and that all those who remained in it would perish either by the sword, famine, or plague ; the people wanted to put him to death for it, and he then obtained leave for them from the king. They let him down with cords into a low ditch of the prison, which was full of mud, and he was about to die when Zedekiah had him drawn out of it. Jeremiah counselled him to give himself up to the Babylonians, but the king would not follow his advice ; he was brought to the king of Babylon, who put to death his two sons, with all the nobles and great men of Judah, in his presence. He then put out his eyes, and had him carried back to Babylon, where he laid in prison till his death. A dreadful carnage was made of the inhabitants. The city and the temple were pillaged ; and all the fortifications were demolished.

Q. Had all the captives who were taken to Babylon great sufferings to endure ?—A. There were some children of illustrious birth, who were instructed and brought up in the king's palace, and who afterwards remained about his person ; of this number was Daniel.

Q. Who was Daniel, and what did he perform ?—A. At twelve years of age he refused to eat of the meats brought from the king's table, because they were such as the law prohibited. He shewed that the Lord had filled him with prophecy when he convicted the two old men, who accused the chaste Susannah, of having borne false witness against him ; interrogating them one after the other, and making them contradict themselves. He told Nebuchadnezzar what he had seen in a dream, and then gave him the interpretation of it. Cast into the furnace, because he would not worship the statue which the king had made, the fire of the furnace neither burnt his clothes nor those of his two companions. He discovered to Elvilmerodach, Nebuchadnezzar's successor, the frauds of the priests of Bel, by whom he had been

made to believe, that Bel ate what was offered to him. Thrown into the den of lions, because he would not adore a great dragon which the Babylonians regarded as a god, he was respected during six entire days by six famished lions, by whose side he sat. He explained to Belshazzar the successor of Evilmerodach the sense of three words which a hand wrote upon the wall of the room at a banquet, during which he drank and made his guests drink out of precious vases taken from the temple of Jerusalem. Three times a day he opened the windows of his room on the side of Jerusalem, and bent his knees to worship God, notwithstanding the king's edict, which forbade the offering of any prayers except to him during thirty days; and having him again cast into the lions' den for having transgressed this edict, the lions did him no harm. Lastly, God informed him of the time when Christ should be put to death.

Q. What was the end of the captivity of the Jews?—A. Cyrus, king of Persia, issued a proclamation whereby he permitted all Jews to return to their own country, and rebuild the temple of Jerusalem. They laid the foundations of the temple, but the Samaritans, their enemies, obtained an order that they should discontinue the edifice: however, Darius, informed of the edict of Cyrus, permitted the Jews to complete it. The Jews worked with so much ardour, that four years afterwards the walls of Jerusalem were rebuilt, and worship re-established. Nehemiah, made governor of Judæa, neglected nothing to induce the Jews to observe the law of God.

HISTORY OF JOB.

Q. What is the history of Job?—A. It is presumed that Job lived before Moses. Job, of the country of Uz, was very rich in flocks and in slaves. He had ten children, among whom were three daughters. God permitted the devil to afflict him, by taking away all he had. He was successively informed that the Sabeans had put all his sons to the sword; that fire from heaven had struck his sheep, and reduced them to ashes; that a furious wind had blown down his house, and crushed all his children. This

great servant of God, so far from murmuring, praised God and said : The Lord gave, and the Lord hath taken away, blessed be the name of the Lord. God again permitted the devil to afflict him in his flesh, and horrible boils soon covered all his body. Seated in the ashes, he made use of a potsherd to lade out the matter that issued from his ulcers. All his acquaintances abandoned him. There remained with him only his wife, who advised him to curse God. Job said while in that state, What, shall we receive good at the hands of God, and shall we not receive evil ? Three of his friends who came to comfort him would not speak to him, convinced that he had committed great crimes since God struck him so rudely. The patience of Job was put to the most severe trials, and he never lost himself. He was thereby pleasing to God, who rewarded him even in this life, restoring him twofold of all that he had possessed before.

HISTORY OF JONAH.

Q. What is the history of Jonah ?—A. He lived in the reign of Jeroboam the Second, king of Israel, and disobeyed the Lord, who ordered him to go to Nineveh, to reproach the inhabitants of that city with their abominable excesses. This prophet took shipping to go to Tarshish, and a great tempest soon arose, so that the vessel was in danger of being wrecked. Jonah was in a profound sleep during the tempest, when it was discovered, by casting lots, that it was on his account the storm arose. They asked him what it was he had done ; he answered, I am an Hebrew, and I fear the Lord the God of heaven, which hath made the sea and the dry land ; I have refused to go where he commanded me ; throw me into the sea, and the tempest will be appeased. As soon as they had thrown him in, it abated. A great fish that God had brought to this place, swallowed the rebellious prophet, who lived three days and nights in its belly, and the Lord then ordered the fish to vomit up Jonah. This prophet went to Nineveh, and preached in all the places through which he passed : Yet forty days, and Nineveh shall be overthrown. The Ninevites believed in the word of God. They acknowledged themselves guilty, humbled them-

selves before the Lord, and were penitent. God had pity upon this repentant people, and revoked the order he had pronounced for their destruction.

HISTORY OF TOBIT.

Q. What is Tobit's history?—A. Tobit was of the tribe of Nepthali. From the age at which he could know God, he served him, and his conduct from his childhood was irreproachable. When he had attained marriageable age, he took a wife out of his tribe, and from her had a son, to whom he gave his name. He taught him from his most tender age to fear God and to abstain from every sin. Brought captive to Nineveh, he did not forget the Lord, but exhorted the captive Israelites never to abandon him. He buried the bodies of the children of Israel upon whom Sennacherib vented his anger. The king, who sought, without effect, to put him to death, took away all his property. Tobit feared God more than the king, and he continued to shew his brethren the duties of sepulture. One day when he was very much fatigued, he went to sleep at the foot of a wall; some hot dung fell from a sparrow's nest upon his eyes, and he lost his sight. Tobit being blind became very poor. He told his son Tobit to go to Gabael, in Rages, to get back from him the money which he had gratuitously lent him, when he was rich. The angel Raphael, who appeared to him under the figure of a young man, offered to accompany him. He bid adieu to his father and mother, and set out upon his journey with the angel. Young Tobit went to wash his feet in the Tigris, when a monstrous fish came out of the water to devour him. He drew the fish on shore, and set apart the heart, the gall, and the liver, according to the advice of the angel. Arrived at the house of Raguel, his relation, who received them with joy, Tobit demanded of him in marriage his daughter Sara, who had espoused seven husbands one after another, and whom a devil had killed as soon as they went to her. He consented to it, and Raguel immediately gave Tobit the half of his wealth. Tobit begged the angel, whom he took to be a man, to go to Gabael, who returned the money; and accompanied the angel to

the nuptials of Tobit. However Tobit and his wife were very uneasy that their son did not arrive the day they expected him; but at last Anna, his mother, discovered him afar off, from the summit of a high mountain, and she ran to carry the news to her husband, who went with her, and embraced him. His son, taking some of the fish gall, rubbed the eyes of his father with it, and he recovered his sight. He recounted all the favour which God had loaded him with, through the interposition of Azarias, which was the name the angel had assumed, and begged Azarias to accept half of all he brought from Raguel. Azarias then told them that he was the angel Raphael. They were at first overcome with fear, but afterwards testified their gratitude to God. Tobit spent the remainder of his life in holy joy, and he lived to see children of his grandchildren. He died in peace at one hundred and fifty-eight years of age, and all his children persevered in their fidelity to the Lord.

HISTORY OF JUDITH.

Q. What is the history of Judith?—A. Judith was a very rich and beautiful widow, who lived shut up in her house, wearing haircloth, fasting almost always, and praying much. She learnt that Holofernes, the general of the king of the Assyrians, who was besieging Bethulia, had cut off the aqueduct which supplied the city with water; that the people represented to Ozias, and to their chief, the necessity of giving themselves up to the Assyrians, and that Ozias had answered them: “If in five days we obtain no succour, we will do as you have proposed.” Judith said to Ozias and the other ancients, “Wherefore hast thou prescribed a term to the mercy of God? Is not that the means of exciting his anger? I have formed a design, pray to God that he may approve it: I only require that you let me go out of the city with my maid servant in the night.” Having washed perfumed, and decked herself in all her ornaments, she was suffered to go out of the city, followed by her servant, who carried all things necessary for her subsistence. The first watch of the Assyrian armies having met her, she desired them to lead her to the tent of

Holofernes, having some secrets to discover to him. After she had saluted him profoundly, she told him that the Lord was irritated against his people, and that she informed him from God that he should in a short time be master of the country. Holofernes was charmed with her beauty, and believed her words. She was conducted to the chamber where she was to lodge. She obtained leave to eat only of the meats which she had brought, and to go out at night, and before day-break, to prayers. Judith was invited on the fourth day to a great banquet that Holofernes gave: he drank to excess there, and was intoxicated. All having retired, Holofernes, who was on his bed, fell into a deep sleep. Judith then, arming herself with his falchion, prayed to the Lord to strengthen her, and cut off his head, which her maid put into her bag. She then came to the gates of Bethulia, which were opened to her. As soon as the guards had heard her voice, the people assembled round about her, who having placed herself upon an elevation, displayed what she had in the sack, saying, "Behold the head of Holofernes, the chief captain of the army of Assur." The head of Holofernes was hung up at day-break at the top of the walls of Bethulia. The Israelites no longer delayed to make a sortie from the city, with loud cries of joy; and the Assyrians, seeing the headless trunk of Holofernes extended on the ground, struck with terror and dismay, hastened to fly. Many Assyrians were killed, and their camp plundered. Judith returned thanks to God in a beautiful canticle, and afterwards went back to her retirement. She was one hundred and five years of age when she died.

HISTORY OF ESTHER.

Q. What is the history of Esther?—A. Esther lost her father and mother when she was yet young. Mordecai, whose niece she was, took as much care of her as if she had been his own daughter. Ahasuerus, having repudiated the queen Vashti, made choice of her for a wife. Esther was one of those young females presented to him on account of her uncommon beauty. As soon as he saw her, he loved her, and made her queen. She informed

the king that two officers had conspired against his life; and told him, that it was from Mordecai she had received the information. Mordecai had incurred the anger of Haman, because he had refused to worship him. Haman, one of the greatest men in the kingdom, who could do every thing with the king, resolving to revenge himself, obtained from Ahasuerus an edict, the purport of which was, that on a certain day all the Jews who were in his kingdom should be massacred, and their property confiscated. Mordecai made it known to Esther, by sending her a copy of the edict, telling her that it was, without doubt, to serve his nation that God had raised her to the throne. "Let us weep, fast, and pray," answered Esther; "in three days I will seek the king, though the law forbid it." She kept her word. Being attired in her richest ornaments, she went into the apartment of Ahasuerus. When he saw Esther coming to him without having received his order, he was angered, and the queen fainted. God then changed the heart of the king, who said to her, "What is the matter, Esther? fear not; what is thy desire? Ask; if it were the half of my kingdom, I would give it thee." She asked, that he would deign to come with Haman to a banquet which she had prepared. He went there, and she intreated the king that he would come also on the morrow, and Haman with him, and she would declare her heart's desire. The king came, and Haman likewise; and after the repast, Ahasuerus wished Esther to declare what she required. "I ask," said she, "life for myself and my people. This Haman, now before you, wishes to destroy us all, and the cruelty of our mortal enemy will fall upon and be imputed to thee." What was the astonishment, what the terror of Haman! However, the king, burning with anger, left the hall, and went into the garden; but he soon came back, and found Haman at the feet of the queen, who was upon a bed, conjuring her to save his life. Ahasuerus, seeing him in this situation, thought he meant to do her violence, and could therefore contain himself no longer. He was then told that there was in Haman's house a gallows of fifty cubits high, which he had prepared for Mordecai, because he would not bend the knee before him. "Let

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him be hanged upon it immediately," said the king; and his choler was not appeased until his orders were executed. Ahasuerus knowing that Mordecai was his uncle, gave him the ring which he had obliged Haman to return to him; and Mordecai then became the second person in the empire. The orders which Haman had surprised the king into, for the destruction of the Jews, were revoked, and all Haman's children, as well as all the enemies of the Jews, were killed on the very day that the Jews were to have been massacred.

HISTORY OF THE MACCABEES.

Q. What happened to the Jews of the time of the pries Ozias?—A. Seleucus, king of Syria, sent Heliodorus to carry away all the silver that was in the temple. He came to Jerusalem, and entered into the temple with the design of carrying all off. It was in vain that the high priest Ozias represented to him that the treasures of the temple were deposits and sums destined for the nourishment of widows and orphans. Heliodorus hearkened not unto him; and he was already at the door of the treasure, when a horse appeared richly caparisoned; he who rode it had a terrifying look, and arms which seemed to be of gold. At the same time were seen two young men of shining beauty, who having placed themselves at each side of Heliodorus, flagellated him horribly. He would have died under the blows he received, had not Ozias invoked the Most High for him, and offered up a sacrifice to obtain his cure.

Q. Who was the successor of Seleucus, and in what way did he treat the Jews?—A. Antiochus-Epiphanes, or the Illustrious. This impious prince deposed Ozias, and put up the sovereign sacrifices to the best bidder. He entered Jerusalem with a powerful army, and killed or made slaves therein twenty-four thousand men. He had the audacity to enter into the temple, from which he took the altar table and candlestick, all of gold, the precious vases, and all the money which was in the treasury, and then undertook to abolish the Jewish religion.

Q. What steps did Antiochus take to abolish the religion a

the true God?—A. He forbade the Jews to exercise it under pain of death. He placed idols in the temple and upon the altar. The Jews were dragged by force to profane sacrifices, and were compelled to eat the flesh of animals which the law prohibited.

Q. How did the Jews conduct themselves during this violent persecution?—A. Several of them submitted; but there were many who remained firm; and among others Eleazar, the father of the Maccabees, and his seven children.

Q. Who was Eleazar?—A. He was a venerable old man, aged eighty-four. His friends, touched with a false compassion, conjured him to eat permitted meats, and to make it believed that he had eaten idolatrous; he received the proposal with horror. “Is it not,” said he, “unworthy my age to resort to such a subterfuge? What scandal should I authorize? What falls might I be the cause of? But though I might, even at present, escape the punishment of men, I could not avoid the hand of the All-Powerful, neither during my life nor after my death.” When Eleazar had spoken, he was dragged to his fate; and in thus meeting it, that holy man exhibited a great example of firmness to all the nation.

Q. What was the conduct of the mother of the Maccabees?—A. They took a mother with her seven children. Antiochus was desirous of constraining them to eat hogs’ flesh: they refused. Six of them were successively put to death with dreadful torture. The king hoped to succeed with the youngest; he exhorted him himself to give up the laws of his fathers, promising with an oath to render him rich and happy, and to make him one of his favourites for it. Nothing that Antiochus said had the least effect upon him. The king invited the mother to give her son salutary counsel; she promised to do so; and immediately, in her native language, made a most affecting exhortation, that he would remain to the last gasp faithful to the Lord. The young child immediately declared aloud: “I do not obey the command of the king, but that of the law.” Antiochus was transported with rage. He ordered him to be tortured with more cruelty than his brothers had been. After he was dead, his mother was brought to

be tormented and killed. She blessed God that she had such children.

Q. What was the zeal of Mattathias?—A. He was a zealous priest, who went out of Jerusalem, and retired with his six sons over the mountain of Modin. While many, to avoid torture, sacrificed to idols, Mattathias said to the officers: "Although all the Jews should obey king Antiochus, we, my children, brothers and self should ever be obedient to the law of our fathers." Scarcely had he finished speaking, when a Jew advanced to sacrifice. At this, the rage of Mattathias was kindled; he first killed the Jew upon the very altar, and next the king's commissioner. He then exclaimed: "Let all those that are zealous for the law follow me;" and he fled towards the mountains with his sons, and the inhabitants of Modin followed him. Their example induced many Israelites to go into the desert with their wives and children.

Q. What steps did Antiochus take in consequence?—A. He sent an army against them, and attacked the Israelites upon the Sabbath day. They made no resistance, for fear of violating that holy day, and a thousand were murdered. Mattathias and his adherents then took the resolution of fighting, though it was the Sabbath, in case they should be attacked; and they went from all quarters to overthrow the idols. Judas Maccabeus commanded the troops after the death of the zealous Mattathias, who in dying blessed his people, and exhorted them to revenge their God.

Q. What were the actions of Judas Maccabeus?—A. Having got together an army, he performed prodigies of valour. He vanquished and killed Apollonius, governor of Samaria, and Seron, the Syrian general. He obtained a victory over Nicanor, general of the Assyrians, who took flight, and reached Antiochus alone like a fugitive slave. He also fought Lysias, whose army was composed of sixty-five thousand men. After these splendid victories, he went to purify the temple, whose sanctuary was in the worst state, and whose altar had been horribly profaned.

Q. What was the death of Antiochus?—A. Having failed in his attempt upon Persia, he only breathed fire and flame against the Jews; when his horses running with great impetuosity, he fell

out of his chariot, and bruised his body all over. So dreadful a sore broke out, that his body swarmed with worms, and his mortified flesh emitted an insupportable stench. Experiencing the most cruel pains, he acknowledged that it was the hand of God which struck him, and said to his friends: "I remember the evils I have done to Jerusalem." He called upon the Lord, but he obtained no mercy, because it was not with a heart broken with grief for his offences. After having written to the Jews in favour of his son Antiochus-Eupator, he breathed his last, and the just judgment of God fell upon him.

Q. What was the end of Judas Maccabeus?—A. Judas being protected throughout by God, Antiochus-Eupator at last permitted the Jews to live according to their laws, and peace was concluded. But Demetrius, who had possessed himself of the throne of Syria, commanded Nicanor, who was upon good terms with Judas, to send him bound hand and foot to Antiochus. Judas was informed of it, and kept out of the way. Nicanor sent forth a thousand blasphemies, and swore, raising his hand against the temple, "That if Judas were not delivered to him, he would raze it to its foundations;" he then marched against his little army. The Jews were victorious; Nicanor was killed, his tongue given to the birds, his right hand fastened opposite to the temple, and his head exposed on the top of the fort. This was the last victory that Judas Maccabeus obtained. He died soon afterwards in a battle, in which he did wonders. His death caused tears to be shed by all Israel.

Q. Who succeeded Judas Maccabeus?—A. His brother Jonathan was chosen by the people. He governed eighteen years, and his courage and good conduct answered the expectations which had been formed of him. He was arrested in Ptolemais, and killed, with his two children, by order of the perfidious Tryphon. The Jews elected Simon his brother, who was advanced in years. He was killed by Ptolemy, his son-in-law, at a banquet. Hircan then succeeded his father Simon, and his posterity reigned until the time of Mariamne, the wife of Herod surnamed the Great. He drowned Aristobulus the Younger whilst he was bathing.

Q. Who was Herod?—A. Herod was not a Jew, but an Idu-

menean by birth, and he obtained leave of the Romans to take the title of king of the Jews. He defeated Antigonus, who opposed his pretensions, and thereby secured himself in full possession of the throne. The Jews under his reign were subjected to a foreign government, that of the Romans. But the Messiah was to appear after the tribe of Judah had lost the authority it had hitherto had; and it did then appear in the person of Jesus Christ.

HISTORY OF JESUS CHRIST.

Q. Which is the greatest event mentioned in holy writ?—A. The birth of Jesus Christ.

Q. Who is Jesus Christ?—A. The Son of God, made man to redeem and save us; the Messiah promised by God, in whom all the prophecies were accomplished, and who made his divinity burst forth in all his mysteries, that we might believe, serve, and be saved in him.

Q. What miracles accompanied and followed the birth of Jesus Christ?—A. Mary, who had conceived the Son of God by the sole virtue of the Most High, brought him forth without pain, and without ceasing to be a virgin: it happened at Bethlehem, in a poor stable, as the prophet had foretold that Jesus Christ would be born there, to teach us humility, and to detach us from perishable things; but angels announced the birth of this God-infant to some shepherds, by singing glory to God in the highest; on earth peace, good-will towards men. The shepherds hastened to Bethlehem, where, having found him laying in a crib, their minds were enlightened by grace; they recognised him as their God, and worshipped him. He submitted to be circumcised according to law, to begin to exercise the office of Saviour, and he then received the name of Jesus, which God himself had given him by the ministry of an angel. Three wise men, versed in the knowledge of the stars, having perceived in the firmament an extraordinary star, knew that it was the miraculous star of which the prophet Balaam had spoken; and they immediately left their country to come and adore the Saviour. Conducted by this star,

which went before them, and stopped over the place where he whom they sought was, they entered the house, and prostrated themselves before him; they worshipped him, and having opened their treasures, offered him gold, and frankincense, and myrrh, as an acknowledgment that he was the God of kings, that he was indeed God, and yet a mortal man. The fortieth day after the birth of Jesus Christ, Mary entered the temple to comply with the law of purification, although not obliged to do so, as she was without spot; and she there presented her adorable Son, who offered himself for us to his Father. Jesus Christ was there recognised to be the Messiah, by the holy, aged, and venerable Simeon, a just man, who feared God, and to whom the Holy Ghost had revealed that he should not die without seeing Christ the Lord. He took the adorable child into his arms, and cried out in a transport of joy, that he should die in peace, not having any thing else to wish for upon earth.

Q. What does the Gospel inform us concerning the private life of Jesus until he attained his thirtieth year?—A. Joseph, whom the Gospel calls a just man, the worthy husband of Mary, who was in the place of father to Jesus, took him into Egypt by the order of God, to shelter him from the fury of Herod, who, wishing to destroy him, had ordered a massacre of all the little children, for the purpose of including him in that horrible destruction. After Herod's death, the parents of Jesus came to reside at Nazareth, and they took him every year to Jerusalem to keep the Passover. He was but twelve years of age, when, having remained in the Temple, Joseph and Mary, who had been looking for him for three days, at last found him in the midst of the doctors hearing and proposing questions. All those who were present were struck with admiration at the wisdom of his answers. His mother, who mentioned to him the affliction into which his absence had thrown her and Joseph, was answered, that he must thenceforth be employed in what regarded the service of God his father, whose glory he must promote. Jesus returned with them to Nazareth, and the Gospel says no further, but that he was always dutiful to them: his external employment was that of assisting them in their labours.

Q. When did the public life of Jesus Christ commence, and how long did it last?—A. The public life of Jesus Christ commenced at his thirtieth, and lasted only to his thirty-third year. He went to the banks of the Jordan, that John, who was preaching repentance there, might baptise him. John, whom Jesus had sanctified in Elizabeth's bosom, and whom he had chosen to go before him, would have avoided it; but Jesus insisted upon it, because it was requisite that he should fulfil all that was promised. After Jesus had been baptised, he was proclaimed Son of God, when the heavens were opened, and the Holy Ghost descended upon him in the form of a dove. A voice, the voice of God the Father, was then heard from heaven, saying, "This is my beloved Son, in whom I am well pleased." John several times bore testimony to his divinity. Jesus was then conducted by the Holy Ghost into the desert, where he remained forty days without taking any nourishment, and he consented to be tempted by the devil, that he might teach us how to resist the spirit of temptation.

Q. What were the acts of Jesus Christ during the days of his public life?—A. He at first fixed upon twelve disciples, who, at his bidding, gave up every thing to follow him, that they might be instructed and associated in his labours. It was not from among the great and the powerful, the wise and the wealthy men of the age, that he chose them, but as men of least earthly account. Accompanied by his twelve disciples, which were called apostles, he then travelled over the different places of Judea, doing the office that was to be done by the Messiah, preaching his Gospel in all parts, doing good to all, and proving, by his splendid and numerous miracles, that he was God, and that the doctrine which he taught was divine.

Q. What did Jesus Christ teach?—A. He taught the truths which are contained in the book of the Evangelists, which was written by the inspiration of God. He preached that there were three persons in one God; that he was the true Son of God, and that he had come to call sinners to repentance; that all sinners who will not repent shall perish; that he shall blush before his

Father to acknowledge those who shall have blushed at acknowledging him before men; that the dead shall rise again; that there is a hell, which he called the place of torments, and that a great reward was reserved in heaven for those who have kept his commandments; that he should be there beyond all ages with his apostles; and that those who would not hearken unto his church, against which the gates of hell should never prevail, should be looked upon as pagans and publicans. The morality which Jesus Christ published was this: Love the Lord with all thy soul, and thy neighbour as thyself: if any one will be my disciple, let him renounce himself, take up his cross, and follow me.

Q. Did not Jesus Christ confirm his divinity, and the truth of his doctrine, by miracles?—A. By a great number of miracles of every kind, the truth of which cannot be denied, because the heathens who wrote in his time admit them, and the Jews said that he performed them in the name of Beelzebub. How many sick he restored suddenly to health, blind to sight, deaf to hearing, and lame to the use of their feet!—and lastly, he raised up the very dead.

Q. How did Jesus Christ close his public life?—A. By incontestable marks of his admirable love towards men, by the ignominies he experienced, the torments he endured, and the death to which he voluntarily submitted. On the eve of his death, after having supped with his disciples, he instituted the adorable sacrament; and having been betrayed by Judas, the intention of which he disclosed to one of his disciples, he suffered himself to be taken and bound in the garden of Gethsemane, condemned to death at the Jewish tribunal, flogged and crowned with thorns in the judgment hall, and crucified on Mount Calvary. The centurion cried out when he gave up his last breath: truly, this was the Son of God; and all those who witnessed his death, returned beating their breasts.

Q. What happened after his death?—A. His body was put into a stone sepulchre, well sealed, and carefully watched by his enemies the Jews; but he rose again on the third day as he had foretold. He staid forty days on the earth with his apostles,

during which he often instructed them in what they were to do to spread his religion in the world. On the fortieth day he ascended into heaven, in the presence of above five hundred of his disciples: there he sits on the right hand of his Father, as being equal with him, and is worshipped by the angels and saints, and intercedes for us.

Q. What did the apostles after the ascension?—A. They shut themselves up in the temple, to prepare for the descent of the Holy Ghost, which Jesus Christ had promised them. That sanctifying spirit descended upon them on the day of Pentecost, Whitsunday: they were filled with it, and the apostles then became new men, burning with zeal: they had the virtue of performing, in the name of Jesus Christ, the greatest miracles. On that very day, Peter, the chief of the apostles, announced to the Jews that Jesus Christ whom they had crucified was God; and in a second discourse he converted three thousand. The apostles then dispersed to preach the Gospel; and the religion of Jesus Christ was soon spread in all parts. No persecution could ever diminish the number of Christians; the blood of martyrs has always operated like a fruitful seed; and when the torch of faith has ceased to enlighten one nation, it is only gone to carry its light among others:

The preceding short sketch, interesting as it must appear to the young reader, only comprehends a very small proportion even of the principal events with which that inestimable and divine work, the Bible, abounds; and is rather intended to excite them to satisfy than to allay a curiosity which should go at once to the fountain head, and drink deeply of that never-failing stream of eternal mercy and life.

PROFANE HISTORY.

Q. What is profane history?—A. It is the history of the different nations which have successively appeared on the face of the earth, and is divided into antient history and modern history, according as the subjects of it existed before or after the epoch marked by the birth of Jesus Christ.

ANTIEN HISTORY.

Q. What was the first people formed into a monarchy?—A. It appears to be the Egyptians, whose history goes back almost to the Deluge. Ham, son of Noah, retired into Egypt with his son Mezraim. His family multiplied rapidly in that country, fertilised by the periodical inundations of the Nile, which forms a sort of valley six hundred and sixty miles long, by one hundred and fifty wide, and terminated by the Delta, an island of great extent, which divides the Nile into two branches.

Q. Who was the first king of Egypt?—A. The most probable opinion is, that Menez first bore that title; Isis was his wife. Their children shared the empire, which was divided into four parts: that of Thebes or Upper Egypt, Lower Egypt, This, and Memphis.

Q. Which are the kings of Egypt mentioned in the Scriptures under the name of Pharoah?—A. The first is he to whom Abraham retired: his name is supposed to be Certos. Mocris at that time reigned in Upper Egypt, where he hollowed out the lake which bears his name, to receive, by a large canal, the too abundant waters of the Nile. Siphon, the successor to Mocris, made great discoveries in the sciences, and the Greeks termed him the trismagistic Mercury. A hundred years afterwards the Arabs possessed themselves of part of Lower Egypt, and of Memphis. The dynasty of those shepherd kings upheld itself nearly three hundred years: it was under one of these that Joseph had the administration of the kingdom, and that Jacob went to establish himself there with his family. One Rampses, called Pharoah, was afterwards put into it, who loaded the Hebrews with extraordinary labours, forgetful of the former services which Joseph had rendered the country. He had two sons, Amenophis and Busiris; the former of whom united the three parts of Egypt under one head, and carried the seat of his empire to Tanis. He is thought to be the Pharoah under whom Egypt was scourged by the dreadful plagues, and who perished in the Red Sea with his army when in pursuit of the people of God.

Q. Who was his successor?—A. His son Sesostris, one of the greatest conquerors that has ever appeared upon the globe. Scarcely was he past childhood, when he unfolded his warlike disposition by an irruption into Arabia; at his return from which, he confided the administration of his states to thirty-six independent governors; then carried the war into Ethiopia, returned into Asia, and with a surprising rapidity penetrated to the Indies; subjected the Scythians, left a colony in the kingdom of Colehis, and returned to his states, where he raised five monuments. We observe that then followed Cheops, and Mycerinus his son; Asychis; Pruseniceis, who gave his daughter to Solomon; and Serac, who made an inroad into Judea under Rehoboam, and carried the treasures of the king, and of the temple, from Jerusalem.

Q. Is the continuation of the subsequent kings known?—A. Great obscurity prevails in the different dynasties. We however find Anysis, Sethon, and Tharaca, who penetrated to the pillar of Hercules, sustained a long war against the Assyrians, and entered into an alliance with Ezekiel king of Judah. Nechoh his son succeeded him, and undertook to join the Nile to the Red Sea, by a canal of one hundred and fifty miles long, in which attempt great numbers lost their lives. It was in his time that the Phenicians, having embarked on the Red Sea, doubled the point of Africa, since known as the Cape of Good Hope, and returned through the straits of Cadiz or Gibraltar. This Nechoh made a glorious attempt upon Syria and Judea, in which king Josiah perished, and his successor was brought into Egypt.

Q. What happened after Nechoh's death?—A. There were great troubles in Egypt. Nebuchadnezzar, king of Assyria, took advantage of it. He got Amasis acknowledged viceroy; and Apries, who had saved himself in Ethiopia, having endeavoured to return, was beaten and killed in his own palace.

Q. Had not Amasis the reputation of being a great king?—A. He governed wisely above forty years, and made himself beloved for his affability, and for the wise laws he instituted—that one in particular should be noticed, by which every one was compelled to declare before the magistrates what were his means of subsist-

ence. He added the isle of Cyprus to his empire. In his time Pythagoras travelled into Egypt, and thence derived, by the frequent conversations he had with the priests, his ideas of the transmigration of souls, and the foundations of his philosophy.

Q. Was there any revolution after the death of Amasis?—A. Psammenit his son was attacked by Cambyses, son of Cyrus, king of Persia, who dethroned him, and reduced Egypt to be only a province to Persia, which it continued for one hundred and twelve years. The Egyptians afterwards had eight kings, who were always at war with the Persians. Artaxes-Ochus again reduced Egypt, which, like all the states of the king of Persia, was conquered by Alexander, and became one of the divisions of his successors. The name of Ptolemy was common to seventeen monarchs, who reigned to the time when Augustus subjected Egypt to the Roman arms. The most celebrated was Ptolemy Philadelphus, who augmented the library founded by his father at Alexandria, and under whom that celebrated Greek version of the books of the Old Testament, by seventy Jews, were made.

Q. Can you mention some of the institutions of this fine people?—A. The Egyptians were, beyond all dispute, the best informed people of all antiquity; the most perfect in the science of government, which consists in rendering life comfortable, tranquil, and safe, by the exercise of virtues, and particularly of gratitude, that strongest tie of society. The one who might have saved the life of a man, and did not save it, was punished the same as the assassin. Employments were perpetuated from father to son, which brought to perfection the secrets of the arts in every family. Youth was accustomed to temperance, and nothing was forgotten to polish the mind, to ennoble the ideas, and to strengthen the body. In the state was a militia of four hundred thousand soldiers, renewing itself from father to son. Never did a nation so long preserve its customs and its laws; a new custom was a prodigy. The dead, even kings, were subject to judgment; there was a public accuser: the memory of the deceased was either praised or condemned. Respect for their ancestors made them preserve, with a religious care, those mummies which have

been handed down to us. The Egyptians, endowed with the genius of invention, were the first astronomers; and we cannot doubt their perfection in the mathematical, and particularly in the mechanical, sciences, when we see their immense pyramids formed of stones of such a weight.

Q. Is any thing certain known of the Ethiopians?—A. The Ethiopians were supposed to be an Egyptian colony, which, placed in a fine climate, multiplied so prodigiously as several times to make the Egyptians themselves tremble. Herodotus describes the Ethiopians as the best formed race of men existing, proud of their strength of body and nerve of arm, and always choosing as king the greatest and strongest amongst them. It is related of Cambyses, the son of Cyrus, that after having conquered Egypt, he sent them ambassadors with presents composed of perfumes, fine linen, and bracelets of gold: which they ridiculed as being of no utility in life, and the king in return sent Cambyses a bow which a Persian could scarcely carry. He bent it in presence of the deputies, and told them when the Persians can make use of this bow as easily as I have just done, let them come to attack us, and we shall see. Cambyses advanced into the country in vain; his army perished in the midst of the sands.

EMPIRE OF ASSYRIA.

Q. Which are the oldest empires coeval with the Egyptians?—A. There are none older than those of Assyria and Babylon. Whether Nimrod or Belus only consolidated at Babylon the empire founded by Assur, son of Shem; whether they were two distinct empires of Assyrians and Babylonians; or whether Belus was the same with Assur: it is difficult to penetrate the obscurity of those primitive times.

Q. What is said of Nimrod?—A. He is represented as a most powerful hunter, and the first of conquerors. He built Babylon near the famous tower of Babel, in the plain of Sermaar. His son Ninus, inheriting his great views, extended his empire, and built Nineveh, which takes precedence of Babylon for size. He married Semiramis, who survived him, continued his haughty

enterprises, and signalised her courage by a grand expedition into the Indies; gave Babylon an extent and strength which it still maintained in the time of Alexander; left throughout her empire marks of grandeur and magnificence, and governed with much dignity. Her son Ninias slumbered on the throne, and did nothing extraordinary.

Q. Who were the successors of Ninias?—A. Their names have scarcely come down to us. We are told, in the holy scripture, that Phul marched to the assistance of Menahem, who had invaded the kingdom of Israel: he is supposed to be the same who became a penitent from the preaching of the prophet Jonah. Sardanapolus his son built some cities, and augmented his empire; but he afterwards lived in luxury, shut up in his palace amongst his women, and could only avoid falling into the hands of his generals by burning himself in his palace.

Q. Did not that revolution destroy the kingdom of Assyria?—A. It was divided into three great kingdoms: Arbaces formed the empire of the Medes, Belisis that of the Babylonians, and Theglathphalasar that of the Assyrians, which was more celebrated than the others. It was the latter who succoured Ahaz, king of Judah, destroyed the kingdom of Syria, and imposed tributes on the king of Israel. His son was Salmanasar, whose yoke Hosea, king of Israel, wishing to shake off, Salmanasar took possession of Samaria, and brought the people captive to Babylon.

Q. Who succeeded Salmanasar?—A. His son Sennacherib, who declared war against Ezekiel king of Judah; but God came to the assistance of Jerusalem: an angel in one night killed one hundred and eighty-five thousand soldiers who besieged it. Sennacherib fled, overwhelmed with shame, into his states, where he exercised a thousand cruelties upon the Israelites; his children conspired against, and massacred him. Assaraddon, his third son, united the kingdom of Babylon to that of Nineveh, returned conqueror of Judea, and brought the king Manasseh prisoner to Babylon.

Q. What became of the Medes during that time?—A. We have seen that they were a dismemberment of the empire of Sar-

danapolis. Their king was Deioces, son of Phraortes, who, during a reign of fifty-three years, extended the boundaries of his empire, built Ecbatan, and established wise laws there.

Q. Who succeeded him?—A. His son Phraortes, a warlike prince, who vanquished and subjected the Persians: but the Assyrians, who always considered the Medes as rebels, attacked them under the conduct of Nabuchadnezzar the first, who defeated them in the plain of Ragan, took Ecbatan by storm, pillaged it, and put Phraortes to death. Puffed up with his successes, the proud king of Assyria undertook to conquer the whole earth. He passed the Euphrates, reduced Asia Minor to subjection, and ravaged Arabia; but his army failed against Bethulia, where Holofernes, his general, was killed by the celebrated Judith, and his troops put to the rout.

Q. What became of the Medes after the death of Phraortes?—A. Cyaxares, his son and successor, profited by the rout of the Assyrians to assemble an army, and would have taken Nineveh but for an incursion of the Scythians from the environs of the Euxine Sea, who inundated Medea, and went even into Egypt. Cyaxares was not slow in revenging the death of his father Phraortes. He joined with young Nabopolassar, and laid siege to Nineveh, which they pillaged and entirely ruined.

Q. Who was successor to Nabopolassar?—A. Nebuchadnezzar II., one of the greatest princes in the world, the instrument which God often made use of to chastise the nations. He conquered Phenicia, Syria, part of Egypt, Judea, and took Jerusalem three times in twelve years. He destroyed the temple of Solomon, carried off all the sacred vases, and led the Jews into their second captivity. This Nebuchadnezzar fortified and embellished Babylon, and built on solid and very lofty vaults those gardens which were the admiration of the ancients. He likewise raised quays to resist the influx of the Euphrates. This prince, revolving in his mind the great things he had accomplished, was inflated with pride; but God took away his reason, and he was driven from the society of men, and lived like a beast of the field. Seven years afterwards he received his reason, and foresaw, on his death-bed, the destruction of his empire.

Q. What became of the Assyrian empire after him?—A. His successors only made their appearance upon a tottering throne, and the Medes, taking advantage of the troubles, besieged Balthasar, who, thinking his capital impregnable, was inactive there in pleasures and festivity: there it was the hand of heaven traced on a wall the order for the destruction of that empire. The Medes, having in fact turned the Euphrates out of its bed, entered the city, and took possession of it.

Q. Under which king of the Medes was the Assyrian empire destroyed?—A. Under Astyages, son of Cyaxares, and father of another Cyaxares, and Mandane, whom he gave in marriage to Cambyses king of Persia. Having learnt that the king of Babylon was taking up arms against him, and that he had entered into an alliance with Cressus, king of Lydia, he demanded help from Cambyses, who sent him his son Cyrus with thirty thousand men, whose first expedition was fatal to the king of Armenia. Cyrus then marched against the Babylonians and repulsed them even into Babylon, returned and cut to pieces the troops of Cressus, king of Lydia, whom he made prisoner; then besieging Babylon, he got possession of it, as we have just seen, and rendered Astyages master of almost all the East.

Q. Did Astyages live long after the taking of Babylon?—A. About two years, when Cyrus, the legitimate heir mounted the throne of the Medes, which he united to that of the Persians by the death of his father, Cambyses. Daniel, who had been in favor with the preceding kings of Assyria, showed him that his reign had been predicted about two hundred years before; which made Cyrus consent to permit the Jews to return to their own country, and re-establish the temple of Jerusalem.

Q. Did Cyrus long live master of all Asia?—A. About seven years, which he employed in making wise laws, preserving tranquillity in his vast provinces, fortifying cities, founding colonies, and rendering his people happy. He is said to have established posts in his states.

Q. Who succeeded Cyrus?—A. His son Cambyses II. one of the weakest princes of antiquity. Not satisfied with his immense

states, he must subject Egypt, and carry the war into Ethiopia; but having failed in his undertaking, he gave proof of his extravagance which corrupted the hitherto excellent morals of Persia. He died little regretted by his subjects.

Q. Who succeeded him?—A. Darius, son of Hystaspes, who, called from private life to a throne, introduced better dispositions for government. He in part repaired the disorders of his predecessor; but abundance having occasioned too much looseness of manners, the luxury of the Persians became proverbial. He ineffectually tried military expeditions; the Greeks repelled him at Marathon, and the Scythians forced him to return into his capital, where he died, on being informed of the revolt of the Egyptians.

Q. What were the first actions of his son Xerxes?—A. He reduced the Egyptians to submission, leagued with the Carthaginians, and was inclined to follow up his father's projects against the Greek islands. He put himself at the head of a formidable army, into which he introduced all the Asiatic luxury and pomp, met with the greatest resistance from Thermopylæ, burnt the city of Athens, and afterwards lost the famous battles of Salmina, Plataea, and Mycale. Ashamed and confounded at seeing his armies annihilated, he retired into Persia, and gave himself up to effeminacy and luxury, until he was assassinated by Artabanes, the captain of his guards.

Q. Who succeeded Xerxes the first?—A. Artaxerxes, surnamed Longmain, who was already a partner in the throne some years before. He protected the Jews, and restored them their country; reduced the revolted Egyptians, received Themistocles, who was persecuted by his fellow-citizens into his city, kept up divisions in the republics of Greece, and died after a reign of forty-one years. There were many revolutions after his death. Xerxes the Second, his son and legitimate successor, reigned only forty-five days, when he was assassinated by his brother, Sogdian, who was himself hurled from the throne by another brother, Ochus.

Q. Did Ochus reign peaceably?—A. Yes; he kept the throne nineteen years. He was a party in the Peloponnesian war, and

assisted the Lacedemonians against the Athenians. Under his reign Egypt gave itself kings. Artaxerxes the Second, surnamed Memnon, succeeded him, contrary to the intention of his mother Parysatis, who preferred Cyrus, his younger brother. This Cyrus, who was called the Young, and had the government of Asia Minor, entered into alliance with the Greeks, of whom he took ten thousand into his pay; and after having traversed a thousand or twelve hundred miles, arrived near Babylon, when a battle took place in which the Greeks defeated the left wing of Artaxerxes, and Cyrus, after having wounded his brother, was himself killed.

Q. What became of the ten thousand Greeks?—A. They retreated before the victorious army of Artaxerxes, and returned into their country, after a march of from fifteen to eighteen hundred miles, which is called the retreat of the ten thousand. Their chief was Xenophon, as good a philosopher and historian, as he was a great warrior.

Q. Who succeeded Artaxerxes-Memnon?—A. Artaxerxes-Ochus the Third, a cruel tyrant, who exterminated almost his whole family, burthened his subjects, retook Egypt and filled it with his cruelties. He was poisoned by his son the eunuch Bagoas. Arses, his youngest son, only filled his place to be murdered two years after by the same Bagoas, who seated Codoman, governor of Armenia, upon the throne. The latter defeated the expectation which Bagoas had conceived of reigning under his name, and reduced him to poison himself.

Q. Who was Darius Codoman?—A. We are assured that he was the best-shaped, most courageous, and most amiable of men, and well adapted to making so great an empire happy. He ascended the throne the same year as Alexander king of Macedonia; but the time being come, according to the prophet's prediction, the Persian empire was to be overturned by the Macedonians. Alexander, desirous of avenging the old injuries sustained by the Greeks, carried the war into Asia. He at first subjected Asia Minor, defeated Darius in three pitched battles, took possession of Persia, and obliged Darius to fly into Bactriana, where

he was stabbed by Bessus, one of his own officers. Thus ended the Persian monarchy, two hundred years after its foundation by Cyrus the Great.

GREEKS AND MACEDONIANS.

Q. What is the origin of the history of Greece?—A. The Grecian history goes as high up as the foundation of the kingdom of Argos by Inachus, who was born in Asia Minor. It was in the reign of his son that Oxyges, king of Beotia lived, whose states were buried in a terrible inundation.

Q. In what time was Athens founded?—A. About sixteen hundred years before Christ. Cecrops brought a colony from Egypt, which he settled in Attica, where he built two towns, and founded the kingdom of Athens: he gave it the same laws and form of worship as his own country. A short time after happened another deluge in Thessaly, which was called by the name of Deucalion, who then reigned there. The name of his son Hellen became that of the people known to us as Greeks. It was at the same time that Cadmus arrived in Beotia, when he founded Thebes, and that Danaus came into Greece.

Q. Are not all these antient times fabulous?—A. After admitting that the gods and heroes of the fable were the oldest kings of the earth, their exploits and institutions owe their wonders and charms to the genius of the poets who immortalised them.

Q. What is known of Cadmus?—A. He was the son of Agenor, king of Sidon, whose daughter, a king of Crete carried off. Cadmus, who was sent in pursuit of the ravisher, not having been able to find his sister, stopped in Beotia, took possession of Thebes, and built a fortress there, to which he gave his own name. It was he who introduced written characters, which were not until then known in Greece.

Q. Which are the founders of the other Grecian states?—A. Perseus having inadvertently killed his grand-father, banished himself from his country, and built the city of Mycena, which afterwards became one of the most powerful of Greece. At the same period Pelops, son of Tantalus, came into Elida, and mar-

ried Hippodamia. His family became very numerous, and peopled all Peloponnesus, to which he gave his name.

Q. Was it not about this time that the Argonauts' expedition took place?—A. A few years afterwards, Jason, the young prince of Thessaly, assembled the bravest warriors of Greece, for the purpose of carrying off the treasures of Aetes, king of Colchos, in Asia Minor. They built a ship, which was named Argo, from the name of its builder; and this expedition was called the conquest of the golden fleece.

Q. What were the names of some of the most celebrated in this expedition?—A. The most illustrious doubtless was Hercules, the son of Amphitryon, of the race of Perseus: he performed in the sequel those famous exploits or labours which immortalised his name. His friend Theseus was the son of Egeus, king of Athens: he united the twelve little towns into one city, which had full authority. The other most celebrated Argonauts were Jason, Castor, Pollux, Calais, and Nestor.

Q. Were there no other expeditions in those early times?—A. First, the siege of Thebes, at which were united the seven most illustrious captains, amongst whom we must reckon Amphitryon, Eteocles, Polinicius, and Amphiaraus.

Q. What was the most famous undertaking of the antient Greeks?—A. The war of Troy, so called from the city founded in Asia Minor by Dardanus, to which Laomedon and Priam succeeded. Paris, son of Priam, having made a voyage to Lacedemon when Menelaus reigned, violated the rights of hospitality, by running away with his wife Helen, the most beautiful woman in the world. All the princes of Greece and their allies combined to avenge this injury. The names of the principal chiefs were Agamemnon, Menelaus, Achilles, Nestor, Idomeneus, Ulysses, Ajax, &c.

Q. How many years did that war last?—A. The Greeks were about ten years under the walls of Troy, which they reduced to ashes after Achilles had perished: on their return into their country, they experienced the greatest misfortunes. Agamemnon was killed by Egysthus; Idomeneus banished himself

from his own country; Ulysses long wandered upon the seas, and the face of all Greece was changed, and suffered many revolutions. The Heraclides or descendants of Hercules, settled themselves in several countries; they took possession of Peloponnesus, which they divided among them. Sthenelus combined under his dominion, the kingdoms of Argos, Mycena, and Scyone. Lacedemon had two kings. Ctesiphone had Messenia, and Aletes the kingdom of Corinth.

Q. Did the Heraclides long maintain themselves in Greece?—

A. Of the four kingdoms founded by the Heraclides those of Lacedemon and Corinth made a distinguished figure; the latter was less remarkable for its arms than for its cultivation of the fine arts, sciences, and politeness. Thebes having lost its kingdom, then set itself up as a republic. The Athenians followed its example on the death of their king Codrus, and put at their head a magistrate called Archontes, whose office was for life: but in the sequel it was limited to one year. In this epoch it was that Greece experienced the most revolutions. The Ionians and Eolians, driven from Peloponnesus, went into Asia Minor, where they founded many cities. The Darrians also made many conquests. The Lacedemonians became the most powerful, and were guilty of various oppressions.

Q. Was there then no check to their excesses?—A. Lycurgus, who had travelled into Ionia, Crete, and Egypt, brought from them excellent laws, which were the admiration of Greece; and so long as Lacedemonia observed them, it was the most flourishing of republics. He made known the works of Homer and Hesiod, who had lived a short time before. Iphitus, prince of Elida, soon afterwards celebrated and renewed at Olympus those games called Olympic, and which continued every four years, and served the Greeks as a memorial of dates and events.

Q. What was the origin of the kingdom of Macedonia?—A. About five years after the restoration of the Olympic games, Caranes, a descendant of the kings of Argos, came into Thrace at the head of some adventurers, took possession of Edessar, and laid the foundation of the kingdom of Macedonia, which became

so considerable, and was not destroyed till long after by the Romans.

Q. What was the origin of the Ilots at Lacedemonia?—

A. Twenty years of war between the Lacedemonians and Messinians, who had assassinated Telectres, king of Lacedemonia, not being terminated by the judgment of the Amphictyons, that supreme tribunal revered by all Greece, Lacedemonia renewed her efforts, under which the Messinians fell; and wishing to shake the yoke off again, they were completely defeated. The party which escaped settled itself in Sicily, and founded Messina. The others remained slaves, and were condemned to the vilest labour under the designation of Ilots.

Q. Who were the legislators of Athens?—A. Dracon Archontes was at first appointed to make laws, but by an unexampled severity he punished the least crimes with death. These laws, which seemed written in blood, subsisted only thirty years. Solon, a celebrated philosopher, one of the seven wise men of Greece, made much better, which polished the people, and prepared the fine ages that followed. There were not however wanting at Athens ambitious men who tried for liberty. Pisistratus usurped the authority, which he was twice stripped of, and twice did he establish it again, and kept it to his death. Hipparchus, his son succeeded him, reigned thirteen years, and was assassinated by Harmodius and Aristogiton. He was replaced by his brother Hippias, but he could not maintain it; driven out by the Athenians, he fled into Persia, and in him tyranny was abolished.

Q. Was it not at this time that lived the seven wise men of Greece?—A. Yes: they were Solon the Athenian, the most illustrious of all; Bias of Prienne; Chilo of Lacedemonia; Cleobulus of Linda; Thales the Milesian, a great philosopher; Pittacus of Mytilena; Penander, tyrant of Corinth, a very great politician. Esop, the great fabulist; Sappho, famous for his poetry; and the philosopher Anaximenes also lived in those times.

Q. Who was Croesus king of Lydia?—A. He was a very powerful king in Asia Minor, who had subjected the Ionians, Darians, and other Greek colonies of that country, and was uniformly

successful. He had amassed very great riches, and was regarded the happiest of mortals. But Solon having had occasion to see him, gave him to understand that happiness could only be judged of at death, which made his reception very cool. Cræsus having dared to brave the Medes, found himself shut up by Cyrus in his capital, and condemned to perish with his treasures in the flames: he then called to mind the words of Solon, and acknowledged them by an exclamation which attracted the curiosity of Cyrus. That magnanimous prince was affected by Solon's reflection, which might likewise regard himself, and he restored to Cræsus the government of part of his states.

Q. Have we not come to the polished times of Greece?—A. Yes: there were now many great men of all descriptions. In poetry, Simonides, Pindar, Anacreon, and Eschylus; in philosophy Xenophon, Epicharmis, Phocylides, Pythagoras, and Anaximenes. The Athenians already distinguished themselves by their genius and eloquence, politeness of manners, and taste in the arts. They were mild, humane, fond of games and spectacles, and yet warlike. As for the Lacedæmonians, they were bred up to war, haughty, austere, and rather savage. They despised riches. The Athenians on the contrary loved luxury and pleasure. It was precisely at this time, the most brilliant of Greece, that it had to support considerable wars against the kings of Persia.

Q. Had not Greece likewise to lament its internal divisions?—A. Yes: according to the greater or less authority that the first men in the state assumed, and the fear they inspired. Thus we see Aristides, the wisest of the Greeks, was banished Athens for ten years. Xerxes, the son of Darius, thought he could take advantage of these dissensions, and triumph over Greece, by an army of seventeen hundred thousand men, without including women and children, which he destined for the establishment of colonies in Greece. A bridge was thrown over the Hellespont, and the coast of Greece menaced by three thousand galleys.

Q. How did Greece resist so great a force?—A. Themistocles, an Athenian general, succeeded in allying all the republics of Greece; but he could form, with them all, an army of but forty

thousand men. Leonidas, king of Sparta, at the head of three thousand Spartans, took post in the pass of Thermopylæ, to defend the entrance of Attica. Twenty thousand Persians perished under the efforts of this brave phalanx, which at last fell. The Persians overran the different Grecian provinces, and reached Athens, which was abandoned. Xerxes took possession of the citadel, and set fire to the city. However, the Grecian fleet, commanded by Themistocles, entirely defeated that of the Persians near Salamina.

Q. What became of Xerxes after this check?—A. He still succeeded in laying waste some cities; but apprehending that the victorious Greeks would block up the passage of the Hellespont, he speedily recrossed into Asia, and left three hundred thousand men at Mardonius. They were cut to pieces near Platea, in Boeotia, by Pausanias king of the Lacedemonians, and Aristides, the Athenian general. On the same day, the remainder of the naval armament which escaped from Salamina was completely destroyed at Mycale. From this time the Persians were seen no more in those seas, and Greece was delivered from that powerful enemy.

Q. What advantage did the Greeks derive from so many victories?—A. They acquired more strength, and freed the Grecian colonies of Asia Minor from the dominion of Persia. The Athenians, under the conduct of Cymon, took possession of all the country which the Persians occupied from Ionia to Pamphilia. These exploits completed the glory of Cymon and of Athens, which became the most flourishing republic of Greece. The walls of Athens were rebuilt, the port of Pyreus fortified, and Pericles adorned it with monuments which were the admiration of foreigners. This city turned itself to commerce, and became one of the most considerable in the world; but its success, and the pre-eminence which it affected even over Lacedemonia, rendered it odious to the other republics.

Q. Had not Athens reason to be sorry for it?—A. The result was a most murderous war against the Lacedemonians and the other republics, which lasted twenty-seven years. The prin-

cial personages which made a figure in it were, on the side of Athens, Theramenes, Pericles, Trasibulus, and Alcibiades; and on the side of the Lacedemonians, Brasidas and Mandares. At last, Lysander, king of Lacedemonia, had the glory of putting an end to it. He besieged Athens, destroyed the port of Pyreus, and the fortifications adjoining the city, and established thirty magistrates under the name of Archontes. But Trasibulus succeeded in returning again into Attica, driving away the thirty tyrants, and restoring liberty to Athens.

Q. What other events are remarkable at this period?—A. One of the greatest celebrity was the war which Cyrus the Younger waged against his brother Artaxerxes II. king of Persia, in which he was killed and Xenophon performed that famous retreat, known by the name of the retreat of the Ten Thousand. In the same period we class the death of Socrates, whom the Athenians condemned to drink hemlock, for having spoken of the Gods differently from other people. The Lacedemonians, alarmed at seeing Athens rise out of its ashes, made peace with Artaxerxes, (the peace of Anabalcides) and gave up to him all the Grecian cities of Asia Minor. They sought to repay themselves by getting possession by stratagem of the city of Thebes, and put a garrison into Cadmea. This pride was soon lowered. The celebrated Epaminondas and Pelopidas, Thebans, put themselves at the head of the exiles, drove the Lacedemonians from their city, gained the battle of Leuctus over them, ravaged Laconia, and advanced to the gates of Sparta. The terrified Spartans even condescended to implore the assistance of the Athenians, who forgot their ancient enmities, and leagued with them against the Thebans. The latter, commanded by Epaminondas, were victorious at Mantinea, and began to give Thebes a superiority over Greece. But they soon lost Epaminondas, so amiable on account of his equity and moderation, and who had made a resolution never to betray virtue even in jest.

Q. What happened after this battle?—A. The Greeks, wearied by so many divisions and fruitless wars, subscribed to the peace of which Artaxerxes-Memnon was the mediator.

Q. Was the peace of long duration?—A. No: there broke out a new war called, the Holy War, which lasted nine years. The refusal of the Phocians to pay a fine to the temple of Delphos, to which they were condemned by the council of Amphyctions, was the cause of it. This war, wherein perished many great leaders, hastened the ruin of Greece, and opened a door to the ambition of Philip.

Q. Who was this Philip?—A. King of Macedonia and son of Amyntas; he was brought up in the house of Epaminondas to the hard military life which that great man led. Having ascended the throne, he meditated the conquest of Greece, and by his policy and treason succeeded in being the arbiter of power there. The Athenians, seeing the storm gathering over their head, entered into a league with the Thebans. But the battle of Chero-neus, which his son Alexander gained at eighteen years of age, was the destruction of the liberty of Greece, notwithstanding the eloquence of the famous Demosthenes.

Q. What did Philip turn his mind to after that battle?—A. He conceived the project of carrying the war into Asia, by getting himself nominated generalissimo of the troops of Greece against the king of Persia; he was even on the point of setting out upon the expedition when he was stabbed by one Pausanias, to whom he had not done justice.

Q. Who succeeded him?—A. His son Alexander, at the age of twenty-four. After having revenged his father's death, he was appointed generalissimo of the Greeks against the Persians. He then marched against the Thebans, ruined their city, and left only Pindar's house standing. Afterwards, after having left the government of Macedonia to Antipater, he set off for Asia with an army of forty thousand men. He entered Asia Minor, which he reduced entirely to submission; then Syria, where he subjected all the cities in his way, took Tyre, and became master of Egypt, in which he founded Alexandria, returned into Persia, and subdued it, after four pitched battles. He was marching against Ecbatane, when he learnt the assassination of Darius by Bessus, one of his own officers. He next conquered Medea, Parthia,

Hyrkania, Bactriana, Sogdiana, penetrated to the Indies, and would have gone much farther had not his fatigued troops refused to follow him. He returned to Babylon, and died there of a debauch at the age of thirty-three years, without having an heir to his vast empire.

Q. What became of the empire of Alexandria after his death?

—A. His generals, after having sacrificed all his family to their ambition, divided it amongst themselves. Antipater took Macedonia; Ptolemy, son of Lagos, Egypt; Lysimachus, Thrace and the Hellespont; and Seleucus, Syria; but jealousy, interest, and ambition, soon put arms in their hands, which were imbrued in bloody wars.

Q. What was the consequence of Alexander's death to Greece?

—A. Its history no longer excites any great interest; the republic of Achæans, by the valour of Aratus and Philopæmon, alone retarded the fall of liberty; but it was destroyed by the Romans, with Corinth, nearly two hundred years after. There, for a long time, appeared no more great men in Greece.

Q. Did not other kingdoms rise in Asia Minor?—A. In the midst of the disorders caused by the ambition of Alexander's generals, many natives of Asia Minor freed themselves, and formed the different monarchies of Pont, Bithynia, and Pergamus. Armenia also threw off the yoke of the Macedonians, and became a great kingdom; but the two most powerful monarchies were those of Syria and Egypt. All the East acknowledged the empire of Greece, and took the language, while Greece itself was oppressed, and became the prey of the first comer, as a vacant succession.

HISTORY OF THE ROMANS.

Q. What was the origin of the Roman republic?—A. Its foundation is attributed to Romulus and Remus, sons of Numitor and the vestal Rhea-Sylvia. Vagabonds, wretches overwhelmed in vice and debts, uniting in some huts scattered upon the banks of the Tiber, seven hundred and fifty years before Christ, founded the beginning of the masters of the world. A dispute which arose

Between the brothers was the cause of Remus's death. Romulus remained king alone, divided the city into three tribes of a thousand citizens, and each tribe into ten decuries. He established a senate of the most independent and oldest people, and formed a body of cavalry, which afterwards became the order of knights. These first Romans having too few women, published that they should hold games to attract the Sabines their neighbours, whose daughters they forced away. After a very long war, the two nations were united, and Tatius their king reigned the rest of his life with Romulus, who himself appears to have been sacrificed by the senate: his death was considered as a deification.

Q. Who was the successor of Romulus?—A. Numa Pompilius, of the city of Cures. He turned his views towards religion, and established very salutary laws. He instituted the college of Vestals, softened the stern disposition of the people, kept up peace with his neighbours, built the temple of Janus, and died after reigning tranquilly and happily for forty years. After him the people chose Tullius Hostilius, whose warlike character disclosed in the Romans that military discipline which afterwards raised itself to so high a pitch. Weary with the blood shed between the Romans and Albanians, it was agreed to decide it by a singular combat of three warriors of either nation. The three Curiaei having fallen under the blows of the Horatii, Albanii, was incorporated into the city of Rome.

Q. Who was the fourth king?—A. Ancus Martius, the grandson of Numa, who continued to make citizens from his enemies; built the wall of Ostia at the mouth of the Tiber, shut up Rome with strong walls, and after a reign of twenty-five years left two sons to the government, under the tutelage of Tarquin, who, abusing the credit he had with the people took possession of the throne. He extended the dominion of the Romans, subjugated Tuscany, and adorned the city with monuments of public utility, some of which still remain. He augmented the number of senators and knights, and was assassinated by the son of Ancus Martius, after having reigned thirty-eight years.

Q. What was the consequence of Tarquin's death?—A. Ser-

vius Tullius, who had married his daughter, succeeded him, to the prejudice of Tarquin's two sons. He made war upon Etruria, added some tribes to the former, rendered the enumeration of the citizens more regular, and distinguished himself by his military successes. His daughter Tullia, impatient to ascend the throne, prevailed upon her husband Tarquin to seize upon it. Tullius was dethroned after a reign of forty-three years, and Tullia had the atrocity to pass her car over her father's body.

Q. How did Tarquin the Proud conduct himself to the people ? —A. He gave himself up to all sorts of violence, and governed Rome as a tyrant rather than a king. He completed building the capitol, an immense work, and worthy the future greatness of the Romans. The outrage done to Lucretia by Sextus, his son, accomplished the irritation of every mind against him : it was the signal of liberty. The harangues of Brutus animated the Romans : the kings were banished, and the consular empire established.

Q. What happened to Rome from this revolution ?—A. From amongst the patricians were chosen two counsellors or consuls, to be the chiefs of the senate and of the people, for only one year. Brutus and Collatinus who had brought about the change were the first raised to the sovereign magistracy. The exiled Tarquins found defenders both in and out of Rome. Several young men of distinguished families combined to re-establish them upon the throne : the conspiracy was discovered, and Brutus sacrificed the rights of nature to the public weal, by himself ordering the death of his two sons, who were of the number of the conspirators. The neighbouring kings considered the banishment of the Tarquins as an injury done to all thrones; and Porsenna, king of Etruria, marched against Rome ; but Horatius Cocles, Scevola, and the younger Clelia, performing innumerable prodigies of valour, Porsenna despaired of conquering Rome, and abandoned the Tarquins.

Q. Did Rome then remain tranquil ?—A. After it had triumphed over its external enemies, it had nearly fallen a sacrifice to those within it. Jealousies arose between the patricians and the people, who impatiently put up with the consular power, although it had been moderated by the law of Publius Valerius. It wanted to wipe

off the debts it had contracted towards the rich, and refused to take up arms against the Latins in a war. In the midst of these troubles, a magistrate was appointed under the name of dictator, whose power was absolute. His authority lasted only six months : but the people, not having been able to obtain the abolition of debts, went out of the city, and retired to a neighbouring mountain, called the Holy Hill. Civil war was on the point of breaking out, but for the peaceful remonstrances of Mercurius Agrippa, who made use of the ingenious fable of the Belly and the Members. The people came back again to Rome, which established tribunes, magistrates drawn from its own bosom, who were interposed between the consuls. The opposition of any one of them was sufficient to prevent a law being passed, by the sole word veto, I forbid it. The debts of insolvent debtors alone were done away.

Q. Did Rome remain tranquil after the reconciliation of the senate and the people ?—A. Rome beat all its external enemies, aggrandized itself within, and seemed to have nothing to fear but itself. Caius Martius, surnamed Coriolanus, on account of the city of Coriolus which he had taken by assault, a zealous patrician, having loudly protested against some enterprises of the tribunes, was condemned to perpetual exile. Leaving Rome, and meditating the ruin of his country, he took refuge with the Volscians, whom he conducted to the very walls of Rome. However, being appeased by his mother Veturia, accompanied by other Roman ladies, Coriolanus took back the Volscians to their own country, where he was assassinated ; thus expiating the crime of his revolt by his death. Jealousies, subsequently increased with conquest, and the state, apprehending intestine divisions, agreed to make such laws as should secure the public quiet, and the rights of every order of citizens. To take advantage of the wisdom of the Grecian legislators, ambassadors were sent to Athens, with instructions to collect the best and most suitable laws for the republic.

Q. Did the ambassadors succeed in their mission ?—A. They brought back the laws of Solon, as the best adapted to their manners. The care of digesting them was entrusted to ten magistrates, named decemvirs, who laid before the people the laws of the

twelve tables, the basis of all the rights of Rome. The people, satisfied with the equitable mode in which they had composed them, let them assume an absolute authority, which they used tyrannically. Appius Claudius, in particular, gave into such excesses, that the father of Virginia saw no other alternative of preserving his daughter's honour, than by himself stabbing her in the market-place. The blood of this second Lucretia awakened the Roman people from their lethargy: the decemvirs were overthrown, and military tribunes were erected in their stead, which governed Rome for nearly twenty-four years.

Q. Did not Rome extend its empire in spite of all these revolutions?—A. Having a force of one hundred and thirty thousand citizens, Rome subjected the Eques and Faliscii. The city of Veia, which almost rivalled Rome in glory, was taken, after a ten years siege, by Furius Camillus, one of the most extraordinary personages of antient Rome, in whom was united every virtue, moral, civil, and military. At this time new enemies, more formidable than all those that had ever before occupied the attention of Rome, fell upon Italy. The Gauls, led on by Brennus, vanquished the Romans at Allia. Rome itself was taken and burnt, and Manlius retired into the capitol at the head of a body of young men, who defended themselves in it courageously; while these things were going on, Camillus, who had been unjustly exiled, assembled some troops, and reached the ruins of Rome at the moment when the besieged were in treaty with the Gauls. He invested the latter, defeated them, and retook Rome. The city was rebuilt in the space of a year, and Camillus, with justice, acquired the appellation of its second founder.

Q. What were the nations with which Rome was at war?—A. It had scarcely risen from its ashes, when it had to combat the different nations of Italy. The war against the Tarentines was the most furious, as Pyrrhus, king of Epirus, came to their support: however, he was weakened by his very victories, and the great Fabricius at length made him sensible of the power of the Roman arms. The king and the consul seemed to dispute the palm of generosity between them: Pyrrhus returned his prisoners without

ransom, and Fabricius sent him his physician who offered to poison him. Pyrrhus was again beaten by the consul Curius, and recrossed into Epirus, and Tarentum was given up to the Romans, who were very soon masters of all the antient nations of Italy.

Q. When did the first Punic war commence, and what was the cause of it?—A. Ten years after Pyrrhus had abandoned Italy, Messina, agitated by the revolt of the Mamertines, implored the succour of the Carthaginians, while the Mamertines had recourse to the Romans. A pretext alone was desired by a people jealous of the rising power of Carthage, and which tolerated with impatience seeing it mistress of the sea, and of commerce, and sovereign of Corsica, Sardinia, and part of Spain. Rome, therefore, in sixty days equipped a fleet of one hundred and sixty sail. The consul Duillius had the honour of the first success. Attilius Regulus afterwards maintained that glory, and landed in Africa, where he forced nearly two hundred towns, several times defeated Amilcar and Asdrubal, and was at length himself beaten, made prisoner, and sent back on his parole to regulate the exchange of prisoners. Looking at nothing but the glory of his country, he prevailed upon the Romans to continue the war, and faithful to his honour, returned to Carthage, where he knew death awaited him. He perished there under the most cruel torments, but the republic revenged him by many great victories, and the Carthaginians were forced into a peace on disastrous terms, by which they lost Sicily. The Romans then turned their arms against the Illyrians and Circassian Gauls, whom they vanquished.

Q. Was the peace with the Carthaginians of long duration?—A. No, the city of Saguntum, in Spain, was allied to the Romans. Hannibal, the Carthaginian general, took possession of it. The Romans sent ambassadors to Carthage to demand an explanation of that measure: and received an answer breathing only defiance. Hannibal was not long in setting out from Carthage, crossed the Eber, surmounted the Pyrenees, and passed the Rhone. He increased his army from the different Gaulic nations, crossed the Alps, and came like thunder upon Italy, joined by the Cisalpines. Four pitched battles that he gained, one after another, excited a

belief that Rome was no more. Sicily and all Italy abandoned the Romans, and the last resource of the republic seemed to perish in Spain with the two Scipios. In such a cruel conjuncture Rome owed its safety to the faults which Hannibal himself committed, and the valour of three great men, Fabius Maximus, Marcellus, and the younger Scipio, who was afterwards surnamed Africanus. Hannibal, after staying sixteen years in Italy, was at length obliged to leave it for the defence of his own country. Scipio gained the famous battle of Zama over him, which concluded that long war. The Romans had Spain, the islands of Corsica, Sardinia, and Sicily, and all the others between Africa and Italy. About this time, Antiochus the Great, king of Syria, at Hannibal's solicitation, had taken up arms against the Romans. Cornelius Scipio crossed into Asia, and shut him up in mount Taurus. Some years after, Perseus, king of Macedonia, flew to arms, was beaten, taken prisoner, and carried before the triumphal car of Paulus Emilius, into Rome, where he died in irons. From that moment the kingdom of Macedonia became a province to Rome.

Q. Was there not a third Punic war?—A. Carthage rushed headlong into destruction: it was already proscribed in full senate, when its ambition impelled it to declare war on Masinissa, king of Numidia, an ally of the Romans. Scipio Emilius, grandson of the great Scipio, was charged by Rome to avenge the insult done to its friends, and Carthage was destroyed entirely. In Greece Mummius also destroyed Thebes and Corinth, and Greece was conquered.

Q. Did there not arise some domestic commotions at this time?—A. The tribunes, whose only aim was to elevate the popular state, to the prejudice of the senate, was continually proposing new laws. Tiberius Gracchus, and Caius, his brother, tribunes of the people, with a view of making themselves popular, demanded a division of the lands, and the distribution of all the gold of Attalus, king of Pergamus, who had made the Roman people his heir. The troubles only ended with the death of the two tribunes.

Q. Was Rome left in peace after all these discussions?—A. Solicited by the Marseillaise to give them succour against their neigh-

hours, it took the opportunity to subdue part of Gaul. Jugurtha, the king of Numidia, who had already experienced the Roman clemency, having revolted against them, Marius, who had succeeded from his connection with the people, to the consulate, went to the conquest of Numidia, and brought Jugurtha with him a prisoner to Rome. Marius afterwards defeated the Cimbi, and Teutones, nations of Germany, who had made considerable irruptions upon the Gauls. New allotments of lands at Rome, were proposed, and dissensions were the consequence; they were appeased by the blood of Saturnius, a popular tribune. Then it was that a new enemy arose, in Asia, against the Romans: the famous Mithridates, often beaten, never discouraged, and always rising again. He was one of the best officers of his time, but the most faithless and cruel of men.

Q. What was the origin of the civil war between Marius and Sylla?—A. The tribune Sulpicius, wanted to take away the honour of commanding the army sent against Mithridates from Sylla, to give it to Marius. Sylla came to Rome, killed the tribune, and drove out Marius, who was compelled at seventy years of age to take refuge in Africa. He besides annulled all that Marius had done, and condemned him and his children to exile. A most bloody war was soon began between Spain and Italy. Of the two consuls, Cinna and Octavius, the first was for Sylla, the latter for Marius; they came to blows: Cinna, the conqueror, entered Rome, and recalled Marius, who being nominated consul, massacred a great number of the senators, and from thence began the proscriptions. But Marius soon after dying of intemperate debauchery, his party was destroyed. Sylla then had himself elected dictator and governor of Rome, and thought only of sacrificing all his enemies to his vengeance by horrid proscriptions, and at last however, abdicated the dictatorship, and died in quiet.

Q. When did the conspiracy of Catiline take place?—A. Not long after the death of Mithridates. Catiline, a patrician, overwhelmed by debts and debauchery, formed the project of invading the sovereign authority, by murdering the two consuls, and with them the greater part of the senators. But Cicero, the then con-

sul, by his vigilance frustrated that horrible conspiracy. Catiline, obliged to leave Rome, assembled some troops, which he headed, and, happily for his country, soon lost his life. There were then in the republic three men of inordinate ambition, Pompey, Cæsar, and Crassus.

Q. What were their views?—A. They united, and formed the first triumvirate. Cæsar obtained the consulate and government of the Gauls: he was the greatest general of the age. Pompey's reputation was little inferior. Crassus owed his consequence to his riches and good fortune. This triumvirate lasted ten years, and was only dissolved by the death of Crassus, who fell in the war with the Parthians. Cæsar and Pompey could not agree, and their quarrel was concluded on the plains of Pharsalia. The victorious Cæsar at once shewed himself to the whole universe, in Asia, Egypt, Mauritania, and Spain. Pompey, who had hitherto appeared great, his courage failing him, saved himself in Africa, where he was cowardly assassinated as he was landing in Egypt. His head, when presented to his rival, made him shed tears. Cæsar soon returned to Rome, and was elected perpetual dictator, with the title of imperator. He only retained this post five months: libels disseminated against him, and some haughty airs which he affected, having awakened the antient love of liberty, caused his assassination in full senate, by the senators themselves, headed by Brutus and Cassius.

Q. What was the state of Rome after Cæsar's death?—A. It neither found peace nor liberty. Mark Anthony excited a sedition, and made a considerable party. Anthony was soon opposed, on behalf of the senate, by Octavius, the younger, grand nephew to Cæsar. Those two chiefs, in the sequel, uniting, associated with them, Lepidus, a man of no character, and formed the second triumvirate. Then were the antient proscriptions of Sylla renewed. Rome was deluged with blood; Cicero fell one of its earliest victims. Brutus and Cassius, to whom the senate had given the command of an army, were defeated in Thessaly, and liberty perished with them. Anthony and Octavius, who had reduced Lepidus to a private station, turned against each other. Anthony,

overcome at Actium, fled, coward-like, into Egypt, whither he was attracted by the charms of Cleopatra. Every thing gave way to the good fortune of Octavius. Alexandria opened its gates to him. Cleopatra and Anthony killed themselves, and Egypt became a Roman province. Octavius, on his return to Rome, after three different triumphs, was saluted by the senate with the title of Emperor Augustus. The temple of Janus was shut up, the whole world lived in peace under his power. Rome returned to a monarchical state, and JESUS CHRIST CAME INTO THE WORLD.

Q. How many years did Augustus reign?—A. He kept the empire forty-one years, esteemed and honoured by all nations: it was said of him, that he could never die. The protection he accorded to literature carried knowledge and taste to their achme of perfection. In his time appeared Virgil, Horace, Phædrus, Ovid, Catullus, Tibullus, Propertius, and Titus Livius, whose names and works will never be forgotten.

Q. Was Augustus replaced?—A. Tiberius, whom he had adopted, succeeded him without opposition, and the empire was acknowledged hereditary in the house of the Cæsars. Private persons suffered from his cruel policy, but the state was perfectly tranquil. There were only a few risings in Germany, which Germanicus, Tiberius's nephew, appeased. But the love of the people for that young prince excited the jealousy of his uncle, by whom he was poisoned. Having lost his mother, he shortly gave way, from the perfidious councils of Sejanus, to his sanguinary character, and destroyed his own son Drusus, and the children of the same Germanicus-Agrippa. He at last became a model for the monsters who reigned after him.

Q. Who was his successor?—A. Caligula, his grand nephew, and adopted son, a child of Germanicus and Agrippina. His commencement was happy, but he soon became cruel, debauched, ferocious, and foolish, which produced a conspiracy against him.

Claudius, the son of Drusus and his uncle, took his place. He was a weak man on the throne, but the Romans breathed a little under his reign. His misfortunes were all owing to his wives: Messalina, who was his first, dishonoured him, and he put her to

death; the second poisoned him, after a reign of thirteen years, having made him adopt her son Nero, whom she put on the throne.

Q. How did he conduct himself?—A. He was but sixteen years of age when he took the reins of empire, immediately on his leaving Burrhus and Seneca, who brought him up. For five years he was the delight of Rome: but subjugated by his mistress, Poppea, he became a disgrace to nature, and scourge of humanity. He destroyed Germanicus, to whom he had been preferred, Burrhus, and Seneca; begun the first persecution against the Christians, and set fire to Rome. The indignant senate condemned him to die, but he stabbed himself after he had reigned thirteen years.

Q. What became of the empire at his death?—A. Galba, governor of Spain, was proclaimed emperor. There were then four armies, each of which set up an emperor; the dispute was decided near Rome by dreadful combats. Galba, Otho, and Vitellius, successively fell there, and the wearied empire sought repose under Vespasian. The Jewish nation was, in his time, exterminated, and Jerusalem burnt and sacked by Titus, his son. He died sixty-nine years old, after having held the empire nine years. Titus succeeded him, and gave the world a very transient joy. His days, which he considered lost, when not marked by some good action, were too soon brought to a close: he was emperor only two years and a half. The first eruption of mount Vesuvius took place in his reign. Pliny, the naturalist, perished in it, and Herculaneum and Pompeia were overwhelmed.

Q. Who succeeded Titus?—A. His brother Domitian, whose character was entirely the reverse. In him revived all the ferocity of Nero; he gave way to every sort of debauchery and cruelty, and persecuted the Christians. He reigned fifteen years. They began to draw breath a little under Nerva; his great age, and sixteen months that he reigned, were not sufficient for the re-establishment of affairs; but to secure peace, he himself chose his successor, by adopting Trajan, who then commanded the armies against the Dacians. Returned conqueror, Trajan extended his conquests in the East, gave a king to the Parthians, and persecuted the Christians. After a reign of nineteen years, he left the empire

to his relative Adrian, whose reign was a mixture of good and evil. He went over the empire with the view of establishing proper discipline; comforted the provinces; made the arts flourish, and rebuilt Jerusalem, to which he gave his name. He unhappily disgraced himself by his licentious life, and persecution of the Christians. He seemed to repair his faults by adopting Antoninus.

Q. Who was Antoninus?—A. A very good prince who obtained the name of the pious, on account of his mildness and the love he had for his adopted father. To him is attributed the superb mausoleum, called the Mole of Adrian, now the castle of St. Angelo. He can only be reproached with his weakness in persecuting the Christians. He adopted Marcus Aurelius, his son-in-law, who restored the golden age of Augustus. Marcus Aurelius associated himself with Lucius Verus; and Rome, for the first time, saw two emperors reigning together, with but one mind, and the same good inclinations, which, however, they did not extend to the Christians. The death of Antoninus put an end to the flourishing days of the Roman empire, which for an age was a prey to strange revolution. Commodus, a son of Antoninus, and unworthy such a father, brought upon himself the hatred of the senate and the people, so that he was obliged to make away with himself.

Q. By whom was he succeeded?—A. By Pertinax, a good prince, but a severe observer of military discipline. He was sacrificed by the very soldiers who a short time previous had raised him, whether he would or not, to supreme rank. The empire then became a prey to the most ambitious, and was, as it were, put up to the highest bidder. We see a Didius Julianus, and Septimus Severus, the latter a great soldier who triumphed in all parts of the world, and went to die in Great-Britain; a Caracalla, a Geta, a Macrin, and a Heliogabalus, the scourges of mankind. Alexander Severus seemed by his virtues to sooth the empire during some years for its bad princes, but he was cowardly stabbed at Mentz. It is pretended that he was secretly a professor of Chris-

tianity; be that as it may, the Christians were persecuted in his time.

Q. Who was put in his place?—A. The tyrant Maximinian, who having instigated the murder, made himself master of the empire: but the Roman senate opposed four emperors to him, all of whom perished in less than two years. They were Maximus, Balbin and the two Gordians. The younger Gordian, although extremely young, displayed much wisdom, and defended the empire against the Persians. An Arab whom he had made prefect, sacrificed him and set up in his room. Phillip supported himself some time, but Decius defeated him in a battle, where he perished near Verona. The reign of Decius is remarkable for the cruel persecution which inundated the empire with Christian blood, during the two years that he filled the throne. Gallus and Vellusius very soon finished their courses; and Elulian did but make his appearance. Valerian who commanded the Gaulic legions upon the Rhine was proclaimed emperor by his own soldiers, and took his son Gallian as an associate. Valerian failed against the Persians who had overspread the empire, and perished. His son, Gallian, completed the loss of every thing by his effeminacy, and was killed by his soldiers. The empire then fell a prey to the Getans, Germans, and Scythians. Thirty tyrants shared the empire. Odenat, king of Palmyra, was the most illustrious; he saved the provinces of the east from the hands of barbarians. His wife, Zenobia, acquired celebrity for her chastity, beauty, knowledge, and valour.

Q. What became of the empire in the midst of all these troubles?—A. Claudius the Second, and Aurelian after him, settled its affairs; the latter triumphed over Zenobia. But this prince, too soon carried off, was universally regretted. There was then a contest of mutual deference between the army and the senate upon the choice of an emperor, and the imperial seat was eight months unoccupied.

Q. Who was at length chosen?—A. An old man of seventy-eight, whose name was Tacitus, a relative of the celebrated historian. He fell six months afterwards a victim to the fatigues of

war. His brother Florian was a pretender to the empire ; but Probus more fortunate, wrested it from him with his life. This Probus acknowledged by the senate and the provinces, made all nations tremble in Gaul, Germany and the East : he hoped, he said, that the empire would want no more soldiers. This expression, and the severity of his discipline towards the troops, hastened his fate. The army was not long in repenting of its violence and regretted him sincerely. Caius, his successor, not less zealous of discipline, revenged his predecessor, beat the barbarians on all sides, and was only checked by the storm he had raised, to the regret of his people and their children.

Q. Who succeeded him ?—A. Numerian and Carinus. The former was soon killed by Aper, his father-in-law. Carinus gave himself up to effeminacy and debauchery, and perished by the hands of one of his soldiers. Dioclesian, who had been raised to the empire in the time of Carinus, remained sole master ; but seeing that the state was extremely unsettled, he shared it with his old friend Valerius-Maximianus, who surnamed himself Herculus. He left him the west, and took the east for himself. Each emperor had a Cæsar, so that the empire was under four masters. They had great difficulty in supporting the burthen of the wars with which the country was assailed. Galerius, puffed up with his success over the Persians, would no longer be satisfied with the title of Cæsar ; he first intimidated Maximian, and forced his father-in-law, Dioclesian, to quit the empire. A long illness had broken the spirits of the latter, who retired into Dalmatia to Salona, where he amused himself with agriculture. Maximian soon followed his example.

Q. What did Constance-Chlorus and Galerius, after they retired ?—A. They made a new partition of the empire, and associated with them two new Cæsars, Maximinius and Severus. The troops indignant against Galerius, proclaimed Maxena, the son of Maximian, who repaired to Rome. Galerius in his turn, sent his officer against Maxena, and made him quake. The ambition of Maximian, shewed itself in his retirement ; he in vain endeavoured to withdraw Dioclesian from his peaceful enjoy-

ments, put himself at the head of some troops, and besieged Galerius in Ravenna, and Severus was betrayed by his own soldiers. Maximian, to obtain support against Galerius, entered into an alliance with Constantine, and gave him his daughter Fausta. During this time, Maxena took possession of Rome. Constantine marched against, defeated and killed him, and had the whole empire at his own disposal. This prince, besides political talents, possessed all the military virtues; he was mild and humane. At this period, the Roman history, properly speaking concludes.

MODERN HISTORY.

Q. What are the principal epochs of modern history?—A. They may be reduced to nine, without comprehending the end of the Roman empire, with which we have wound up ancient history. First. Clovis, the commencement of modern kingdoms. Second. Mahomet, the origin of the eastern empire. Third. Charlemagne. Fourth, Otho the Great, the empire going into the hands of the Germans. Fifth. The Crusades. Sixth. Rhodolphus the First, of Hapsburg, emperor of Germany. Seventh. Christopher Columbus, or the discovery of the New World. Eighth. The peace of Westphalia. Ninth. The reign of Louis the Sixteenth, and the revolution of France.

FIRST EPOCH.

CLOVIS.

COMMENCEMENT OF MODERN KINGDOMS.

From the year 450 to 622 of Jesus Christ.

Q. What are the principal facts of the first epoch?—A. The Roman empire was annihilated in the west, a people till then unknown, who came from the northernmost part, divided the spoils. Africa was a prey to the Vandals; Spain to the Visigoths; Great-Britain to the Picts: Germany and Gaul were conquered by the Franks. Rome itself was taken and pillaged by Alaric, and Stilicon perished in defending it. However, the Burgundians, a nation of Germany, settled themselves on the banks of the Rhine, from whence they by degrees encroached upon the Gauls. The Franks were not forgetful of themselves in the general conflict; and they raised their chief Pharamond to the kingly power. In him commenced the French monarchy, the most considerable one of modern times. Rome once more fell into the fetters of the Heruleans and Augustulus, the last of the Cæsars, made way for Odoacre, the first king of Italy. In Asia, Persia notwithstanding its internal

discords, yet displayed a formidable monarchy, extending from the Euphrates to the Indus. The eastern empire at peace under Leo the Thracian and Zeno, was for a moment troubled by the revolt of Basalic, happy had it not interfered with regulating questions of faith. Anastasius, disgusted by the Persians, kept them off by presents. He corrected abuses, and framed wise laws; but he upheld the heretics, and thereby rendered himself odious to the people. Justin the First, raised from the dust by his own merit, to the first dignities of the empire, repaired the faults of his predecessors: but it was under his son, Justinian, that the western empire put on a new aspect. The Persians were repulsed; the Scythians restrained; Africa wrested from the Vandals; the laws reformed, and jurisprudence fixed by a code, which, even at the present day, regulate almost all Europe. In his reign appeared those famous generals, Belisarius and Narses. Justin the Second saw Italy a second time taken away, because Narses was no more; and he became almost distracted with reflecting upon the advantages which Chosroes, king of Persia, gained over him. Tiberius the Second, repulsed the enemies and comforted the people: but his refusal to ransom the prisoners, which the conquerors sacrificed to their fury, was the cause of his murder by Phocas, who took possession of the throne. He, dishonoured by his debaucheries, lost the throne which he had usurped by crime. Heraclius, who revenged it, found Asia ravaged by the Persians; his bravery animated the soldiers, and by multiplied victories, he wiped away the shame of preceding defeats. He recovered the true cross, transported it to Constantinople, and thence to Jerusalem, and seemed to have his revenge, by the death of Chosroes, the assassin of his son.

Q. What was then going on in Italy?—A. That ruler of nations was torn in pieces by its children. The Heruleans no sooner came forward than they were overset by the Ostrogoths, whose chief, Theodoric, founded the kingdom, from that time the greatest. This prince made Italy happy; the end of his reign was, however, blemished by some injustice. His daughter Amalasontes, heir to his power and good qualities, unhappily perished

by the hands of a wretch she had crowned. All immediately became confusion. Belisarius, at the head of Justinian's armies, reclaimed the rights of his prince, and the king Vitiges added lustre to his triumph. Italy took breath during the disgrace of Belisarius; but Totila was at last vanquished by Narses, who, discontented with the empress, called in the Lombards or Longobards from the heart of Germany, the chief of whom, Alboin, took Milan, and besieged its states.

Q. Who then reigned in France?—A. Faramond, who died in the midst of his greatest projects, succeeding Clodian, Merovee, and Childeric. Clovis having driven the barbarians out of Gaul, was proclaimed king; and he it is who may be considered the actual founder of the French monarchy. The Channel, the Ocean, the Mediterranean, and the Rhine, were the boundaries of his empire. He gave to the companions of his victories the lordship of the lands, the property of which he left to the original possessors, thereby conciliating the victors and the vanquished. His four sons divided the succession, and nothing but murders and jealousies were the consequence; Clotaire, the most cruel of them, took possession of the entire monarchy. The state was a second time divided amongst his four sons: Gontran, king of Orleans; Caribert, of Paris; Childeric, of Soissons; and Sigebert of Austrasia. The names of the two latter bring to mind those of their wives, Fredegonda and Brunechilda-Bremehaud, the disgrace of that country. Fredegonda finished her days in tranquillity, but Brumehaud expiated her crimes by a dreadful punishment. Clotarius the Second, in sacrificing her, secured the full extent of the monarchy. Under him commenced the mayors of the palace, a kind of viceroys, who afterwards made their way to the throne.

Q. Who at that time governed Spain?—A. Atalaphus, a descendant of the Visigoths kings, fortified himself in this vast province of the empire; and favoured by the troubles, enlarged its boundaries. Ere long Alaric, who ascended this brilliant throne, saw with a jealous eye the progress of Clovis. They measured their strength together on the plains of Poitiers, and Alaric fell under the blows of the French monarch. The conqueror pene-

trated into Spain, and but for Theodoric would have added this state to his crown. Several princes, not worthy of being even named, succeeded one to another; Leovigild alone appears great by his virtuous and good government, had he not unhappily tarnished his glory by the murder of his son Hermenegild.

Q. What was the situation of England?—A. It was laid waste by the Anglo-Saxons, who wanted to subdue it. In turn a prey to the Picts and Scots, it vainly implored the assistance of Rome; left to itself, it was resigned to the Anglo-Saxons, who drove out the Picts and Scots, and restored peace. Thus were formed in that island the seven kingdoms known by the name of the heptarchy.

Q. Was there no other state founded in those times?—A. While strength was destroying so many thrones, wisdom planted in a corner of Italy the foundation of a powerful republic: some wretched kings, who escaped the overthrow of their country, sought an asylum in a collection of little islands situate in the heart of the Adriatic gulph. Thus in the bosom of liberty and mediocrity, Venice laid down the principles of a wise government, which has stood nearly twelve hundred years without being any more protected against revolutions than other empires.

SECOND EPOCH.

MAHOMET.

THE ORIGIN OF THE EMPIRES OF THE EAST.

A. D. 622 to 800.

Q. What are the principal events of the second period?—A. The foundation of the empire of the caliphs by Mahomet. That able impostor, born at Mecca, of obscure parents, set himself up for a prophet among the Saracens. It was in 622 that, driven out of his own city, he assembled around him a crowd of enthusiasts, and in some years subdued all Arabia, in the centre of which he founded the empire of the caliphs, the extent of which equalled that of the Romans. Aboubeker succeeded him, and united the authority of pontiff to the dignity of emperor. Advancing as far as Damascus, he subjugated all the country between Lebanon and the sea, and died after displaying great wisdom. The Saracens raised Omar to the throne; he made conquests; took Syria, Phenicia, and Mesopotamia from the Greeks, and turned towards Persia. In less than two years that antient empire was reduced to submission, and the alcoran raised upon the ruins of altars. On Omar's assassination, Othman succeeded, who completed the conquest of Persia and part of Tartary. He ravaged the islands of the Archipelago, took possession of Rhodes, and even spread alarm into Italy itself. He was massacred when he returned home. Ali seized the throne; he wept over the memory of his predecessors, and softened the rigour of the laws; but he too was killed. Hussein, his son, the head of the Fatimists, threw himself into Caffa, and secured the title of caliph. At his death we see no more scions of Mahomet. The Fatimists were dispersed, and the Abassides retired to Armenia. Moavia, a great warrior and politician, transported the seat of the empire to Damas,

made Constantinople quake, and destroyed the monuments of the arts. Yesid, his son, imitated only his vices, and, notwithstanding, escaped factions. Moavia the Second, Marvan his brother-in-law, and Abdolmelek, were merely seen; but the latter rendered himself odious by shedding the blood of the prophet's family. Under Valid the First, the caliph's empire attained the climax of its glory, and menaced the whole earth. Its army penetrated at once the heart of Asia, to the Bosphorus, into Africa, Spain, and even into France. Solyman had not time to continue his father's projects. Omar the Second, who succeeded him, was assassinated by Yesid. Heschem could not hold out against Charles Martel, who defeated him in the plains of Tours. However, the Abbassides taking advantage of the new troubles, fell upon Persia, and invaded Yerek. Marva fled before Abbas their chief, was conquered, and saved himself in Egypt; and thus ended in him the reign of the Ormiades. The family of the antient pontiffs was exterminated. Abdarahman escaped the massacre, crossed into Spain, and formed a state separate from the Saracens. Abbas, the conqueror of Marvan, notwithstanding, replaced the family of Mahomet upon the throne, and re-established the memory of Ali. His son Al-mansour founded the city of Bagdad, upon the Tigris, and made it the seat of his empire. He resigned himself to his taste for letters, collected men of knowledge in his states, and medicine, astronomy, poetry, and architecture flourished there, while ignorance overshadowed the rest of the earth. Mahadi and Haroun-Al-Raschid walked in the same steps.

Q. What then became of the empire of Constantinople?—A. The greatness of the Saracens served to awaken the Greeks: religious disputes occupied every mind, and Heraclius finished a reign at once glorious and unhappy. His son, Constantine the Third, no sooner came forward than he was sacrificed by an intriguing step-mother, whose son took his place, and was shortly dethroned. Constance the Second, his brother occupied with monothelism, had left the empire a prey to the Saracens. Constantine the Bearded had fled before the Bulgarians who came out of Tartary.

The troubles became extreme under Justinian the Third, who by taking revenge on his enemies, raised up more formidable ones, and fell under their strokes. Philippic was scarcely set up by the rebels, whose monothelism he favoured, before he was driven away and his eyes scooped out. His successor was Anastasius the Second, a catholic prince, who was soon put into a monastery. Theodosius also took the ecclesiastical state; Leo, the Isaurian, distinguished himself by his wisdom and valour, faced every thing, made himself formidable to the Saracens, and made them raise the siege of Constantinople. However, as he supported the iconoclastes, he saw his statues overthrown, by way of reprisals, in different places. Constantine-Copronymus, an imitator of this false zeal, and too much taken up by the aim of lowering the clergy, with difficulty upheld the empire tottering in all its points. Leo the Fourth, beaten by the Saracens, found nothing but faction at home. Irene his wife, and Porphyrogenetes his son, although religious executors of the decrees of the councils, were incessantly endeavouring each to become independent of the other.

Q. What was passing in Italy?—A. The north of Italy was still subject to the Lombards, who became more ambitious than ever, and extended themselves over the two seas which bounded Italy. Among their kings we see Partharites sinking his predecessor into oblivion; and having left the throne, mounting it again, to be the father of his people. Luitprand destroyed the remnant of the Grecian possessions by wresting from them the exarchy of Ravenna. Astulphus and Didier were subjugated by Pepin and his son Charlemagne, who made Lombardy a province of his empire. Rome however preserved itself in the midst of so many disorders; its bishops began to understand policy and to scatter avaricious princes by powerful protectors. Martin the First, Sergius the First, and John the Sixth, were defended by the people of Rome, happy under their government. Zachary took ready advantage of the power of France to obtain it as a support. Stephen the Third finished his predecessor's work and secured the rich patrimony which his successors still possess. Charlemagne

confirmed all his donations to Adrian. Venice aggrandized itself day after day in the midst of its lakes, and enriched itself by commerce. England was busied in internal wars amongst its sovereigns. Spain underwent strange revolutions, which forced the throne from the descendants of Alaric, and made it elective. We then see Viteric, Chintila, and Recesuinte, who was the father of his people: next Wamba, more worthy a throne by his refusal of it: Witiza, a cruel tyrant, and Roderick, too voluptuous to govern well, and whose defeat and death destroyed the first monarchy of the Goths, and brought Spain under the yoke of the alcoran. Pelagius, who hastily retired into the mountains of Asturias, assembled some fugitives, repelled the Saracens, and was crowned king of Oviedo. His successors imitated him, and by their bravery and understanding gradually enlarged the boundaries of their kingdom.

Q. Was not this a splendid moment for France?—A. France had to this time had but weak kings, who were slaves to their ministers and mayors. The latter made use of their authority to acquire partisans, and soon became the efficient sovereigns themselves. Amongst others we observe Pepin the First, who only used his authority for his master's glory. Charles Martel, the hero of his time, delivered his country from all its enemies, and destroyed in the plains of Tours those Saracens who had subjugated Asia and Africa. Pepin and Carloman partook his rich succession. Pepin the Second was left alone, tired of supporting the weak descendants of Clovis upon the throne. The assembled nation put the sceptre into his hand and the crown became hereditary in his family. In Italy he obtained new victories, gave the exarchy to the holy see, and died esteemed for his wisdom and valour. Charles, his son, became still greater. The limits of his empire were the Baltic, the Elbe, the Ocean, and the Pyrenees. He rallied the arts and sciences round him, and delayed their fall.

THIRD EPOCH.

CHARLEMAGNE.

THE WESTERN EMPIRE RENEWED BY THE FRENCH.

A. D. 800 to 962.

Q. What are the principal events of this period?—A. The re-establishment of the western empire in the person of Charlemagne, who commanded Europe while Irene ruled over part of Asia, and Haroun-Al-Raschid blessed Africa and the greater part of Asia by his sceptre. The rest of the earth was a display of states, feeble and nameless. Charles appeared in the habit of the Cæsars, more venerable to his new subjects, filled Rome with magnificence, and exercise all the plenitude of sovereignty in it, reserving to himself the right even of confirming the papal succession. He provided for every thing by his sons, maintained his states in security, and himself carried terror as far as the banks of the Weser and the Elbe. Constantinople too shook, and its prince was happy to consider himself as his equal. Peace gave him one of the longest and most glorious reigns that history speaks of. To be compared to Cyrus and the Anthonys, he made himself admired for the extent and justice of his views, taste for the arts, profound policy, and wise institutions, which made Europe renew her taste for proper studies, and respect for the laws. Louis Debonnaire, who succeeded him, shewed the difference between a wise king and a king whose piety is little enlightened. The empire was left a prey to a crowd of enemies; the Normans, the Avari, and the Saracens ravaged the sea-coasts with impunity, took the islands of Italy, and advanced up to Rome. The weak emperor resigned all authority into the

hands of his ministers. His barbarous sons shewed the most disgraceful and ambitious hatred; they marched against their father, shut him up in a cloister, and if he afterwards reassumed his sceptre, it was only to lay it down again, and end his days in sorrow. The three brothers, Lothario, Louis, and Charles, disputed the splendid succession on the plains of Fontenoi and Champagne, which a hundred thousand Frenchmen sprinkled with their blood. They afterwards divided the empire: Lothario took the title of emperor, with Burgundy, Italy, and Provence; Louis all Germany; and Charles the remaining part of France, which was, under him, a prey to all the evils caused by the Normans. Louis the Second, son of Lothario, who closed his life in a monastery, supported the glory of Charlemagne, less unworthily. He was feared in Italy, and defended himself against the ambition of his uncles. Charles the Fat, who had at the commencement great difficulty to keep Germany together, annexed to it Italy, which the death of Charles the Bold, who was poisoned by his physician, gave time to breathe. France under Louis and Carloman, whose terror was its glory, witnessed some sparks of the genius of the Pepins again taking fire. After them Charles the Fat was the sole support which the calamities of the people dared appeal to: he seemed called upon to revive the power of the great Charlemagne: but very soon sinking under the weight of so much power, he lost his head, and fell from that throne whose wrecks formed the little principalities of Italy, Germany, and France, which gave rise to the feudal government.

Q. What then became of France?—A. The house of Charlemagne from that time produced nothing but weak princes. The suffrage united on Eudes, Comte of Paris, a brave and enlightened prince. He protected the monarchy against the Normans, and made himself respected by his neighbours. His death gave the reversion of his states to Charles the Simple; but it was to facilitate the access of the Normans, who made a considerable establishment. Robert, Eudes's brother, a man worthy of the throne, was called to it by the nation: the state thus divided completed

its ruin. Robert, who died in the arms of victory, rendered the situation of Charles more doubtful. Raoul, duke of Burgundy, invaded the whole monarchy, which seemed again to have raised its head during his reign.

Q. Who was the successor of Charles the Fat in the empire of Germany?—A. The nation, still respecting the memory of Charlemagne, placed Arnold, a bastard of that house, upon the throne; but it was the more fortunate as he was weak. Louis the Third, his son, even yet more unworthy than himself, succeeded him. Germany renounced that house, to seek hands more worthy to wield the sceptre amongst its nobles. Conrad was the first who justified a free choice by his wisdom, bravery, and strength of character. Henry, surnamed the Fowler, after him, displayed the soul of a hero, re-established the expiring laws, repressed the pretensions of his vassals, extended France beyond the Rhine, and freed it from the tributes which were paid to Hungary. His son Otho, heir to his expansive views, rendered the country yet more illustrious. He extended his exploits to the Baltic, added Lorraine to France; and Germany, which had never been in so flourishing a situation, distinguished him by the name of the Great.

Q. Was Italy fixed on a solid basis?—A. The misfortunes which followed the house of Charlemagne had left that rich country a prey to a crowd of petty tyrants who tore it to pieces. Berenger, who got possession of it, was driven away by Guy of Tuscany, after whose death he returned to it again. Louis for a time afforded protection to Italy; but Rodolphus of Burgundy, who replaced him, was himself forced to give way to Hugh of Provence. At Rome, Leo the Third, who had submitted to Charlemagne, eluded the power of his son. Stephen the Fourth, Paschal the First, and Gregory the Fourth, took advantage of the dissensions which divided the children of Louis, and declared their pretensions to the seat. Disorder even crept upon the pontifical throne with Stephen the Seventh, and Sergius the Third. The latter, who had succeeded by cabal, left the reins of the church to females; they filled the city with troubles, and elected John

the Tenth, a warlike prelate, who was almost instantly hurled from it. His successor, John the Eleventh, no sooner stepped into his place, than he fell a victim to Alberic, who set up his son under the name of John the Twelfth. Rome was sacked, and Italy laid waste, by the Greeks and Saracens. Venice alone strictly adhering to its policy, now acknowledged the Greeks, now the French, and thus, by bending to all, sheltered itself from the invasion of all. She fortified herself; her industry redoubled; her marine, the only one that was in a flourishing state, made a happy interchange of the riches of Europe for those of Asia: it is pleasing to contemplate the peaceful progress of that Republic, when all the governments around it were in flames.

Q. What became of Spain?—A. It was divided between the Moors and Christians; the latter, however, aggrandised themselves. Alphonso the Chaste repaired the misfortunes of the preceding reigns, and commanded love by his virtues. Ramiro strengthened the throne by his victories, and left it to Alphonso the Third, who also was victorious. Ordogno the Second carried his arms to the banks of the Tagus. Alphonso the Fourth was the author of his own misfortunes by his inconstancy, and Ramiro the Second displaced him from the throne. In the midst of these divisions, Ferdinand Gonzalez shook off the yoke of Ramiro, and commenced the line of the sovereigns of Castille. The Spanish Christians reckon three crowns—Arragon, Castille, and Navarre.

Q. Had England similar revolutions?—A. It then enjoyed a splendor which it had not known before; but was soon eclipsed by the Danish cruelties. Egbert repelled them: but his son Ethelred let them get possession of one part of the island, and lay waste the other. The nation then witnessed the crown change from a Saxon to a Danish head. Alfred was one of them; a formidable warrior and wise prince; Athelstan, endeared to his people by the wisdom of his government; and lastly Edgar, the David of England.

Q. Where was the Grecian empire?—A. It always displays

bloody revolutions. Irene, who reaped the fruit of her crimes, was superseded by the ingrate Nicephorus, who was killed by the Bulgarians. His son was shortly despoiled by the feeble Curopalatus, who administering badly, was deposed by Leo the Armenian. He was assassinated by Michael the Stammerer, who took his place. His son Theophilus, by his exposition of the clergy, tarnished that glory which his love of justice had acquired him. Basil the Macedonian attached victory to his banners: religious disputes were set at rest, and Constantinople saw some gleams of its primitive glory. Leo, surnamed the Philosopher, did not disdain the empire: his son Constantine-Porphirogeneta, first driven from the throne, was replaced upon it under the regency of the patriarch. He had much to endure in his early years; at last he recovered all his power, and his reign became that of the fine arts, but he was poisoned by his son.

Q. What was the state of the Saracen empire at this period?
—A. At the commencement of this epoch, the Saracen empire under Haroun-Al-Raschid, an accomplished prince, raised itself to the pinnacle of glory, the splendor of which was tarnished by his children. Al-Mamire, who became sole master, re-established its affairs: his arms struck dread into Constantinople, Africa, and Italy: his fleets carried terror to Rome. The works of Aristotle, the Greek physicians and philosophers, being translated, gave birth to the principles of good taste and science among the Arabians. Motassem and Wattick were an honour to literature and to arms; but with them it ended. Multiplied imposts enraged the people, divisions were raised, Syria revolted, and the governors of Algiers, Tunis, and Tripoli, followed the example. The Fatimites re-appeared, and formed a powerful empire in Africa. Cairo became the centre of the commerce of the east. Fanaticism ere long too made a revolution. Some fakirs of Mecca sent missionaries into Africa to convert the idolaters: these missionaries seduced that ignorant people, and gave to the sect the name of Masabouts, which became so formidable as to excite the vigilance of government. The Mahometan religion had at that time at its head three chiefs, who called themselves the true successors of

Mahomet, and they respectively anathematised each other, while the Saracen monarchy was crumbling piecemeal into dust.

Q. Did not the Turks now make their appearance?—A. This new ferocious and warlike people came from the heart of Tartary, extended itself over the banks of the Caspian Sea, and looked for an opportunity of settling in the beautiful provinces of Asia. The caliphs of Bagdad invited them to come to their defence; but they shortly seized upon the government, left the caliphs the mere title of religious chiefs, and reduced all Asia to their dominion.

FOURTH EPOCH.

—
OTHO THE GREAT.

THE EMPIRE CHANGES HANDS FROM THE FRENCH TO THE
GERMANS.

A. D. 962 to 1095.

Q. Which were the empires that now swayed?—A. Of three empires into which the world was divided, the weakest only remained. The empire of Greece, though assailed on all sides, still supported itself with all its vices and all its misfortunes. The Saracen empire, so triumphant a century before, was almost overthrown, and that of France was divided into an infinity of petty sovereignties which emanated from its ruins.

Q. In what situation was Italy?—A. John the Twelfth, who at eighteen years of age was placed upon the papal chair, indignantly beheld his authority annihilated by the people, the senate, and Berengarius. He appealed to Otho, who was preceded by victory, and invited him to Rome to receive the same honour as Charlemagne had acquired from his predecessors. Otho crowned emperor, exercised the power, reformed the abuses, punished the factious, and looked upon the pontiff as his first subject. John the Twelfth was not long in being convinced of his error, and he waited only for Otho to absent himself to undo his former work. Otho returned to Rome as quick as thought, drove out the pope and Berengarius, assembled a council, deposed him, and set up Leo the Eighth. John watched the moment Otho had re-crossed the Alps, returned again to Rome, assembled another council to anathematise the emperor, declared his supremacy over the thrones of kings, and at last died a victim to his own irregularities. The hope of liberty held out by John the Twelfth to the Romans,

made them reject all foreign dominion. They chose Benedict the Fifth, and made a vow to shed the last drop of their blood to repel the emperor; but they fell before the exertion of the Germans, and were forced to acknowledge John the Thirteenth. Otho then carried to his grave the name of the Great. Otho the Second, who succeeded him, was neither fortunate upon the Rhine against the French, against the Greeks near Rome, nor against the Saracens, by whom he was wounded, and returned to die at Rome. Otho the Third, raised to the empire when only twelve years old, protected and aggrandised it. Rome alone grieved him; he was many times obliged to return to it, to confound the intrigues which shewed a desire to revive the antient dignities: at one time he was shut up in the castle of St. Angelo, and blood drenched the axe of the executioner: at length returned to Germany, he died by poison. Henry, duke of Bavaria, was put in his place: he gave himself to the clergy, granting it every description of privilege and authority. In his time the Pope carried his pretensions beyond any of his predecessors. From the house of Saxony, the empire went to that of Franconia, and Henry the Third inherited the crown at twelve years of age. The Italians presuming on his youth, renounced his authority. He crossed the Alps, put down the Popes installed without his approbation, and placed his relation Bruno in the chair. His son, Henry the Fourth, succeeded him when but five years old, and at thirteen took the reins into his own hand, and became a hero in every sense. Alexander the Second was a source of great trouble to him; but death removed him, and Hildebrand ascended the throne of St. Peter, and took the name of Gregory the Seventh. He made the emperor dissatisfied by his appointments; and, by a kind of whim which then took possession of every brain, thought he had the right to confer monarchies: he consequently pronounced the deposition of Henry, and absolved his subjects from their oaths of fidelity. Europe was astonished, and Germany divided: Henry marched to Rome to punish the pontiff. Europe took fire; terror and superstition chilled the courage of the most faithful subjects of the emperor, who was obliged to submit to

Gregory and demand his pardon. He was not long before he blushed at what he had done, and, returning to Germany, deposed Gregory in council. He was himself necessitated to re-conquer his crown, and defeated his competitor Rodolphus, returned to Rome to install another Pope, and compelled Gregory to seek a retreat, where he died of chagrin a victim to his ambition.

Q. Were the pretensions of future Popes less hardy?—A. The maxims of Gregory went like an inheritance to his successors, Victor the Third, and Urban the Second. The latter succeeded in exciting Conrad against his father, and the north of Italy was long the theatre of war. In the south, a multitude of Norman adventurers wrested that part, with Sicily, from the hands of the Saracens. The brave Norman, Tancred, established himself there with his twelve children, and founded the monarchy of Naples.

Q. What, in the sequel of this era, became of France?—A. France displayed nothing but weakness under the reign of Lothario, insolence on the part of the nobles, and opposition on the people. Louis the Fifth was poisoned by his wife, and the last scion of Pepin, Charles of Loraine, lost his right to the crown. The French sought, amongst their comtes, the most worthy to wield a sceptre, and found it in Hugh Capet, whose posterity retained it for eight hundred years. Inheriting the valour of his ancestors, he had, under Lothario, saved France, and defended Paris against the Normans: these were titles to public gratitude, of which he showed himself worthy. The pious Robert, his son, wholly devoted to the pope, added no particular splendor to the throne, and France was governed feudally.

Q. Was England still a prey to the barbarians?—A. It was then in the hands of two competitors, who disputed for the prize with vehemence, Ethelred and Sweyn. The latter maintained his conquest, and forced the Saxon to seek an asylum in Normandy. After some generations, the Saxon princes were recalled. Edward brought with him to the throne the Christian virtues, united with the science of government. Harold appealed to the rights of the Danes, which his wife had transmitted to him, and the nation declared itself in his favour: but William, Duke of

Normandy, established the intention of the late king, which called him to succeed to the crown. He embarked, landed on the English coasts at the head of a numerous army, defeated Harold in a pitched battle, and in nine months secured, under the name of William the Conqueror, the crown of that powerful state. William, his second son, succeeded him, and pursued his father's plans in every thing, particularly in repressing the ambition of the clergy.

Q. What was then observed in Spain?—A. The Moors were daily losing ground, Navarre became more powerful, and the marriage of Ferdinand, king of Castille, with the heir of Leon, rendered him one of the most potent monarchs of Europe. Under his name it was that the famous Roderigo rendered himself famous by the name of Cid. The kingdom of Portugal took its rise in the person of Henry comte of Burgundy. His triumphant arms obliged the Moors to call the Saracens from Africa, and they were soon forced to re-embark.

Q. Was it not at this time that the monarchy of Poland was settled?—A. Poland became a Christian country, emerged from obscurity, and was erected into a kingdom by the Emperor Otho. Boleslaus the First extended its limits to the Oder and Tanais; Mieczslaus the Second governed ill, and his widow and son were superseded. The latter, who took refuge at Chury, was recalled, and brought back to the throne the virtues of a great king, and the piety of an anchorite. The reign of Boleslaus began under the most glorious auspices; but Poland, struck by the thunder of the Vatican, lost the title of kingdom, became a duchy again, was divided by a number of petty tyrants, and ceased to make a figure in the world.

Q. Does not Bohemia take its date as a kingdom from this time?—A. Bohemia was enriched with the spoils of Poland; and Wratislaus was its first king. Hungary likewise began to show some interesting records. Geisa its king became a catholic, and removed, by his sage laws, the ferocity of his people. Russia, under its king Wladimir, adopted the religion of the Greeks, and its sovereigns formed alliances with the other princes of Europe.

Q. What was the fate of the empire of Greece?—A. It dis-

closed much wickedness, and little virtue. Romanus, stained with his father's blood, dishonoured the throne by his effeminacy. Nicephorus perished by the hands of his wife. The pious Zimisces emblazoned his glory by his victories over the Russians. Basil and Constantine succeeded him without glory; and Zoe, daughter of the latter, was able to preserve, under three following husbands, the supreme authority, but it was by dint of crime. The senate and people soon raised to the empire the blood of Comnenus. Isaac, by his virtues, induced a hope of the cloudless days of Constantine, when his health obliged him to retire. His successor Ducas, a mild and humane man, suffered the barbarians to ravage with impunity the environs of Constantinople. His widow, Endoxia, gave her hand to Romanus-Diogenes, who found more loyalty in his enemies than in his subjects. Michael-Parapinaceus, the son of Ducas, took advantage of the misfortunes of Diogenes, and assumed the purple, but he was forced to resign it. Two Nicephorus's contended for the empire; the conqueror enjoyed only for three years the rank which he disgraced. Then it was that the Comneni redemanded the throne of which they had been deprived by cowardly usurpers. Alexis, however, obtained the preference, and governed with profound policy.

Q. What became of the state of Venice?—A. The fleets of that republic covered almost every sea. Dalmatia, unfortunate in the depredations of barbarians, submitted to it; and strengthened by so rich a province, Venice ranked amongst the first powers. Genoa followed its example, and shook off the yoke of the comtes who governed it, formed a navy, established a doge and senate, and acquired a power in the Mediterranean which rivalled that of Venice. As to Asia, the caliphs were nothing more than splendid phantoms, driven from the throne one after another, until the moment in which the Turks gave freedom to the Tigris and Euphrates, and overthrew the empire of Bagdad. Several dynasties spread over the west, and formed a multitude of little sovereignties from the Euphrates to the Bosphorus; but the Fatimites uniformly maintained themselves with advantage in Egypt.

FIFTH EPOCH.

THE CRUSADES.

A. D. 1095 to 1262.

Q. What was the cause of the first crusade?—**A.** Peter the Hermit, on his return from Palestine where his zeal had carried him, painted in the countries and cities the disasters of those places which Jesus Christ had bedewed with his blood so energetically, that the people were warmed by his discourse, and attached themselves to his steps. The enthusiasm spread from the people to the nobility, and the desire of visiting the holy places became the mania of Europe. The sovereigns partook in it, and the clergy applauded. A council was called at Clermont and Auvergne, where the expedition was universally decreed. Sovereigns, nobles, priests, labourers, artizans, women, and even children, enrolled themselves in it: four hundred thousand men tore themselves from their country, and set out in three divisions. The first, without any order, crossed Germany, Hungary, and Greece, and was almost annihilated before it arrived at the strait. The second penetrated into Asia, and, after some successes, became a prey to Soliman on the plains of Nice. The third more judiciously composed, and led by the choicest generals in Europe, fell upon the Turks, and took possession of those provinces of Asia whence they were driven. Godefroy of Bouillon was, owing to his wisdom, proclaimed king of Jerusalem, Antiochus became the domain of Boemond, and Edesse that of Raimond; but these states could not be kept up without constant reinforcements from Europe. From thence arose different orders of knights, that of St. John of Jerusalem, the Templars, and Teutonic. The emulation which animated the warriors soon degenerated into cruel jealousy: they turned against themselves those arms which religion had

taught them to take up, and they exhausted, in a short time, that ill-founded kingdom which afterwards fell under the blows of the Mussulmans.

Q. In what time did the second crusade take place?—A. Under Eugene the third, whom his virtue had drawn from Clairvaux to place him upon the throne of the church. Aided by St. Bernard, that eloquent man who enjoyed a singular consideration on account of his piety, dissipated every difficulty. The emperor Conrad and Louis the Seventh could not prevent it: the people deserted their fire-sides in crowds to enrol themselves. The same causes of the misfortunes of the first expedition again ruined this. Louis the seventh was wholly indebted for his liberty to the valour of the king of Sicily.

Q. When did the third crusade take place?—A. About forty years after. Expeditions so ill concerted, had only given the Turks greater animation against the Christians, and the sultan of Egypt, Noradin, successor to Saladin, took Jerusalem by surprise, and destroyed this little kingdom whose duration was but a century. Urban the Third died of grief at the news, and the desire of recovering Jerusalem gave birth to a third crusade. No one could be better ordered, none could be more wisely executed: three princes, the first of their time, were the chiefs of the enterprise. Success signalised their first onset; but jealousy, and Frederick's death, rendered this attempt again ineffectual.

Q. Did they not grow weary of so much ill success?—A. So many unfortunate endeavours, and so much blood and treasure expended, did not relax the ardour of Europe, which saw great revenge threatened by the Saracens. Innocent the Third again hoisted the standard of the cross, and at first assembled only French and Italians under the orders of Bandoin, comte of Flanders. Arrived on the territory of the Grecian empire, they gave succours to the younger Alexis against a barbarous brother who de-throned his father; delivered Isaac, and restored him the empire: then returning a second time to avenge him, they laid siege to Constantinople, which they took possession of and pillaged, established themselves as French emperors, and renounced the crusade.

Q. What was the object of the fifth crusade?—A. The arms of the crusaders were still directed towards the infidels of the East; but Innocent the Third was the first who employed them against the French heretics termed Albigenses. A powerful army, commanded by Simon de Montfort, was formed, and gave rise to a bloody tribunal which perpetuated the inquisition always rejected by France with horror. Thousands of the Albigenses perished by the sword and flames: Raimond, comte of Toulouse, only recovered his states by securing them after his death to France.

Q. Was not the sixth crusade directed towards the Holy Land?—A. Yes; but neither England nor France entered into it. Andrew, king of Hungary, and John of Brienne, were the chiefs of it, accompanied by the legate Cardinal Julien: they changed their plan of attack, by falling first upon Egypt. Their first blows were successful; but the legate interfering with the command, led them into an ambuscade, whence they had great difficulty in extricating themselves.

Q. Which was the last crusade?—A. The seventh: it was proclaimed by the pious Louis the Ninth. He embarked with Margueritte his wife, accompanied by Edward, son of the king of England. He landed in Egypt and took Damietta; but was soon overcome and taken at Massorah. He ransomed himself, overran Palestine, and staid there four years, returned to France, and at the end of seventeen years went back again, where he died of the plague as soon as he landed at Tunis.

Q. What was, during the course of the crusades, the existence of the Latins empire?—A. This new empire, which consisted of scarcely more than Constantinople, could not maintain itself in the midst of the enemies by which it was surrounded. Bandoin, his brother Henry, and Pierre of Courtenay, perished by violence.

Q. Was the German empire much agitated?—A. Henry the Fourth, occupied in pacifying Italy, was obliged to return on account of the revolt of his son; he dispersed his troops, and left him to die of grief in a prison. The second son was induced by the clergy to take the diadem of his father, who, confined at Liege, perished without, by his death, extinguishing the flames of

discord between the priesthood and the empire. Paschal the Second had flattered himself that Henry the Fifth would let him govern. He saw him, on the contrary, reclaiming the prerogatives of his rank, despising his threats, making him prisoner with the sacred college, and constraining him to swear upon the altar to the cession of his right of appointments. However, successively a butt either to Paschal, Gelavus, or to Celestine the Second, and above all, to the fanaticism which inflamed his states, he concluded by renouncing the most precious rights of his crown. His apprehension gave a calm to his country, and he died some time afterwards without posterity.

Q. Who was his successor?—A. Lothario, Duke of Saxony, elected by the faction of Rome. He, notwithstanding, marched towards that city, and, guided by St. Bernard, installed Innocent the Second, and drove out Roger, with his Pope. Germany soon changed its master. Conrad the Third took the place of Lothario, and was followed by Frederick the First, a great warrior, the idol of his subjects, and the hero of his times. That prince, ashamed of the opprobrium which the haughtiness of the Popes had brought upon kingly diadems, sought to foment the intrigues of the anti-papists, went into Italy, and in spite of the Venetians and Milanese, made his way, beat the Italians, took Milan, and reduced it almost to nothing. Alexander the Third, with undaunted courage, resisted him, and although Frederick uniformly conquered, he was at last obliged to renounce the investitures, and submit to the pope. Innocent the Third, raised to the papal chair, carried still higher the pretensions of the tiara. He excommunicated and deposed kings, and assumed the right of electing emperors. Henry the Sixth, and Otho, disputed the empire; a civil war was on the point of breaking out when Otho gave up to Philip, who enjoyed the sovereignty. Frederick the Second became possessor of the empire, and was again a butt to the power of Innocent, who, shocking to relate, condescended to appear in arming the infidels against the Christians; but the active Frederick fought, and beat them.

Q. Was Gregory the Ninth like his predecessors?—A. Faithful to their systems, and dreading such a neighbour as Frederick, he

had recourse to cunning to get rid of him, and accordingly summoned him, as son-in-law to the king of Jerusalem, to go over to Asia at the head of an army of crusaders. Frederick obeyed, trembling at the snare which the pope had lain for him. Learning, in his absence, that the empire was ravaged, he hastened a treaty with the sultan of Egypt, and sped to Italy for the defence of his states, which he delivered, took possession of all Italy and Sardinia, and returned to lay siege to Rome, where Gregory died of grief. Innocent the Fourth, Frederick's friend, soon became his enemy, and excommunicated him. The emperor answered his anathemas by continually repeated victories, and forced the pope to seek refuge in France. A council pronounced the deposition of Frederick, but he shewed himself every where, put down factions, and confounded the apostate wretches for making attempts upon his life. At last, one of the greatest men that Germany ever produced, fell a victim to his troubles, sorrow, or to poison.

Q. What happened on his death?—A. Innocent the Fourth went immediately into Italy, and privately conspired to excite insurrection amongst the subjects of the new emperor. Conrad, who inherited his father's talents, appeared, and distinguished himself in every part, flying from the north of Germany to the south of Italy: but neither could he guard against the poison, which ended his days. Innocent the Fourth died in his endeavours to set Conrad aside from the empire. Alexander the Fourth, and Urban the Fourth, offered the Italian states to all princes. Charles of Anjou, brother to Louis, accepted them, and made a rapid conquest of great part of Italy. He stained his memory by sprinkling the scaffolds with the most illustrious blood in the universe. The vacancy of the empire occasioned a dreadful anarchy. Nothing was any where to be seen but murders and treasons, and devastated cities. At length the wearied empire united in its choice of Rodolph, Count of Hapsburg. In the midst of these troubles, several great towns of the north of Germany endeavoured, by confederating, to defend themselves against the usurpations of the petty princes of Germany, and protect their commerce in the Baltic. They were termed the *Anseatic*, or *Hans-Towns*.

Q. What became of the other states of Italy?—A. Several formed themselves also. Pisa, Florence, and Lucca, became considerable republics. Genoa increased daily; its flags were displayed in every sea, and Corsica was subject to it. Venice struggled with success against the emperors, and possessed itself of part of the islands of the Archipelago, and even of Candia. Unfortunately, jealousy of commerce rendered these two republics inimical to each other.

Q. What was at this period the situation of England?—A. It assumed a formidable aspect. Henry the First bore away from his brother Robert his kingdom and Normandy, and thereby becoming one of the most powerful monarchs, thought only how he could weaken the king of France, whose vassal he was. Louis the Sixth excited some enemies against him. Anselm, archbishop of Canterbury, the friend of the pope, harrassed Henry upon the subject of the investitures. The king of England was not to be intimidated; he put down the rebels, defeated Louis the Sixth, and even went so far as to make him uneasy for his crown. His daughter Matilda, married to Plantagenet, heir of Maine and Anjou, was obliged to cede throne to his cousin Stephen, Comte of Boulogne. But the latter, before he died, bestowed his daughter and sceptre on the son of Matilda, Henry the Second, who, by marrying Eleanor of Aquitaine, who was repudiated by the king of France, was master of a great part of that kingdom. He it was who had so long disputes with Thomas à Becket; and the continual butt of his wife and children died of vexation and remorse.

Q. What influence could France then have over its neighbours?—A. Louis the Sixth was employed in reducing the petty tyrants who contended against him. Aided by that great statesman, Suger, he struck the first blow at feudal anarchy, and rendered his people contented. Louis the Seventh, unworthy of the sceptre he held, made himself odious by the desolation he committed in Champagne, and to expiate it drew off his choicest troops into Palestine, where his conduct was inglorious, and his return shameful. His imprudent step in repudiating Eleanor paved the way for two hundred years of war with England. Philip Augustus gave a

new face to things, and turned the scale of fortune. He for some time seemed only a rival to Richard of England in virtues. Both embarked for the Holy Land; but the faithless Philip returned to France, and invaded the possessions of Richard, who was compelled to reconquer his states, and perished by the sword of a villain. John took the sceptre of England, and signalised his commencement by assassinating Arthur, Duke of Brittany. Philip, as sovereign, cited him before his tribunal, and seized on his dominions in France. The stupid John passed his time in effeminacy, by his exactions spread revolt among his subjects; and, as if he had not already sufficient enemies, entered into a dispute with the pope, and afterwards consented to declare his kingdom feudatory of Rome. He at length awoke from his lethargy, and entered into a league with the Emperor and Comte of Flanders. Philip overthrew them at Bouvines, and put the Comtes of Flanders and Boulogne in irons, while John re-embarked with shame, and died of grief at home, having first, on the 15th of June 1215, signed on Runnemede, between Staines and Windsor, the great and ever memorable charter of English liberty, called Magna Charta. France continued to acquire power under the wise administration of Philip. He first introduced into his court that politeness which has always distinguished that nation, of which he was regarded as a new founder. Louis the Eighth preserved this superiority: and the talents of his queen, Blanche, prevented the state from being weakened under Louis the Ninth. That prince, upon the throne, developed the qualities of a great king. He beat his enemies wherever they appeared, kept his vassals to their duty, repressed the clergy, created a police, erected tribunals, and his wisdom was a blessing to his people, and an example to kings. A narrow-minded piety led him, like his predecessors, to the Holy Land, and with as little avail; he there lost his liberty, and valuable time, which he could have employed with greater benefit in appeasing the sedition which his long absence had given birth to. At last, ever impelled to make war against the infidels, he perished, in Africa, of the plague, with almost his whole army.

In England, the minority of Henry the Third, under the

management of Pembroke, was truly happy; but on his death there was a total change. Henry relied upon ministers who deceived, and a wife, who made him hated to that degree, that the nation reclaimed its antient privileges, and displayed Magna Charta. All was in an uproar: the Earl of Leicester grasped the authority, which he did not abuse, but was speedily overthrown, and Henry was left in quiet possession.

Q. What important events were now passing in Spain?—A. Spain had as many heroes as kings upon the catholic thrones. Peter the First, and Alphonso, after him, were successful in their bold undertakings. The two Alphonso's gained ground upon the Moors daily. About this time, Henry of Burgundy, one of the grandsons of Robert of France, went into Spain to succour Alphonso the Sixth, king of Castile, made himself formidable to the Moors, of whom he beat five kings in one day, became master of Portugal, and fixed his seat at Lisbon. Under Alphonso the Ninth, the famous battle of Murandal was fought with the Moors, who left two hundred thousand men dead on the field. The unexpected death of Henry the First plunged Spain into grief. Frederick the Third soon united the sceptres of Castile and Leon, and equalled the glory of all his predecessors: Merida, Badajos, Jaën, Cordova, and Seville, opened their gates to him. He died in the midst of his vast projects. Alphonso the Tenth succeeded him, and acquired, by his abilities, the surname of Wise, but could not fix the affection of his people.

Q. What was doing in Poland and Bohemia?—A. The sequel of the misfortunes of Bosleslaus the Second were still felt in the former. Bohemia continued a kingdom famous for wise kings, and fine actions. In Sweden manners were polished: Eric gave laws to his nation, and the Goths and Swedes, hitherto at variance, united. The cities of Dantzic and Copenhagen reared their heads. Waldemar the First and Second founded the kingdom of Denmark, and subjected Pomerania, Mecklenburg, and Courland: but a scandalous error lost the latter and almost all its possessions. The Teutonic Order, profiting by the confusion, possessed itself of Prussia and Livonia, and founded a formidable

power. Hungary, likewise, had illustrious kings. Stephen the Second disputed Croatia with the Venetians. Andrew the Second acquired celebrity by his expedition to the Holy Land, and Bela the Fourth wrested his kingdom from five hundred thousand Tartars.

Q. What was observable in the Grecian empire at this epoch? —A. The ability of Alexis saved his kingdom from being overwhelmed by the Crusaders. Alexis the Second, son-in-law of Louis the Seventh, was assassinated by his uncle, Andronicus, whom he had associated with himself in his rank. Isaac the Angel avenged his people only to lose their favour very shortly after. His brother tore the empire from his hands. In a short time, and still to revenge Alexis, the Crusaders attacked Constantinople, and founded the Latins' empire, which lasted but very few years. Theodore Lascaris, and John Ducas, his son-in law, retook from the French all the places they had conquered. Michael Paleologus afterwards dispersed the Tartars, repelled the Turks, and turning to good account the troubles of the house of Swabia, attacked the Latins with an impetuosity which they could not withstand: he retook his capital with eight hundred soldiers.

Q. What is known about Asia at this period?—A. The Turks, after alternate success and reverse, were at last borne down by the exertions of the crusaders; but Saladin, by his policy and genius, ruined all their projects, and compelled them to leave him for ever at rest. He died adored by his people, and dreaded even by Europe itself. At this time Gengis appeared in Tartary; he overturned the throne of Persia; penetrated Indostan; enchained China; then returned to the Euphrates, and pushed his conquests to the Hellespont. His son continued his victories, absorbed the provinces of the Turkish empire, and penetrated into Europe.

SIXTH EPOCH.

RODOLPH OF HAPSBURG.

A. D. 1262 to 1492.

Q. What are the principal events of the sixth epoch?—A. Gregory the Tenth laboured in Italy, like his predecessors, to drive out the Ghibellines and ruin the Greeks. Michael Paleologus, who was in want of support, found it in the Pope alone. The re-union of the Greeks, which was executed in the Council of Lyons, was of no longer duration than the danger of the emperor. Innocent the Fifth, Adrian the Fifth, and John the Twenty-first, employed their pontifical courts to preserve this so advantageous union. Martin the Fourth offered Sicily to Peter of Arragon, against the rights of the Dukes of Swabia. Procida, a Neapolitan lord, animated all the Sicilians against the French; a general conspiracy was set on foot, and on Easter Monday they were all massacred at the first ring for the vespers, which were called the Sicilian vespers. Peter of Mouson, the hermit, who came out of the deserts under the name of Celestine the Fifth, appeared for a moment on the pontifical throne. Cajetan, who prevailed upon him to make a solemn abjuration of it, succeeded him. He treated kings with great arrogance, and had the famous dispute with Philip the Fair. He died of despair at being humbled. Benedict the Eleventh made himself venerable for his humanity. He was followed by Clement the Fifth, a Frenchman, who fixed his residence at Avignon. In his time the order of Templars was abolished. John the Twenty-second troubled the empire by his envenomed hatred to Louis of Bavaria. Benedict the Twelfth, who came from the cloisters, brought with him to the throne some virtues, but no great talents. Clement the Sixth, Innocent the Sixth, and Urban the Fifth, loved, protected, and rewarded literature. Gregory the Eleventh thought of returning to Rome, but

did not. The Roman people, apprehensive of the Pope again quitting their capital, forced the conclave to elect Urban the Sixth. His cruelty produced a competitor in Robert of Geneva, a man of great merit. This was the origin of the long schism of the West. Urban fixed himself at Rome, and Robert at Avignon, under the name of Clement. The two Popes excommunicated each other, and the people were divided between them. Tired of the perfidy of the Popes, the Cardinals of the two Chairs united at Pisa, deposed Gregory and Benedict, and chose Alexander the Fifth. There were then three popes. Europe at last opened its eyes, and the Council of Constance deposed the three. John the Twenty-third was tried and imprisoned.

Q. Were there not other ecclesiastical troubles?—A. Some years before, John Wickliff, an Englishman, had dared to attack the ecclesiastical authority; this schism, at first destroyed, had been renewed in Germany by John Hus, of the university of Prague, who was condemned to the stake by the Council of Constance, with Jerome of Prague, his disciple. The Council at last, under the guidance of the celebrated Gerson, brought its sittings to a close, by the election of Martin the Fifth, who was acknowledged by all the Christian princes. Eugene the Fourth, who succeeded him, fearing the power of the Council of Basle, anathematised it. The Fathers of the council deposed him, and put the Duke of Savoy, Amadea the Eighth, in his place, under the name of Felix the Fifth: he is, however, only reckoned among the anti-popes, Eugene having had the prudence to oppose him with another council, first at Ferrara, and then at Florence. Nicholas the Fifth erected the famous library of the Vatican, and declared himself the protector of literature and of the arts. Æneas Silvius, enthroned by the name of Pius the Second, renounced the principles which he professed at the Council of Basle. Sextus the Fourth, and Innocent the Eighth, supported science, and embellished the city of Rome.

Q. What then happened in Germany?—A. The new emperor, Rodolph, the first comte of Hapsburg, seeing that he was upon a throne without power, troops, or finances, at first flattered

the course pursued by Rome, conciliated the minds, demanded in the name of all Germany the homage of Bohemia, which Ottocarus then possessed, and obtained it by his bravery and address. He soon got Austria and Swabia ceded to him, and left his son, Albert, a considerable domain, with a plan of aggrandisement, which was always pursued by his family. Two emperors were elected at once : Adolphus of Nassau, in the first instance, bore away the palm from Albert, but afterwards lost it by his own imprudence. Albert obtained the name of the Great, and was assassinated by his nephew. The policy of the electors called Henry of Luxembourg, who neglecting Germany for Italy, went to Rome ; sought to retake Naples, and died of poison at the sacrament. The electors were divided between Frederic the Third, son of Albert, and Louis of Bavaria. A defeat put Frederic into his competitor's chains. Louis, forgetting how much he was indebted to papal intrigue, marched to Rome, wherein he placed a cordelier devoted to his interests. The flames of discord were kindled in Germany, and Louis was deposed. Charles of Luxembourg took the name of Charles the Fourth, and established, by the celebrated Golden Bull, the Germanic constitution. At the fourth election the Imperial crown returned to the house of Austria, which was increased by the states of Hungary and Bohemia.

Q. What passed in those states ?—A. Their affairs were a series of misfortunes. Ladislaus the Fourth was plunged into a degrading effeminacy, and trusting too much in the Tartars, was assassinated. Andrew the Third reclaimed the succession, which was contested. It was not till Louis the Fifth ascended the throne, that he reduced the Bohemians to submission ; drove the Tartars for ever from his frontiers ; acquired Bosnia ; retook Dalmatia ; twice wrested the kingdom of Naples from his father's murderers ; received the Polish diadem, and lastly enjoyed the satisfaction of hearing himself styled the Great ; a title which he well merited from the wisdom he displayed in his government. After this fine reign, history presents us with nothing but a tissue of crimes and horrors : Charles of Duras, reeking with the blood of the queen of Naples, hastened to despoil the two heirs of

Louis. Sigismund of Luxembourg married one of them, and shed oceans of blood ; but he could not resist the Sultan Bajazet, and unhappy Hungary became, in a few years, the prey of barbarians. Bohemia, on its side, first illustrious from the conquest of Ottocarus, was afterwards happy under Vinceslaus the Third. Agriculture flourished, new riches were drawn from its mines, education had asylums, and tribunals a code. The troubles which followed brought on the choice of John of Luxembourg. He, going to the aid of Philip of Valois, perished in the battle of Cressy. Sixty years after, Sigismund fled from his states, before Zisca. Albert of Austria married his heir, and immediately united Bohemia and Hungary. At his death, Ladislaus of Austria attacked the Turks, and forced them to sue for peace. The famous Huniade, who had defended Hungary, was named governor-general of it. Ladislaus soon had reason to complain of the sons of Huniade, with whose death, however, tranquillity was re-established. Ladislaus himself was poisoned in the midst of the preparations for his marriage. The prince of Tarentum whom the voice of Europe accused of that crime, assembled the states of Bohemia, and succeeded in obtaining the crown. The Hungarians on their side, took Mathias Huniade out of prison, to place him upon the throne.

Q. What was going on in Burgundy ?—A. John the Good had given to his fourth son, Philip the Bold, Burgundy, to which was added at first, Flanders, and then Nivernois and Artois, which rendered the power of those dukes one of the first of the West. Charles the Rash had only one daughter, who took his vast dominions to Maximilian.

Q. Did England then enjoy peace ?—A. It had been considerably increased under Edward the First. His son, Edward the Second, by his indolence and love of pleasure, had overwhelmed the state with misfortunes, and occasioned his wife to revolt against him. But Edward the Third avenged his father, and contested with Philip de Valois his right to the crown, to which he was a pretender, as heir to his mother. The Salic law was referred to, and he was rejected. But he did not let it rest there ; he flew to

arms, and landed in Picardy, where he overthrew the French at Cressy, took Calais, and made a glorious peace. We shall find in the history of France, the various advantages which the English obtained under the reigns of John and Charles the Fifth and Sixth.

Q. Was not England itself a prey to divisions?—A. While young Henry the Sixth was in France, the house of York reclaimed the sceptre. The Earl of Warwick, who supported it, carried the emblem of the white, and Henry that of the red rose. Henry's first successes were owing to the heroism of his wife, Margaret of Anjou. Edward the Fourth remained conqueror, and Henry was murdered in the tower of London. At the end of fifteen years, an heir to the house of Lancaster made his appearance, having been saved in Brittany. This was Henry, Earl of Richmond, who was in a situation to assert his rights, particularly against a prince so detested as Richard. He conquered them at Bosworth-field, and was proclaimed king under the title of Henry the Seventh.

Q. Where was Scotland all this time?—A. It had hitherto done nothing material: now ravaged by the Picts, and now by the Scots, from Ireland, by their union it formed a kingdom. At the death of Alexander the Third, two competitors entered the lists. The king of England, who was appealed to as arbitrator, decided in favour of Baliol, who was so weak as to acknowledge himself Edward's vassal. The indignant people, therefore, rejected him; but Edward entered Scotland, and made it a province to his empire. Nothing but trouble and revolutions were speedily the consequence, until Scotland found an avenger of its liberty in the husband of the heir of Bruce, Stuart; the stem of that kingly race, so celebrated for its misfortunes.

Q. What was the situation of the north at that time?—A. Denmark was but a dismembered kingdom, its authority enjoyed by the nobles and an usurping clergy. In Sweden, Magnus the First had extinguished the flames of sedition. The brilliant regency of the wise Canutson had added Carelia to the kingdom, and Birger's ingratitude repaid it by bringing him to the scaffold. The

people were dissatisfied, and Birger's heir was put to death. Magnus the Second, by whom he was succeeded, could only support himself in Norway. The immortal Marguerite, widow of Haquin, soon became arbiter of the North, commanded respect from the rest of Europe, and, by the celebrated treaty of Calmar, united the three northern crowns, which did not long remain so. During this time Poland resumed its position in Europe as a kingdom. The Teutonic Order began to make itself formidable. Casimir the Fourth was adored by his people. Louis, who succeeded, was more busied about Hungary than Poland. Jaghellon, grand duke of Lithuania, ascended the throne as Ladislaus the Fifth, and Poland increased to so great an extent, was one of the principal powers of Europe. The Teutonic Order was still on the move, and after alternate disgrace and success, was forced to acknowledge itself a vassal to Poland.

Q. Was it not at this epoch that the foundations of the Russian empire were laid?—A. Yes; John Basilowitz, indignant at the oppression of the Tartars, called his nation to liberty, took possession of Novogorod and Moscow, and made the latter the seat of his empire.

Q. What appearance did Spain make?—A. In Castille the scenes were disgusting: Alphonso the Tenth, one of the most respectable sovereigns, was forced to leave his states, from which he was driven by his son Sancho. The vigorous acts of young Alphonso the Eleventh brought back good order. Arragon had three illustrious kings. Peter the Third shewed the talents of a great monarch. James the Second formed a good navy for the support of his disputes with the Pisans. The crown of Navarre shifted from the house of Champagne to that of France, and afterwards to Evreux. The thrones of Spain were only filled by princes who disputed the prize of cruelty: Charles the Wicked, in Navarre: Peter the Ceremonious, in Arragon: and Peter the Cruel, who subdued them all, in Castille. An avenger was, however, at hand; Henry, comte of Trastamara, aided by Du Guesclin, ridded the earth of that monster, and took possession of a throne which he transmitted in peace to his son. The mi-

nority of Henry the Third gave up Castille anew to its troubles, of which the Jews were the victims. Misfortune reigned with John the Second, or rather under his worthless favourite Alvarez of Luna, who perished on a scaffold. Henry the Fourth was driven from his throne with the execration of his subjects. At length Isabel of Castille, wife to Ferdinand king of Arragon, a strong-minded woman, was called to the succession. The daughter of Henry asserted her rights in vain; she was forced to bury herself in a convent. Then it was that Ferdinand, uniting Sicily, Sardinia, and Corsica, with two-thirds of Spain, was seriously intent upon the entire expulsion of the Moors.

Q. What were the events of Portugal at this period?—A. By the valour of Alphonso the Third, it triumphed; by the wisdom of Denis, the Titus of his age, was happy; and deplored the severity which Alphonso the Fourth evinced against Ines, and of his son's rebellion. Ferdinand in vain disputed the sceptre of Spain with the fortunate Trastamara. John the First, after having destroyed the Spanish battalions, hastening to dispossess him, took from the Moors the important city of Ceuta, in Africa. The Portuguese, under his son Henry, explored new tracts upon the ocean, traversed the coast of Guinea, from whence they brought back gold and ivory, and made the Portuguese name respected on every sea.

Q. What was doing in Italy?—A. Two powerful families contested the South, and the North was invaded by a swarm of tyrants. The factions of the Guelphs and Ghibelines, divided every city. A myriad of houses rose up: the d'Est, Gonzague, Visconti, and Sforce. Savoy began to be prominent as a great power, and nine princes successively bore, with glory, the name of Amadea. The states of the pope, deprived of the presence of their sovereign, by the chair being transferred to Avignon, became the prey of petty princes; Rome was a shelter for robbers; the Colonnae, and the Ursins, had their factions. Rienzi's project was a fine dream; he was torn to pieces by the very populace which idolized him. But for Albani, the pope had speedily lost his patrimony. Genoa then appeared the first maritime power

in Europe. Pisa conceded to, and Venice resisted it; but dissension in its bosom soon gave it up, at one time to the French, at another to the dukes of Milan, and at another to a doge. Venice rose again from its embers with victory floating on its standard; expelled the Genoese from the Gulph, subjugated Dalmatia, and the islands of Corfu, Cephalonia, and Cyprus; and by its administration, and the extent of its commerce, became one of the most considerable states of Europe. Florence shone with a splendor in nowise inferior. The Medici's, the Strozzi's, the Pazzi's, unfolded in behalf of their country, their genius, and their means. The great Cosmo, only a merchant, invited all the arts, gave animation to talents, made light shine forth, rendered Florence the finest city in Europe and his family illustrious by alliances with all the crowned heads.

Q. Is not the origin of the republic of Switzerland about the present time?—A. That simple and brave people had preserved its liberty in the midst of its mountains, and was part of the German empire. But the house of Hapsburg having wanted to subjugate the Swiss, three private individuals of Uri, Schwitz, and Undervalden, roused the cantons to arms. William Tell further animated them for the sake of his personal vengeance. Ere long all the powers of Austria failed against them. Twenty thousand Austrians were destroyed at Morgarten by a handful of peasants. The other cantons, animated by their example, united and formed that republic of the Thirteen Cantons with which all powers sought an alliance.

Q. What was the then state of the Grecian empire?—A. It was daily falling in pieces. Andronicus saw that formidable dynasty of the Turks rising into power. The storm commenced under Manuel, siege was laid to Constantinople, which was saved only by a fortunate diversion. In vain did John the Second endeavour at Florence to cement the union of the two churches, and thereby to avert the already distant roaring of the tempest. He was abandoned by his own subjects as well as by all the princes of Europe. Constantine the Eighth fell like a hero in the field, along with the throne of Greece, which had endured twelve

centuries. Mahomet the Second, descended from a family of heroes, commenced his reign by the capture of Constantinople, invaded the empire of Trebisonde, and the islands of the Archipelago, and made every thing bend before him from the Euphrates to the Adriatic Sea. Rhodes alone was for the moment invincible; Italy was pillaged, and the Vatican trembled for itself. Under the preceding Sultan, Scanderberg, son of the king of Albania, brought up in the seraglio, had found means to reinstate his throne, and conquer the superb Amurath and his immense army. Mahomet the Second was himself no stranger to the strength of his arms, and at his death did honour to his memory. In Upper Asia the Turks had extended themselves by repelling the Tartars, and China had disencumbered itself from the yoke of those conquering barbarians. Tamerlane came forward, ravished Persia and the Mogul; and conqueror of the great Bajazet, founded a new empire from the Hellespont to the Ganges. His posterity too was destroyed by Mahomet the Second. Africa attracted little notice. Egypt, under its sultan, resorted to commerce; and Cairo became a point of union for the exchange of the merchandise of three quarters of the world.

Q. What happened in France on the death of Louis the Ninth?—

A. He was succeeded by his eldest son Philip, surnamed the Bold, who still, by means of the succour of Charles of Sicily, his uncle, was enabled to beat the Infidels, and force them into a truce for ten years. He was crowned at Rheims, and governed with much wisdom. The death of his uncle Alphonso added Poitou, Auvergne, and part of Saintonge to his crown.

Q. Was there not likewise an expedition against Spain?—A. The massacre of the French at the Sicilian vespers being the work of Peter of Arragon, Philip crossed the Pyrenees, beat the Arragonians, who left their king on the field of battle, and took Gironne and Rose; but sickness obliged the troops to fall back upon Perpignan, where Philip died in 1285, after reigning fifteen years. He left two sons.

Q. Who succeeded Philip the Bold?—A. His eldest son Philip the Fourth, surnamed the Fair, seventeen years old, and already

married to Jane, heir to the kingdom of Navarre, Champagne, and Brie. War was soon declared against England, on the subject of some French ships insulted by that power. Edward was condemned at a court of peers, and all his possessions in France were confiscated; but in mind he was not to be so easily depressed. On the 24th of June, 1340, he obtained a signal naval victory; and after various successes obtained the celebrated battle of Cressy on the 26th August 1346. The Count of Flanders having been a party in this quarrel, Philip marched against and beat him, and united Flanders to the crown; but the Flemings, oppressed by the vexations of the French government, shook it off, and triumphed at the celebrated battle of Courtray. Philip beat them at Mons en Puelle, and retained the cities of Lisle, Douay, Orchies, and Bethune.

Q. What else should be noted in regard to this reign?—A. He was the first king who rendered the parliaments permanent, and who, in concert with pope Clement the Fifth, abolished the order of templars; knights or military religious men, who affected the care of the pilgrims to the Holy Land. These knights were become so rich as to excite jealousy; they were accused of important crimes, and some were burnt, with the grand master, James of Molay, who cited the pope and the king to appear before the judgment-seat of God within the year, which happened as predicted. Philip died at Fontainebleau, after a reign of twenty-five years. He was a firm and courageous prince, violent, and rather harsh towards his people.

Q. To whom did Philip the Fair leave the crown?—A. To his son Louis, surnamed Hutin, or the Wrangler, who had already become king of Navarre by the death of the queen his mother. Although he had the priority, his uncle, the count of Valois, got possession of the authority, and made a criminal use of it. The offices of judicature were sold, the people borne down with taxes, and Enguerrand of Marigny, superintendant of finance, upon a vague accusation of extortions, was hanged at Montfaucon.

Q. What occurred at Louis's death?—A. The queen being pregnant, Philip the king's brother, was declared by parliament

regent until the queen should be brought to bed. The infant king John lived but eight days, and Philip was acknowledged, notwithstanding the pretensions of Eudes duke of Burgundy. It was decided unanimously, according to the Salic law, that females could not inherit the monarchy. Philip the Long also died without male issue. He had enacted a great number of wise ordinances, and undertook to establish an uniformity of customs as well as of weights, measures, and moneys, throughout the whole of the monarchy.

Q. Who succeeded him?—A. Charles the Fourth, his brother, called the Fair, who laid hold of the opportunity of the calm of the first years of his reign to repress disorder, either by punishing those who impeded the course of justice, or by a close watch upon the financiers. Some disputes with England were settled by treaty. By his three wives he left only some daughters, and was the last king of the elder branch of the third race of Capets. He died at Vincennes, aged thirty-three, and was succeeded by Philip of Valois, his cousin.

Q. Were there not many contests upon the subject of the regal succession?—A. Yes; Edward the Third, king of England, son of Isabella, pretended to the crown by his mother, to the exclusion of Philip; but the states of the kingdom and the barons assembled, repealed the Salic law. Philip's first exploit was the triumph over the Flemings at Cassel, and he replaced the comte of Flanders on the throne.

Q. Was not Philip engaged in other wars?—A. His wars against England can scarcely be said to have ceased to the present day; their origin was the homage of Guienne, which Philip compelled Edward to do in person, for which he took ample revenge; besides the most important victories already mentioned or referred to, he took Calais, notwithstanding the vigorous defence of John of Vienna. The misery of France became general; salt was taxed; all contributions were increased, and moneys depreciated; and finally, the plague which was raging universally, was felt there to a most lamentable degree. France was not, however, curtailed, except by the cession of Dauphiny, which he had ac-

quired from Humbert the Second, the last dauphin, and he obtained Rousillon, Champagne, and De Brie in return.

Q. Who was Philip's successor?—A. His son John, under whom misfortune did but increase. The arbitrary execution of the constable Raoul, and confiscation of his goods, rendered him odious. Charles the Bad, king of Navarre, assassinated the new constable. The king of England interfered in the quarrel, and sent his son to lay waste Poictou, Berri, and Auvergne. John marched against him, and refused to make peace with the Prince of Wales, whose forces appeared too inferior. The English, fighting from despair, obtained the victory of Poitiers, took the king prisoner, and carried him first to Bourdeaux, and then to England, where he was for four years.

Q. What was the issue of that disastrous battle?—A. The dauphin, Charles, the king's eldest son, an accomplished prince of twenty years old, obtained subsidies and succours from the states general. He had to guard against the intrigues of the king of Navarre, who even made an attempt upon his life. The Parisians, stirred up by their provost, Marcel, would not be appeased until they had murdered him, and received the dauphin, who granted a general amnesty, with loud acclamation. King John had formed an alliance with London, by a treaty still more fatal than the battle of Poitiers, ceding to the English half the kingdom, with four millions crowns of gold. The refusal to consent to it, on the part of the states general, was the occasion of Edward's return into France at the head of one hundred thousand men. A check near Chartres induced him to sign a peace, by which England kept Guienne, Poictou, and Limosin, and the king regained his liberty. John did not long survive his captivity: returning to London for his brother's ransom, he died there, without having enjoyed that happiness which his valour, generosity, and, in particular, his loyalty seemed to deserve. He it was who left behind him the honourable maxim—"That though justice and good faith were banished the rest of the world, they ought to be found in the heart of a king."

Q. Was Charles more fortunate than his father?—A. He had

already shewn himself worthy the name of the Wise, by his exercise of the regency during his father's captivity. Scarcely had he ascended the throne, ere he forced the king of Navarre to cede to the arms of Du Guesclin, his pretensions to the duchy of Burgundy, and to be contented with Evreux, Montpellier, and some other places, in lieu of it. War between France and England was recommenced, under the pretext of the succession of Castile, contested by Peter the Cruel, and Henry, Comte of Trastamara, who was supported by France. The inhabitants of Guienne, on their part, overwhelmed with taxes by the Prince of Wales, demanded justice of Charles the Fifth, as sovereign. Bertand Du Guesclin's death was some months before that of the wise monarch, who was a prey to the slow poison which Charles the Bad administered to him. Charles the Fifth was religious, and a lover of science. He contributed nine hundred volumes to the Louvre library.

Q. Did Charles the Fifth leave any children?—A. He left two sons and a daughter. Charles the Fifth, who reigned after him, and Louis, Duke of Orleans, the ancestor of Louis the Twelfth. Charles was but twelve years of age. His reign was the most unfortunate of any that had been for a long time. The contests on account of the regency excited divisions among the princes of the blood, which were only terminated by the king's death. The duke of Anjou obtained the regency, which his avaricious and bad government rendered fatal to the kingdom. His departure for Italy left the power to the Duke of Burgundy, who put an end to the Flanders war, during which there was a meeting, on account of the taxation of the Parisians, who broke open the houses, hotel de ville, and arsenal. The principal chiefs were arrested, and the riot put down. The troubles existing in England, on account of Richard the Second, were a favourable opportunity for attack, but it could not be turned to account, from the indifferent state of the king's health, and the misinformation of his uncle. The king's majority was no addition to the strength of the government. The constable of Clisson, the head of the council, was assassinated by Peter de Craon, whose person the king demanded from Brittany, with a

powerful force. It was on this expedition that Charles had his first attacks of insanity, which obliged him to be taken back to Paris.

Q. Who governed during the king's incapacity?—A. The Dukes of Burgundy and Berri, to the exclusion of the Duke of Orleans, and thence the long enmity between the two houses, pregnant with such mischief to the state. The Duke of Orleans was assassinated by the Duke of Burgundy's order. The young Duke of Orleans, supported by the Comte d'Armagnac, succeeded in tearing off the Duke of Burgundy's mask, and declaring him an enemy to the state. Then happened the riot of the butchers, termed cabochiens, from the name of one Caboché, their chief.

Q. Did not the English take advantage of these troubles to attack France?—A. By a descent in Normandy, they made themselves masters of Harfleur, and were victors on the plains of Agincourt, where seven princes of the blood, and nearly eight thousand French gentlemen, perished. The Duke of Burgundy, introduced by a traitor into Paris, made a dreadful massacre there, but he soon abandoned the king of England, Henry the Fifth, who had become too powerful by the capture of Rouen, and wished to make friends with the dauphin, who had taken the reins of government. Their interview took place on the bridge of Montereau, where the Duke of Burgundy was assassinated. Nothing could then moderate the vengeance of the new Duke of Burgundy, Philip the Good. He brought about a truce with England, gained over the queen, and conceived the project of setting aside the dauphin, to place the king of England upon the throne, by making him espouse the princess. Immediately after the marriage, Henry the Fifth took the title of regent, as presumptive heir to the crown. In circumstances so critical, the dauphin left nothing to chance. He beat the Duke of Clarence at Baugé, and Henry the Fifth no sooner returned from England, than he died at Vincennes. Charles the Sixth died nearly at the same time, after a reign of forty-two years, without his misfortunes having sunk his good qualities into oblivion.

Q. Did the death of Charles the Sixth occasion any great changes?

—A. The Duke of Bedford continued to govern, as regent, for the young king of England, who was but nine months old, and his power seemed to increase every day. Charles the Seventh, after first losing two battles, brought over the Earl of Richmond, appointing him constable. The English were soon obliged to raise the siege of Orleans, which was defended by the Comte de Dunois, son of the Duke of Orleans. This was the period when the maid, Joan of Arc, reanimated the fallen courage of Charles the Seventh, beat the English at Patay, and brought the king to be crowned at Rheims. Henry the Sixth was likewise crowned at Paris, but the Duke of Burgundy's reconciliation with the king speedily weakened the English party, which the death of the Duke of Bedford ruined entirely.

Q. What became of the maid of Orleans, after such brilliant exploits?—A. Charles the Seventh would not allow her the repose which she was entitled to for having crowned him. She threw herself into Compigny, to defend it against the Duke of Burgundy, who had the infamy, after having made her prisoner in a sortie, to sell her to the English, by whom she was discredibly burnt as a sorceress, in the market-place of Rouen, in 1431.

Q. Had not Charles the Seventh some domestic troubles?—A. The want of discipline among the military made some malcontents, at the head of whom was the dauphin, Louis. This party, which was termed the Praguerie, was soon dispersed. Charles the Seventh being at Bruges, where he was much pleased, had the Pragmatic Sanction drawn up, to regulate benefices, and other ecclesiastical affairs. A three years truce with England gave Charles time to recover his power. The Duke of Brittany, also, at the expiration of the truce, joined him. The English lost all their strong holds; the battle of Fourmigny terminated their successes, and Calais was the only place left in their possession in France. The Dauphin then began to give the king trouble, first in the states of Dauphiny, and afterwards by the Duke of Burgundy, in Flanders. Charles becoming every day more suspicious and fearful of being poisoned, abstained from eating for seven days, which brought on his death, at the age of fifty-eight, after he had reigned thirty-eight years.

This prince was indebted for the surname of Victorious to the valour of his generals, and the Maid, and to the noble and elevated sentiments of Agnes Sorel, his mistress: for he had not, within himself those virtues which make great kings; and he had a great love for pleasure.

Q. Did Louis the Eleventh tread in the steps of Charles the Seventh?—A. On the contrary, he affected to change the magistrates and ministers appointed by his father; he broke through all the good that had been done; loaded the people with taxes, and drew down the hatred of every order of the state. He, in particular, formed the design of levelling the power of the Dukes of Burgundy and Brittany, the only great vassals that still remained. The clergy was uneasy for its privileges, and he revoked the Pragmatic Sanction. At this time rose the league, called the public weal, between the Dukes of Brittany, Bourbon, and Berri, the Comtes de Charolois and Dunois, and many other malcontent nobles. A battle took place at Monthery, and victory was undecided. Peace was afterwards made at Conflans, and the king gave up Normandy to his brother, but retook it shortly after, and drove the Duke of Brittany from his duchy.

Q. How did Louis the Eleventh conduct himself towards the Duke of Burgundy?—A. Charles the Rash, who, in 1467, succeeded his father Philip, began by complaining of the treaty of Conflans not being executed. Louis the Eleventh excited the inhabitants of Liege to revolt, for the purpose of making a diversion. Charles subdued them, and returned to Peronne, where, profiting by an interview with Louis the Eleventh, he seized upon his person, and compelled him to march in his company against Liege, which had risen anew, and obtained a very advantageous treaty. Louis the Eleventh purchased his reconciliation with his brother, the Duke of Berri, by giving him Guienne, the new duke of which died, ere long, of poison. The Duke of Burgundy, who had promised him his daughter, threw suspicion on Louis the Eleventh, and laid siege to Beauvais, which the women valiantly defended, under the conduct of Jane Hachette. There was nothing but a series of treaties made and broken, until the death of the

Duke of Burgundy, which happened in an engagement with the Duke of Lorrain.

Q. What effect did his death produce?—A. It changed the whole face of affairs; for Charles leaving only one daughter, the law of apanage united one part of his states to the crown. Burgundy likewise submitted to Louis the Eleventh, and the kingdom resumed the extent which it had under Philip Augustus. The king, however, committed a great fault in not marrying his son to this Mary, who afterwards married Maximilian, son of the emperor Frederick the Third, and whose dowry consisted of Artois, Flanders, and Franconia. Louis the Eleventh made a truce with England for one hundred years, and engaged to pay fifty thousand crowns a year. The peace was disturbed for an instant by the ambition of Maximilian, who lost Franconia; but the treaty of Arras, afterwards, set all to rights. The dauphin's marriage with the daughter of the duke was concluded upon, but did not take place. The preceding year France had been increased by the addition of Provence, conformably to the will of Charles of Anjou. Louis the Eleventh was struck with an apoplexy, at the castle of Plessis-Tours. A prey to suspicions and terror, he gave the dauphin excellent advice, and blamed his own conduct in certain points. He was a cruel, deceitful, avaricious prince, who had no regard for decorum. It was said of him that he was a bad son, bad father, perfidious friend, and troublesome neighbour. He was the founder of some good establishments, the institution of the order of St. Michael, and the parliaments of Dijon and Bourdeaux.

Q. At what age did Charles the Eighth come to the throne?—

A. He was but thirteen, and his father, who had kept him away from all business, left Anne of France, his eldest daughter, and Anne, Lady of Beaujeu, the government of the king's person, without other regent. The States General confirmed the will, notwithstanding the opposition of the Duke of Orleans, who, being discontented, entered into a league with the Duke of Brittany and Maximilian, but was beaten by the valiant La Tremoille, and made prisoner at the battle of St. Aubin. Shortly after, the Duke of Brittany having died without heirs male, Charles the Twelfth

espoused Anne of Britanny, instead of Maximilian's daughter who being only betrothed, was restored to her father, with Artois and Franconia, which were her dowry. The Duke of Orleans being set at liberty, was afterwards very serviceable to the king.

Q. Did not this marriage make him enemies?—A. The emperor and the king of England flew to arms: but Charles, burning with the desire of reviving his rights to Naples, ceded Sardinia and Roussillon to the king of Arragon.

SEVENTH EPOCH.

CHRISTOPHER COLUMBUS.

A. D. 1492 to 1610.

Q. What was the situation of Italy at the beginning of this epoch?—**A.** It had for some time tasted the sweets of peace, when the pride of a private man set it on fire from one extremity to the other. Ludovic Sforce was not contented with the authority he had usurped at Milan, but he invited Charles the Eighth to revive his rights to Naples, opened, to that young prince, the Milanese, and excited him to pursue his destiny of a conqueror. All the cities submitted to him: Florence, Rome, and Naples; even the Arragonians were expelled, and the arms of France were seen on every edifice. The finest climate, and the pleasures of a life of ease, were not long in diverting Charles from his great views. The army no longer had a curb to its licentiousness. Naples found oppressors in its new masters. The princes were roused. Maximilian, and Sforce himself, saw with regret the dominion of a foreign people. A league was formed to cut off Charles's retreat in every direction. He at length shook off his supineness, left Naples, struck new terror into Rome, went to Florence, and arrived in Lombardy, to conquer at Fornoua. But Naples returned again to its antient masters, and Charles saw, when it was too late, that he had been deceived. Louis the Twelfth, who succeeded him, took up his projects, and punished the perfidy of Ludovic. In the space of a month the Milanese was conquered, and Ludovic compelled to fly: when rising again, he fell into the hands of his enemy, and died in a prison. Louis the Twelfth could, notwithstanding, not remain master of Naples; he was beaten and betrayed, and his unavailing efforts exhausted his kingdom. The Venetians had taken advantage of the troubles of Italy, to appro-

appropriate certain places to themselves. The famous league of Cambray was formed against that republic, which lost, in one campaign, the fruit of two centuries of wise policy; but it divided its enemies; accommodated matters with some, humbled before Julius the Second, the soul of the confederacy, and succeeded in recovering the greatest part of what it had lost. The death of Gaston completed the misfortunes of Louis. He wanted to depose Julius, in the council of Pisa: but Julius, more cunning, assembled another at Rome, excited enemies against Louis on every side, and died in his projects. Louis the Twelfth, during this time, regained the Venetians; for the third time, retook the Milanese, which Leo the Tenth once more wrested from him. Genoa rose, and returned to its first state. One would think that so much blood having been shed in Italy, might have deterred Francis the First from contending for the same rights. His youth, greedy of glory, saw no obstacles; but he was checked by the Swiss, with whom he was obliged to fight two whole days. The Milanese gave itself up, and Sforce went to terminate his misfortunes in France. To Leo succeeded Adrian the Sixth, tutor to Charles the Fifth, who raised him to the pontifical throne; he was of a narrow and weak mind. Nepotism raised after him, Clement the Seventh, commendable for his love of letters. Paul the Third, of the Farnese house, a widower before he came to be pontiff, sometimes displayed firmness; but, to elevate his family, he detached from the dominion of the holy see, the duchies of Parma and Placenza, with which he invested his son Louis Farnese. Fiesco, an ambitious young man of Genoa, succeeded in enslaving it; he drowned himself without restoring it to its antient consideration.

Q. In what state was England at this time?—A. The calm which the wisdom of Henry the Seventh had procured was not of long duration. The impostures and intrigues of one Perkin Warbeck, brought forward by the dowager of Burgundy, excited some uneasiness. The Earl of Warwick was sacrificed to the cruel policy of Ferdinand of Spain, who gave his daughter to Artus only on that condition. Henry the Eighth, on coming to the throne, married Catharine of Arragon, the first of his unhappy wives.

He entered into the league of Cambray, formed by the house of Austria against France; went into Flanders, took Turenne, and gained the battle of Spurs. He soon made peace with Louis, gave him his sister in marriage, continued the same union with Francis the First, and seemed to have extinguished all the long-standing quarrels of the two nations.

Q. Was it not under these circumstances that the New World was discovered?—A. While Europe was in flames, Christopher Columbus, a Genoese, a skilful navigator, and well versed in geography, imagining that there were other habitable countries besides those known, resolved to discover them. Several princes to whom he addressed himself treated him as a visionary. Ferdinand and Isabella turned a more favourable ear to him. He obtained some ships, and after a long navigation, landed upon the Lucayos, or Bahama Islands. This first success required fresh succours, and returning to the New World, he discovered Cuba, St. Domingo, and Jamaica. He brought back immense treasures to his masters, though he did not the less, on that account, die a victim to calumny within the walls of a Spanish prison. Americus Vesputius followed his steps, gave his own name to the fourth quarter of the world, and made two voyages for Emmanuel, king of Portugal. Spain, exhausted by numerous emigrations, had also to suffer from superstition. The clergy, with Mendoza and Ximenes at their head, saw, with uneasiness, the Moors exercising their worship on the faith of treaties. An edict was extorted from the queen, which left them no alternative, either between leaving their country, or renouncing the religion of their ancestors. Scaffolds were made ready on every side, and thousands of Moors perished. The daughter of Ferdinand and Isabella, transferred, by marriage, their states to the house of Austria, and Philip saw himself master of the two worlds. Charles the Fifth, his son, at sixteen years of age, received in Flanders the news of so rich a succession. His grandfather Maximilian soon left the empire vacant. Charles and Francis the First were two rivals worthy each other. His laurels attracted the attention of Europe to the latter: but the preference accorded to Charles the Fifth became a source of endless wars.

Francis was made prisoner at Pavia. It was not till the reign of Henry the Second that Charles's fortune abandoned him; he consented to peace, and silencing his ambition, renounced the empire in favour of his brother, left Spain to his son, and went to look for happiness in cloistered obscurity. A profound knowledge of man, the art of assigning to every one his proper place, and an unexampled activity, put him in the first rank of those who have governed the world.

Q. Which were the most remarkable events relating to England at this period?—A. Henry the Eighth succeeded his father, and espoused Catharine of Arragon; but that ferocious prince, who acknowledged no religion but his own will, ere long, repudiated her to marry Anna Bullen. To this, who died on a scaffold, succeeded Jane Seymour, afterwards Anne of Cleves, Catharine Howard, and Catharine Parr. His favourites were not less spared. Fisher, and sir Thomas Moore, the lord chancellor, were put to death for not abjuring their religion. Clement the Seventh excommunicated him, but he made the English clergy recognise him as the head of the church. He formed a parliament to sanction his authority and caprice, and, in the midst of a general overthrow, his state remained tranquil. To this monster, his son Edward the Sixth succeeded, under the regency of the Duke of Somerset, whose head was soon afterwards brought to the block. Edward introduced the protestant religion, and died, pointing out lady Jane Grey for his successor. Mary, Edward's sister, was preferred: Lady Jane Grey abdicated, and soon afterwards perished on the scaffold. To the sanguinary Mary succeeded Elizabeth, her sister, the daughter of Anna Bullen. When she had secured her authority, she declared against the catholics, and established the English religion. The judicial murder, which she committed, of Mary Queen of Scots, widow of Francis the Second, was a blemish to her glory which can never be effaced. Few monarchs ever had a more perfect knowledge of the art of government. The English navy was raised to the highest degree of celebrity, by the matchless victory over the "Invincible Armada" of Spain, in 1588, by Drake, and others. She assisted the rebels of the Low Countries with troops, and

bucked the efforts of Henry the Fourth against the League. Some haughtiness towards her favourite, the Earl of Essex, excited him to revolt, in consequence of which he was brought to the block: but her grief for his loss went with her to the tomb.

Q. What was the state of Spain at this time?—A. Philip the Second, who possessed such powerful means for effecting great deeds, attempted nothing that answered: basely sanguinary, he threw his family into trouble, of which his wife, his son, and his mistress, were the victims. Philip the Third, with less talents, and fewer vices than his predecessor, seemed to reign but for trifles, and to busy himself merely with the barbarous ceremonies of the inquisition. The navy declined, the finances were mal-administered, and Spain was depopulated for America. The United Provinces, turning these faults to their advantage, cemented their liberty every day. The brave Maurice confirmed that rising republic, and his powerful fleets, spread over all the seas, pillaged at the same time, the Antilles, Brasil, and the Moluccas, and founded vast colonies at eighteen thousand miles from his country. Germany alone enjoyed profound peace. Ferdinand the First governed with wisdom. After him, Maximilian the Second, and Rodolpho, obtained blessings on their heads. But under the great Henry, the succession of the duchies of Cleves, and Juliers, set Europe in a flame, and were the cause of much bloodshed.

Q. Did Sweden enjoy the fruits of the peace of Germany?—A. By a second renunciation of the treaty of Calmer, she had broken all union with Denmark, and re-established the dignity of administration. Christian the Second, consumed by ambition, saw with inquietude this fine kingdom slipping through his fingers; he entered it with conquest, and laid siege to Stockholm. Stenon, the new administrator, beat him; but, too ready to make peace, he sent Gustavus Vasa, as plenipotentiary, one of the race of antient kings. Christian detained him prisoner, and renewed the war. Gustavus made his escape, and after unheard-of dangers, was acknowledged by the Dalecarlians, and retook from the usurper all the towns he had obtained possession of. Master of Stockholm, he there received the sceptre, and employed himself in re-

storing to his country the lustre it had lost, by maintaining it in peace, externally and internally, during a long reign.

Q. What became of Poland?—A. Having lost Sigismund-Augustus, the last of the Jagellons, its choice of the Duke of Anjou, had, since Henry the Third, occasioned a new interregnum, when he was recalled to France. Bathory, aided by the famous Zamoski, maintained himself against all his united neighbours. Sigismund, prince of Sweden, was placed on it after him: but his avidity made him lose Sweden, to which he was called by birth. During this time Russia was a prey to all the horrors of civil war. To the ferocious Basilowitz succeeded Theodore, unfortunate in war, and contemptible in peace. His brother Demetrius, was assassinated by Borris, who seized the throne, but who had afterwards to combat, successively, two pretended Demetrius's, the first of whom fell a victim to the preference he gave the Poles over the Russians; the second, more clever, supported himself. Sigismund took advantage of its misinformation to fall upon Russia, Sweden interposed, and the North was inflamed by an impostor.

Q. What then was the state of the church?—A. At this moment it was that Paul the Fourth put an end to the council of Trent, by his nephew Charles Borromea, archbishop of Milan, equally celebrated for sanctity of manners and charity. Pius the Fifth next edified the world by his piety, but his harshness lighted numerous faggots at Rome, where he persecuted the protestants. In his time, Venice and Spain triumphed over the Ottoman forces at Lepantus, and made the Porte tremble. Gregory the Thirteenth was revered for his government, and he immortalized himself by reforming the calendar. A shepherd of Montello was shortly invested with the purple by Pius the Fifth, and placed upon the pontifical throne by some ambitious men, who thought they could take advantage of his weakness; but Sextus Quintus astonished the universe by a government replete with prudence and vigour. Public safety established, licentiousness repressed, Rome embellished, the monuments of antiquity drawn from the ruins in which

they were buried, and arts and sciences powerfully protected, illustrated his pontificate. After him, Urban the Seventh, Gregory the Fourteenth, and Innocent the Ninth, passed like shadows over the canvas. The most amiable virtues ascended the ecclesiastical throne with Clement the Eighth, who gained the love of France, and of the literati. He, by the absolution of the great Henry, assured him the tranquillity of his kingdom. Leo the Eleventh was no sooner raised to the pontificate than it was taken from him. Borghese, who succeeded him, by the name of Paul the Fifth, treated sovereigns with haughtiness, and compromised his dignity by his dispute with Venice.

Q. What is known of the states of inferior note?—A. Cosmo the Second obtained from the pope the title of Grand Duke of Tuscany, which the empire confirmed to him. Ferdinand's daughter, Maria of Medici, became the wife of the hero who governed France. The Farnese house acquired additional lustre from the exploits of the duke Alexander. Savoy continued to produce great men. Emmanuel Philibert returned to his states, by the peace of Chateau Cambresis, and governed wisely. He increased his possessions, became arbitrator for his neighbours, and ended a wise administration in a happy old age. Charles Emmanuel, in his agitated reign, profited by the troubles of France, to get possession of the marquisate of Saluces, and make his neighbours uneasy. Lorraine was quiet and happy under Charles the Second, who derived from the French court a taste for science, and attached himself with sincerity to Henry the Fourth. The Swiss, tranquil among themselves, and at peace with all powers, were a model of a well regulated state. Geneva supported itself by its industry, and notwithstanding the attempts of the Dukes of Savoy, tasted a tranquillity for which it was indebted to its own wisdom.

Q. Did not Turkey seek to aggrandise itself in Europe?—A. The Porte, triumphant in Persia, in Africa, and in Hungary, flattered itself that the same good fortune which had rendered it victorious at Rhodes would follow it to Malta; but the fortress of

La Valette renewed these prodigies effected at Candia, and the extensive fleet of the Ottomans, after six months fighting, were mere wrecks. To repair it, Soliman penetrated Hungary anew, and died in the arms of victory, before Sigeth. Just and beneficent, he had polished his nation in leading it to glory. The Ottoman power was at its zenith, and could not but decline, from the innovation of its sultans. It failed at Lepantus; Moldavia escaped it. For all this period, in like manner, nothing was to be seen in Persia but vice on the throne, effeminate monarchs, and transitory gleams of glory.

Q. What steps did Charles the Eighth of France take after his treaty with the king of Arragon?—A. He went into Italy, and six months completed his conquests; he was invested by Alexander the Sixth. Success so rapid awakened all princes. Henry the Seventh of England, Maximilian, the Venetians, and Ludovic Sforce, formed a league to drive him out of Italy. He gained the battle of Fornoue over them, but it was with difficulty he got back to France. The kingdom of Naples was instantly retaken. He died some months afterwards, aged twenty-eight, at Amboise.

Q. Who succeeded Charles the Eighth?—A. Louis the Twelfth, who was thirty-six years old. He was the son of a grandson of Charles the Fifth, and grandson of the Duke of Orleans, who was assassinated by the Duke of Burgundy. Good, beneficent, and generous, he was a model for kings. On coming to his throne, he remitted half the taxes to the people, and pardoned those with whom he was dissatisfied. He annulled his marriage with Jane of France, daughter of Louis the Eleventh, having had no children by her, and espoused his predecessor's widow, Anne of Brittany, then her third husband, the sister of Henry the Eighth, king of England. Louis now thought to exercise the rights of his grandmother, Valentina, over the duchy of Milan, then possessed by Ludovic Sforce. He conciliated the Venetians and the pope, and in twenty days made himself master of Milan, into which he made his entry.

Q. Did Louis preserve that duchy long?—A. Hardly had he returned to France before he lost it; La Tremoille was obliged to

conquer it again, and brought Sforce prisoner to France, where he died in ten years. Louis the Twelfth, and Ferdinand the Catholic, acting in concert, conquered the kingdom of Naples, whose king, Frederick, went to France to relinquish his rights to Louis, and receive in its stead the province of Maine. Italy, owing to misintelligence, was not long in becoming the property of the French and Spaniards. Louis wanted to remedy it, by promising to the young Charles, afterwards Charles the Fifth, his daughter Anne, on whom he had settled Brittany, Burgundy, &c. but the states general assembled at Tours, protested against the inconvenience of such a dismemberment, and the princess married the comte of Angouleme, afterwards Francis the First.

Q. Had not Louis other subjects for war in Italy?—A. The ambition of Julius the Second, who aspired to the extension of the domains of the holy see, prevailed on the Genoese to rise against France, on which account Louis entered their city in triumph, put their doge to death, and imposed on them a fine of three hundred thousand ducats. The conduct of the Venetians, during this war, was the cause of the league of Cambray, between Julius the Second, Ferdinand the Catholic, Henry the Eighth, Switzerland and France. Louis returned to Italy, and obtained a complete victory over the Venetians at Aignadel. The Venetians made a separate peace with Ferdinand. Julius the Second, ever jealous of the power of France, entered into a new coalition with Spain, Venice, England and Switzerland. Louis sustained all the efforts of his enemies, but after various successes, the Duke Gaston de Foix, his nephew, having been killed at the age of twenty-three, his death brought on the loss of the Milanese, and occasioned great disgust at these fruitless wars. The Genoese again revolted, and Maximilian, the Swiss, and Henry the Eighth, fell upon France. The latter made a landing in Piccardy, besieged Turenne, and gained the battle of Guinegate. Dijon was attacked by the Swiss, and saved by La Tremouille, governor of Burgundy. Louis the Twelfth then entered into a treaty with Henry the Eighth, and married his sister. The desirable fruits of a general peace were on the eve of

being gathered, when Louis the Twelfth was taken off from his people, of whom he merited to be called the father.

Q. Who succeeded Louis the Twelfth?—A. Having left no male issue from his three wives, Francis, comte of Angoulême, succeeded him as son of the grandson of duke Louis of Orleans. With this prince commenced the branch of the latter Valois, which was not fortunate. Francis the First resuming the projects of Louis on the Milanese, first resorted to an alliance with England, then with the archduke Charles, and lastly with the Swiss, which he could not then accomplish. The chancellor Du Prat, endeavouring to raise money, advised him to sell the judicial charges. Francis the First having crossed the Alps, penetrated as far as Milan, where he found the Swiss encamped near Marignan. An engagement began, and continued two whole days: Francis the First and Bayard performed prodigies of valour: the marechal of Trivulce, who had been in eighteen battles, characterised this as a battle of giants. The Swiss lost fifteen thousand men. Sforce gave up the Milanese, and died in France. The Swiss acceded to a perpetual treaty of peace, since which they have remained the faithful allies of France. Leo the Tenth, also reconciled, came to a conference, at which the pragmatic sanction was abolished, and the concordate substituted in its place, whereby the king had the right of presentation to benefices.

Q. What happened to Francis the First after his signal success?—A. The death of the emperor Maximilian the First held up the imperial throne to the ambition of Francis the First and Charles of Austria. Charles was successful, and Francis never forgave it: thence the endless wars between the houses of Austria and France. Francis's first care was to attach himself to Henry the Eighth, with whom he had an interview near Calais: but Charles the Fifth went to Dover, gained over cardinal Wolsey, and deranged every thing. A campaign was opened, and pursued with alternate success. The Milanese was detached by the intrigues of Leo the Tenth and Charles the Fifth, and France had at the same time against it the new pope Adrian the Sixth, the Emperor, England, Venice, Genoa, and by a run of ill luck, the constable of Bourbon,

who, owing to some dissatisfaction, had joined Charles the Fifth, of whose armies he had the command.

Q. Did not so formidable a combination deter the king from his project against the Milanese?—A. No: he resumed it, and with various success. The war was general in Picardy, Flanders, and on the side of Spain. The Imperials and English were repulsed by La Tremouille, and the dukes of Guise and Vendome; but Bonivet was defeated in Italy, where the brave Bayard lost his life. Francis was not discouraged by this reverse: he crossed the mountains, and re-entered the Milanese. Directed by Bonivet's advice, he laid siege to Pavia against the opinions of the oldest officers. The confederates had time to give it succours, and fought the famous battle of Pavia, in which Francis behaved himself like a lion, received several wounds, and was taken prisoner. Bonivet killed himself in despair.

Q. What became of Francis the First?—A. He wrote to the duchess of Angoulême, whom he left regent, these few words: "All is lost but honour." Transported to Spain, he was kept in the castle of Madrid, where, falling ill from chagrin, he thought of giving up his crown to the dauphin. He concluded a treaty at Madrid, by which he relinquished Burgundy, Flanders, and Artois. The emperor, however, fearing the king might die, consented to release him for his two sons, and Francis returned to France. His, being made a common cause with all princes, who were fearful of the growing power of Charles the Fifth, a confederacy was formed, consisting of the Italian princes, the king of England, and Francis the First. The indignant emperor sent Lannoy into the states of the church, where he took many places. The constable of Bourbon, even after he had conquered the Milanese, being in want of money, appeared before Rome, and promised his troops the plunder of the city. He ordered an assault, in which he was himself slain. The soldiers, still more enraged at the loss of their leader, entered it within two hours, and put to death without mercy all that came in their way, sacked the houses, profaned the temples, and gave themselves up to the greatest excesses. These horrors, till then unheard of, lasted for two months.

Q. What was the consequence of all these unhappy events?—

A. The war was carried on with redoubled vigour. The marechal of Lautrec retook the greater part of the Milanese, pillaged Pavia in memory of the king's imprisonment, forced the imperialists into a treaty with the pope, who was invested at St. Angelo, and then went to Naples, where he perished with his army by the plague. At last the ladies' peace was concluded at Cambray: it was so called, from the plenipotentiaries being females; the duchess of Angoulême for Francis the First; and Margaret of Austria, governor of the Netherlands, for Charles the Fifth. The king pledged himself to the emperor, at a ransom of two millions of gold, to relinquish the sovereignty of Flanders and Artois, and to marry Eleanora, the emperor's sister, whose attentions had softened his captivity.

Q. What did Francis after this treaty?—A. Finding himself perfectly free and at peace, he turned his attention to repressing innumerable disorders, making wise establishments, correcting the abuses of justice, and maintaining the religious tranquillity which was already menaced by the reformers. He instituted the college of France, protected literature, which he himself cultivated, encouraged the arts, built seats, founded the royal printing-office and library, honoured men of letters, and merited the title of the restorer of science. However Sforce being dead, the king demanded the investment of the Milanese from the emperor. His refusal rekindled the war, and Charles, extending his wild ambition to the conquest of France, made an irruption into Provence, whence he was driven back in every quarter with great loss. The Flemings, who had entered Picardy, experienced the same fate. The alliance concluded between Francis the First, and Soliman the Turkish emperor, rendered Charles more prudent: he made a truce for ten years, which his want of probity, and the assassination of two French ambassadors by Dugast, governor of the Milanese, soon broke. Five French armies being on foot, Charles the Fifth repaired to Soissons; but renewed negotiations effected the peace of Crespy, in which Henry the Eighth was not included. Success was equal on either side; the English had taken Boulogne,

the ransom of which was stipulated in the peace of 1546. Henry the Eighth and Francis the First both died within the three first months of the following year, alike victims to their taste for pleasure.

Q. By whom was Francis the First succeeded?—A. By his son Henry the Second, who was twenty-nine years of age. The moderation which he displayed on several occasions excited the highest hopes; but he did not withhold making changes in no wise favourable to him. He exiled the marechal of Annebant, and recalled the constable of Montmorenci against his father's advice. He broke the peace with England, retook Boulogne, put his frontiers out of the reach of insult; and, taking advantage of the dissatisfaction of the German princes, entered Lorraine, and took Metz, Toul, and Verdun. Charles the Fifth flew to besiege Metz, and was forced by the duke of Guise to raise it with disgrace. He revenged himself on Turenne in Picardy, which he utterly ruined; but was soon after defeated at Renti. Henry had the noble desire of combating Charles the Fifth hand to hand, but the emperor always took care to avoid it. The imperialists were more fortunate in Italy; the brave Monthec could not save Sienna. All these defeats and victories decided nothing. Charles, taking a disgust at grandeur, and affected with the ills he had done, astonished all Europe by abdicating the sceptre, and retiring into a monastery.

Q. Was there any change in the political system from the retreat of Charles the Fifth?—A. Pope Paul the Fourth, who hated the house of Austria, proposed to France the conquest of the kingdom of Naples. Henry the Second accepted it against the wise counsel of the constable of Montmorenci, cardinal Tournon, and Brisac. Henry, duke of Guise, was sent to Italy, where he carried on an unfortunate war for want of the succour promised by the pope. At the same time the duke of Savoy, general of the troops of the king of Spain, besieged St. Quintin; and the constable, who was sent to reinforce it, was overcome and made prisoner. The duke of Guise was obliged to be recalled: that great man restored confidence, fell upon the English, took

Calais in eight days, and drove them entirely out of France. He also obtained advantages over the Spaniards, and forced them into the peace of Chateau Cambresis. France did not gain so much as might have been expected: it restored every thing except Metz, Toul, and Verdun. The marriage of Elizabeth of France with Philip the Second, and his sister Margaretta with the duke of Savoy, to whom he gave back part of his states, were also determined upon. In the midst of the feasts consequent on this marriage, Henry the Second, jousting at a tournament with the earl of Montgomery, received through the visor of his helmet a thrust of the lance, which pierced his right eye. He died of the wound on the 10th of July, 1559. That prince, full of courage and able policy, had great zeal for religion; but he gave way too easily to his favourites and mistress, the duchess of Poitiers.

Q. What change did the unexpected death of Henry the Second bring on?—A. The result was a general confusion. Peace not well settled, discord fomented by religionists, government divided into factions, jealous neighbours, and the youth of Francis the Second, all concurred to render this reign most unhappy. From the preceding reign, the duke of Guise had, by his services, made himself very necessary and powerful. The queen mother, Catherine of Medici, who was very ambitious, had attached herself to the princes of that house, by keeping the princes of the blood, and the Montmorencis, at a distance. The prince of Condé convoked an assembly of the principal princes and nobles, and painted, in glowing colours, the slavery in which it was intended to keep them. Admiral Coligny agreed with him, inflamed the minds, and resolved to put himself at the head of the calvinists, whose numbers were considerable, massacre the Guises, and make themselves masters of the king. The conspiracy was discovered by a confidant of Renaudie; and the duke of Guise, who gave the information to the king, was declared lieutenant-general of the kingdom. The court was transferred to Amboise, where the conspirators were arrested and executed. The states-general were convoked at Orleans, whither the king of Navarre and prince of Condé were ordered to repair: their persons were seized, the

prince of Condé was put upon his trial, and condemned to lose his head. The king's death, which happened on the fifth December 1560, saved him.

Q. Who succeeded Francis the Second?—A. His brother, Charles the Ninth, who was but ten years of age. Catharine of Medici, his mother, retained the administration of affairs, and constantly endeavoured to destroy one faction by setting on foot another. Anthony, the father of Henry the Fourth, had the title of lieutenant-general of the kingdom, the constable of Montmorency was recalled, and the prince of Condé set at liberty: the protestants were endeavoured to be reclaimed by public conferences, known by the name of the Colloquy of Poissy. A triumvirate was at this time formed by the constable, the duke of Guise, and the marshal of St. Andrew, whose aim was to balance the power of the calvinists. The latter having insulted the attendants of the duke of Guise at Vassy, a massacre was the consequence, which might be looked upon as the first explosion of the civil war. Condé having headed the Huguenots, took possession of several cities, and amongst them Orleans and Rouen, the retaking of which cost the king of Navarre his life. At the battle of Dreux the marshal of St. Andrew fell, and the constable lost his liberty; as likewise did the prince of Condé on the other side. Orleans alone remained to be taken, its siege was decided upon, and the duke of Guise made sure of it: he was killed by one Poltrot, a fanatical young gentleman.

Q. What happened in consequence of his death?—A. The court, in the greatest consternation, hastened to conclude a peace on terms of great advantage to the Huguenots. The king and queen travelled through the different provinces to make themselves acquainted with the true state of their affairs: they every where found the Huguenots party so considerable, that, in compliance with the counsel of the duke of Alba, they made fresh levies of troops. The protestants exclaimed against the oppression, and revolted again. They were on the point of carrying the king and queen off from Monceaux en Brie: but they obtained some information of it, and retired to Meaux, whence the Swiss took her to

Paris. To prevent the siege, the constable Anne of Montmorenci gave the calvinists battle on the plains of St. Denis, where she was mortally wounded at the age of seventy-four: both parties claimed the victory. The prince of Condé however fell back; Henry, duke of Anjou, the king's brother, was made lieutenant-general of the kingdom, and, after different hostilities, peace was made at Lonjumeau, called the short peace, because it lasted but six months.

Q. To what was its rupture attributed?—A. To the fear which the prince of Condé and admiral Coligny had of being arrested. They retired to Rochelle, where the duke of Anjou came up with them near Jarnac and beat them, and the prince of Condé was taken and killed in cold blood by Montesquieu. They then called to their assistance Jane of Albert, queen of Navarre, who reanimated the Huguenots, and brought them as a chief her son Henry, then but sixteen years old, and afterwards Henry the Fourth. The Germans also came up, and, to take advantage of the ardour that was testified, gave battle; but the duke of Anjou was again victorious. In spite of all those advantages, the Huguenots could not be overthrown; they obtained an honourable peace, with many cities, and the marriage of the young Henry with Margaretta, sister of Charles the Ninth. The admiral then went back to Paris, where he was included in that horrid massacre of the Huguenots which took place in the night of St. Bartholomew, 24th August, 1572. The prince of Condé and king of Navarre saved their lives by abjuration. The Huguenots still remained formidable, refused to deliver up their strong places, and Rochelle became the bulwark of the new war. The duke of Anjou, with all his ability, could make no impression upon it, and he concluded a peace the instant he was informed of his election to the throne of Poland.

Q. What that peace solid?—A. The Huguenots were not long in rising again: another party likewise showed itself, called politicians, whose pretence was to reform the state. The duke of Alençon, the king's brother, and the Montmorencis were the chiefs, and the protestants joined it. The king's health grew

worse every day, and he fell under it on the 30th May, 1574, in his 24th year, leaving the crown to his brother Henry. Charles the Ninth had wit, courage, and love of glory ; but was irascible and debauched. He took advantage of the great lawyers of his time, to reform the legislation of France, and establish better laws. A great many fine ordinances have, by their wisdom, made the weakness of his government forgotten ; but no excuse, no palliative can be offered for the murders and horrors committed in his reign, and by his own orders.

Q. How did Henry act when apprised of his brother's death ?

—A. He secretly quitted Poland and returned to France, of which Catharine had been declared regent. He pardoned his brother, the duke of Alencon, and the king of Navarre, but resolved to make war on the Huguenots, who were headed by the prince of Condé, and the marechal of Auvinvill. Then it was that Henry the Third, to that time so remarkable for his valour, became weak, fickle, disinclined to business, and contemptible to both parties. Conspiracies were formed against him, and the authors went unpunished. Catharine ever apprehensive of the union of the duke of Alencon and king of Navarre, thought it indispensable to treat with them, and the edict of May 1577, permitted the Protestants the free exercise of their religion.

Q. What effect did the promulgation of this edict produce ?—

A. The Catholics who thought themselves sacrificed, formed different parties in the provinces under the name of the Holy League. The bloody duke of Guise, was its main spring. The ascendancy of the clergy was to be employed to excite the people for the purpose of placing all the king's authority in the hands of the duke of Guise, and destroying the chiefs of the Protestants. A copy of this project fell into the king's hands, who thought he could not better disconcert the league than by declaring himself its head. The States-General were afterwards convoked at Blois. Before long Henry the Third, by way of attaching to him the principal nobles, instituted the order of the Holy Ghost ; but the king of Navarre under pretence of faith not having been kept with the Huguenots, resumed his arms, not intending to lay them down

until he was acknowledged king by all France. He, in fact, soon found himself presumptive heir to the crown by the death of the duke of Anjou, who not having been able to obtain the confidence of the Flemish, although called on to defend them against the king of Spain, returned to die at Chateau-Thierry.

Q. What then became of the league?—A. Supported by the pope and the king of Spain, the duke of Guise was declared its chief, and Catharine, that imperious queen who had held the authority under the two preceding reigns, wishing still to preserve some part of it, declared for the house of Lorraine. The cardinal of Bourbon was given to understand, that the heresy of his nephews might place him on the throne. The cardinal issued a manifesto which was the signal for war. The confederacy took several cities; Guise surprised the town of Verdun without the indolence of Henry III. being at all moved, by such acts of rebellion: he let the queen even prepare an interview for him at Nemours with the duke of Guise, thereby confirming the annihilation of the regal authority. Sextus the Fifth, likewise wishing to interfere in the business, excommunicated the king of Navarre and the other princes. But the latter opposed a manifesto to him, which was posted even upon the Vatican itself.

Q. What was the result of this treaty of Nemours?—A. Much animosity on both sides. The protestant princes termed it abuse, and continued the war which was named that of the Three Henrys, from Henry the Third; Henry king of Navarre; and Henry duke of Guise. Some Parisian curates at this time associating themselves with persons of greater credit, formed the faction of sixteen. The king was forced to issue an edict, compelling all the Calvinists to abjure under penalty of their property being confiscated; and endless disorders were the consequence. The king of Navarre on his side, made use of reprisals in the countries he was master of, and possessed himself of many places in Poitou. He defeated the young and valiant duke of Joyeuse, who lost his life on the plains of Coutras with three thousand men. Paris was in a flame. The new success of the duke of Guise, increased the insolence of his confederates, who called him to Paris notwith-

standing the king's prohibition. The duke filled the city with troops, barricaded the streets, disarmed the king's troops, and obliged the king to withdraw to Chartres. Catherine staid at Paris to negotiate. Guise to preserve his authority, gave Bussi-Leclerc, the most violent of the sixteen, the government of the Bastile; and the king went to Rome and concluded a disgraceful treaty of union. At last, sensible that he was deceived on all sides, he assembled the states at Blois, with the secret design of getting rid of the duke, whatever might be the consequence.

Q. What was the result of the assembly of the states at Blois ?
—A. Henry the Third conceiving that he could not extricate himself from his difficulties, but by a stroke of authority, brought the duke to him under some pretence, and had him stabbed in his own room, as well as his brother the cardinal; the cardinal of Bourbon was shut up, and the principal heads of the league arrested. At this news Paris rose, the sixteen put the duke of Anmale at their head, and every pulpit animated the people against its sovereign. Had Henry the Third hastened thither directly, he could have dispersed the factious, but he giving time to the duke of Mayenne he declared himself lieutenant-general of the kingdom. The Sorbonne released the subjects from their oaths of fidelity, and in short, there was a general overthrow. The parliament, suspected of remaining faithful to its king, was sent to the Bastile.

Q. What could Henry the Third do in these dreadful circumstances ?—A. He made an immediate appeal to the king of Navarre at Tours, and their union was sincere. With the succours which he brought, and ten thousand Swiss who joined them, the two kings marched to Paris where Mayenne commanded. They took possession of the heights of St. Cloud, and began the siege confident of success. The league formed the plan of assassinating the king, and a jacobin undertook the enterprise. He effected his purpose on the first of August, 1589, and Henry the Third died in the arms of Henry the Fourth, whom he declared his successor, and he was acknowledged by all his court. Thus ended the branch of the Valois.

Q. What right had Henry of Navarre to the crown?—A. He was a descendant of Robert of France, comte of Clermont, fifth and last son of St. Louis. He was the son of Anthony of Bourbon, Duke of Vendome, and Jane of Albert, heiress of Navarre. He was in his thirty-sixth year when he was acknowledged king by most of the Catholic lords and Huguenots, who had remained faithful to Henry the Third. The defection of several others who joined the duke of Mayenne preventing his continuing the siege of Paris, he retired into Normandy, that he might be more within the reach of the assistance of Elizabeth. On his side the duke of Mayenne proclaimed the old cardinal of Bourbon king, prisoner, as he was at Poitou, and went to the battle of Arques, near Dieppe. Henry having received a reinforcement of four thousand English advanced to Paris, forced some of the suburbs, and then falling back upon Dreux, beat Mayenne a second time. For four years successes were alternate. Some nobles attached to Henry, pressed him to abjure his errors, and assured him that as soon as he was taken into the bosom of the church, all the French would acknowledge him. His abjuration took place at St. Denis the 25th July, 1493.

Q. Did the change of religion produce those good effects which the king expected from it?—A. The greater part of the nobles returned to obedience. Paris opened its gates to him the 22d March, 1594, and he was crowned at Chartres. Scarcely had he been seated on his throne when two wretches attempted his life. One of these had been brought up amongst the jesuits who were banished the kingdom in consequence, but were recalled a few years after. Henry ever pursued the remains of the league, which still subsisted in Burgundy, to which the Duke of Mayenne had retired. The defeat of the Spaniards having deprived the duke of every support, he made his peace as well as the Duke of Mercœur, who returned Brittany to the king. Henry published at Nantes that famous edict so favourable to the Protestants. He then thought of dissolving the marriage into which he pretended that he had been forced, with Margaretta of Valois, the daughter of Henry the Second, and he some months after mar-

ried Mary of Medici, daughter of the Grand Duke of Tuscany, and had a son by her the following year.

Q. Was not the tranquillity somewhat disturbed shortly after this took place?—A. Biron conspired against the state. He had signed a secret treaty with Spain, to give up to it certain provinces, and he was to have Burgundy, of which he was governor, in perpetual sovereignty. Henry only required his acknowledgment of his fault as the terms on which he would pardon his old friend: Biron would not make it, and was executed. Henry pardoned many others, and tranquillity was restored. However, Henry enraged at the troubles which Spain had excited, prepared to humble it. He had already secured in his interest England, Denmark, Venice, and the Protestants of Germany. A hundred thousand men were in readiness to march under his banners, and forty millions of money were in his treasury, destined for this war, when he was assassinated in the midst of Paris, and in his friends' arms, by Ravallac, a priest. He was really a good prince, whose name cannot be mentioned without praise; a great king, brave warrior, combining with extreme frankness the most adroit policy, and an inexhaustible fund of humanity.

Q. What sensation did his death excite?—A. The kingdom was in consternation; every one lamented his father or his friend. The misfortunes of the anarchy which had been experienced were recollected, and recourse was again had to a regency, Louis the Thirteenth being but nine years old. Mary of Medici was declared regent by Parliament.

SECOND PART
OF THE
SEVENTH EPOCH.

A. D. 1610 to 1648.

Q. What became of Spain during the minority of Louis the Thirteenth?—A. Spain perceptibly declined under Philip the Third, and his weak ministers, who did not know how to make use of the troubles of France. The duke of Ossone, viceroy of Naples, undertook without the consent of his court to reduce all Italy to submission. His Venetian conspiracy was discovered, and its blackness fell upon the chiefs. Philip the Fourth having as little stamina as his father, confided the sceptre to the hands of Olivarez, who, cajoling the weakness of Lewis and his mother, supported the Calvinists. Deceived for a moment by the feigned moderation of Richelieu, he saw and repaired his error, but split afterwards against the genius of that great man. Spain recommenced war with the Dutch. Maurice, fired with the ambition of enslaving his country, sought to throw the state into general confusion, and saw with secret rage, the wise Barneweldt disconcert his manœuvres, and by his ability make commerce flourish, and interest part of Europe in the fate of Holland. The treaty of Breda, took the sword from Maurice's hand. Unmasked and watched in all his steps, he resolved on the destruction of Barneweldt, brought him forward as an impious man, and accused him of the intention of giving up his country to Philip. The head of Barneweldt fell upon the block, and the celebrated Grotius, his friend, could scarcely save himself. Holland was thenceforth only a field of battle, on which Spain endeavoured without avail, to revive its ancient rights. Holland rendered itself independent, and its flag was spread on every sea.

Q. What were the principal circumstances of the revolution of

Portugal?—A. The Duchess of Mantua, appointed vicereine, enjoyed only honours. The supreme authority was reposed in the hands of Vasconcellos with the hatred of his fellow citizens. Every wish was directed towards the duke of Braganza, whose affability made him adored at Villa Viciosa, where he resided. Married into the Medina family, he was the less suspected by the Spanish government. However, from this alliance it was that the blow was to be struck which would overthrow the authority of Spain. The duchess of Braganza sighed for a throne to which the voice of the people called her. Pinto, his steward, had the same views: he sounded the principal nobles, the superiors of the monks, the higher clergy, and the heads of the citizens. Vasconcellos informed by his spies, communicated his suspicions to Olivarez. To remove the duke of Burgundy from Villa Viciosa, the minister sent him a flattering letter, with the office of inspector general of the fortifications of the kingdom, and at the same time forwarding to all the governors an order to arrest him as soon as ever he appeared. The snare was perceived; the prince appeared at Lisbon, which he entered amid the acclamations of the inhabitants, and might at that instant, with a little firmness and courage, have been proclaimed king. Olivarez no longer concealed his revenge, but ordered him to give an account of his conduct. It was impossible to draw back, the duchess and Pinto made it known to the conspirators, who went by different ways, invested the palace, and proclaimed Braganza. In vain Vasconcellos hid himself; he fell under repeated blows. The vicereine was put into a place of safety, and before the close of the day, Lisbon had changed its master. The same revolution speedily ran not only through all the towns but even to the colonies. This resolution, which secured the crown of Castile, gave another powerful ally to Richelieu. Philip thought to repay himself upon France, at the death of Louis the Thirteenth and Richelieu; but the genius of the latter had survived him in the council. His plans were followed up, and Anne of Austria knew the extent of her duties. D'Eng-hien, as soon as he left college, defeated on the plains of Rocroy, the old Spanish bands, took the strongest places of Luxembourg.

and subjected Flanders to the laws of Louis the Fourteenth. Philip was beaten in Germany, in Italy, and in his own kingdom. He disengaged himself from Holland, by consenting to acknowledge its independence, and continued a war with France which prepared it for new reverses.

Q. What events were then going on in Germany?—A. Rodolph the Second stripped of Austria, Bohemia, and Hungary, was satisfied with the title of emperor, and gave himself up to his taste for the sciences. The more ambitious Matthias relieved the three kingdoms, and died without posterity. Ernest of Mansfeldt, a Lutheran, desirous of serving his sect, stirred up Bohemia, and prepared Germany for a long and sanguinary war, which after having for thirty years spread its flames through the greatest part of Europe, produced the famous treaty of Westphalia, the basis of the Germanic body. Gabor, Mansfeldt, Christian, Brunswick, Valstein and Gustavus more celebrated than them all, each appeared in it to advantage. The latter had subjected the whole of Germany to the emperor, and pushed his conquests even to Denmark, nevertheless the ministry of Richelieu menaced the colossal power of the emperor. A powerful rival to him arose in the young hero who governed Sweden. Gustavus Adolphus having first wrested his own country from the Poles and Danes, at sixteen years of age headed his troops, drove out the Danes, obtained Finland from Russia, fell on Sigismund king of Poland, reduced Livonia, opened the way by a splendid victory to Varsovia, took Dantzic and Elbing, and forced Sigismund to sign a peace. United with France, he then looked to revenge for the contempt of Ferdinand and the oppression of the Protestants. Valstein and Gustavus tried their strength. Valstein, before unconquered, met with reverses: Gustavus carried ravage and death into the imperial territory. In vain was he opposed by Tilly, an old man, distinguished by long services. The first encounter added to the glory of Gustavus, and was soon followed by two other defeats of the same general, who not being able to survive them, rashly plunged into the midst of his battalions. In this extremity Ferdinand resought the arm of Valstein, whose necessity made

him forget his wrongs. Valstein was fearful of compromising his glory; he at first endeavoured by easy successes to reanimate his troops with confidence, and then marched towards Gustavus. The fight was long and bloody; at length every thing gave way to Gustavus, who triumphed at the instant that receiving a mortal wound he fell into the arms of his soldiers. They were animated by a noble despair, and resolved to immolate myriads of victims to their general; they put Valstein to flight, and obtained a complete victory.

Q. Did not Gustavus's death make some change in affairs?—A. The three great captains, the instruments of his victories, and the duke of Saxe Weimar, his intimate friend, pursued his plans and continued his conquests. Valstein, ashamed of his defeat, fell back upon Bohemia to collect the wrecks of his army. He saw the laws without force, the protestants disunited, the emperor trembling in his capital, and the army having no confidence but in its general. Vast domains gave him a great credit; he had nothing to do but dispute the crown with Ferdinand. Relying on fate, he raised the standard of revolt. The emperor thought to arrest him by exerting his authority; but Valstein, strong in the hearts of his soldiers, and fortified in Egra, was going to be crowned there, when he was assassinated. Richelieu, a spectator of what was passing, turned it all to advantage and brought forward the Swedes again. He negotiated with Weimar, and took his troops into pay; gave fresh courage to Banier by subsidies, and declared war against the two branches of the house of Austria. Long alternate successes, and the death of the most eminent generals, at last made all the powers of the empire feel the want of peace, which was concluded by the treaty of Westphalia, whereon rested the government of the empire.

Q. What were the most remarkable occurrences of England at this period?—A. James, indifferent to the affairs of his neighbours, only thought of keeping up peace in his own state. A conference at Hampton-court conciliated the presbyters and the episcopacy, and to disencumber himself from the pretensions of

parliament, he abandoned the catholics. The marriage of his son with the daughter of Philip the Third, having failed by the intrigues of Olivarez, he obtained for him the famous Henrietta of France, and died in his preparations for war. Charles the First, his son, who succeeded him at twenty-seven years old, found a resistance in the parliament, which increased from the division between the two religious sects. The king, inclined to theological disputes, shewed himself anti-presbyterian. The queen, with great qualities, was filled with the idea of arbitrary power. The rebellion of the parliament determined them to retire to Hampton-court with the high nobility. London, and many cities, declared against him; success was equal. Oliver Cromwell succeeded in being elected deputy for Cambridge. An apparent rigidity of manner, and superstitious ecstasies, captivated the uninformed mass of soldiery, of which he made an army of enthusiasts. Charles with a small number of his friends, a mark for wild intrepidity, gave way, and was obliged to shut himself up in Oxford. A victim to the treachery of a barbarous and villainous parliament, he died on the scaffold. Not one, however, of his judicial murderers closed his life quietly in their own land.

Q. What was the state of affairs of the other European powers?

A. Venice, disturbed by the Uscoques, brought them to reason. Charles Emanuel of Savoy, ever ambitious, was forced after many defeats, to attach himself closely to France. The Cosmos had the faculty of preserving peace in Tuscany, and to turn the arts which they protected to the embellishment of the cities. Genoa experienced some uneasy moments from an ambitious neighbour. Paul the Fifth received ambassadors from Japan, as well as from Abyssinia, who honoured him as chief of religion. Urban the Eighth united to the patrimony of St. Peter the duchy of Urbino. Switzerland persisted in its system of indifference for the quarrels of its neighbours, and furnished its brave warriors to whoever would pay for them. Sigismund's imprudence continued to exhaust Poland in the war against Russia, and the barbarity of a Polish lord brought upon him the Cossacks, who put every thing to the fire and sword. During this time Russia enjoyed a

happiness long unknown to it. Turkey, under the reign of the weak Achmet the First, displayed only inefficiency in its councils, and losses in Europe and Asia. Osman restored part of its glory to the empire, repelled the Cossacks, and kept the Tartars under the yoke; but betrayed by his janissaries, lost his head upon the scaffold, and the silly Mustapha no sooner ascended than he was precipitated from the throne. After him, Amurath the Fourth subjugated Bagdad, and Ibrahim only used his authority to the same end.

Q. What events took place in the other states of the Old World?

—A. Morocco was all atrocity, its coasts merely retreats for pirates, which infested the seas. Abyssinia, after having embraced the Romish faith, renounced it, owing to the inconsiderate zeal of certain ministers. The same cause occasioned a similar revolution in Japan, and made an infinite number of martyrs; and in China, the dynasty which had replaced Gengis terminated by the greatest catastrophes.

Q. How did Mary of Medici act on being appointed regent to Louis the Thirteenth?—A. She immediately made a durable treaty with Spain, and cemented it by the double alliance of Elizabeth her daughter with Philip the Third, and of the infanta with Louis the Thirteenth. She left the Dutch to their own strength, and finding in Sully, Henry's friend, too inconvenient a censor, she took from him his employments, dismissed him from court, and replaced him with foreigners.

Q. Who were these foreigners?—A. The marquis of Concini, and his wife Galigai, whom the queen had brought from Italy, and weighed down with favours. Their enormous influence disgusted all the courtiers, the princes left the court, and formed a party against the regent, who succeeded in disarming it. On the king's coming of age, the states-general were convoked, and the king distinguished among them Richelieu, bishop of Lucon, whose ability brought back the princes; he was made secretary of state. Albert of Luynes taking advantage of his youth, obtained the greatest influence over the king, acquainted him with the slavery in which his mother held him, and the insolence of Concini,

marechal of Ancre. Louis ordered the marechal to be arrested, but having made resistance, he was killed on the bridge of the Louvre. The queen mother retired to Blois in disgrace, and seconded by the duke of Epernon, went to Angoulême, where a considerable party was collecting. Richelieu, fearful of falling with the queen, banished himself to his diocese, and then to the province of Avignon. He kept up a correspondence with De Luynes, who, apprehensive of the consequences of these troubles, thought of making a merit with the mother of reconciling her to her son, and employed Richelieu, whose ability he well knew, to bring it about. The reconciliation took place, and the mother and son embraced at the bridge of Ce. Richelieu was cardinal and minister; and again, after some time, had a new disagreement to make up between Louis the Thirteenth and his mother.

Q. Did France remain long quiet?—A. The year following De Luynes, insatiable after riches, laid claim, under the specious pretext of restoring them to the church, to the ecclesiastical property formerly usurped in Berne by the protestants, who immediately took up arms. Rohan and Soubise put themselves at their head. The king instantly went to Guienne, and after a variety of good and ill success, reduced the protestants to acknowledge his authority. The changes which took place in the administration soon opened the way to the cardinal for the place of prime minister, which Mary of Medici had long been preparing for him. Richelieu immediately removed the veil which concealed from the king the greater part of the misfortunes of the states. He showed him a people oppressed, nobility seditious, and heretics, audacious and in motion; he likewise explained to him the infallible means of remedying so many evils. Louis admired the depth of the new minister's views, and thought he saw in him the man destined to repair the misfortunes of the throne.

Q. What were the first operations of Richelieu?—A. After having dismissed Aligre, Rochefoucault, and la Vieuville from the council, he renewed the treaty with the Dutch, encouraged the malcontents in Catalonia, sent assistance to the Grisons, and turned his eyes to the calvinists. They had troops, a navy, and se-

eure holds. Rochelle was impregnable, its harbour facilitated their connections with England. To break them Richelieu negotiated the marriage of Henrietta of France with Charles the First, and then superintending the siege of Rochelle in person, he took it in sixteen months. Envy and hatred, excited by an unbounded authority, so animated the great against him, as to set on foot a conspiracy to assassinate him: he took advantage of the circumstance to obtain a company of guards for the safety of his person. The pass of Suza was soon forced, and the war with the Huguenots put an end to. Louis was suddenly struck on his return by a malady which appeared mortal: he stopped at Lyons with the two queens, all whose efforts were to destroy the cardinal. Gaston was in the plot, but the restoration of the king's health set them all aside, and the effects of the cardinal's vengeance alone remained. The queen-mother was forced to leave the kingdom, Gaston fled to Lorraine, the Marillacs were stripped, and died on the scaffold, together with Montmorency, who was taken prisoner at Castelnaudary.

Q. Did not these internal troubles give great advantages to the enemies of France?—A. In the midst of conspiracies and storms, Richelieu, who rose superior to his enemies, neglected nothing. Occupied with the means of humbling the power of Austria, he negotiated with the northern potentates, and furnished supplies for Gustavus Adolphus to humble the court of Vienna. Six armies appeared at once on the frontiers, fleets paraded every sea, and ravaged the coasts of Spain. Every event was inauspicious to Austria and its allies, and favourable to France. The queen successively gave two princes to France after she had been twenty years barren.

Q. Was not Richelieu crossed in his ministry?—A. That immense power which made him universal arbiter, dazzled many eyes, and even his friends conspired against him. Cinq-Mars, a young lord, whom he had brought to court, forgot the kindness he had received, and joined the malcontents. Monsieur the king's brother, who was in all conspiracies, again joined this. Cinq-Mars was beheaded at Lyons, Gaston was exiled, and Mary of

Medici once more obliged to quit France, died in misery at Cologne. Richelieu did not long survive this new victory; a languid disorder terminated at fifty-eight years of age his glorious ministry. He has been reproached with atrocity and vice; but the state was indebted to him for its grandeur and tranquillity, and letters and the arts for their first flourishing days. Louis was not long behind his ministers; he did not rule himself; but wise and religious, had strength to support his minister against all cabals, and even to sacrifice his personal disgust to the welfare of the state.

Q. Who succeeded Louis the Thirteenth?—A. His son Louis the Fourteenth, who was but five years old. History has no example of so brilliant a reign, whether we look to the great events which took place in it, or to the union of so great an assemblage of men celebrated in all the arts. His mother, Anne of Austria, was declared regent, and Mazarin, already introduced by Richelieu, was attached to the person of the prince as tutor. All the ministers retained their places, and the princes and exiles were recalled. Spain thought it a favourable opportunity, both king and minister being dead, to fall unexpectedly upon the frontiers of Champagne; Condé overthrew them at Rocroi, and in one day destroyed all those Walloon regiments, wherein consisted the whole strength of their armies. In Germany, Fribourg was taken, general Merci killed at Nortlinguen, the pride of the empire laid low at Lens, and peace concluded at Munster.

EIGHTH EPOCH.

TREATY OF WESTPHALIA.

A. D. 1648 to 1774.

Q. What was the advantage of the treaty of Westphalia?—A. It terminated one of the longest and most bloody wars that ever agitated Europe; fixed the form of government for the empire, and the exercise of the religions, catholic, Lutheran, and Calvinistic, which were tolerated in all the circles. France acquired great part of Alsace: Sweden kept Pomerania, and the rights of the electors was equitably fixed.

Q. Did Oliver Cromwell remain long protector?—A. The artificial policy which had invested him with a power far beyond that of kings, supported ruinous wars against Holland and Spain, acquired Jamaica for England, and considerably increased the commerce of his country; but his soul could not enjoy a moment's happiness. The spirit of the unfortunate Charles always seemed to be hovering about him. Fear laid hold of him, even in the midst of his soldiers in the palace of Whitehall; he notwithstanding died in his bed, and was replaced by his son. General Monk, governor of Scotland, soon put himself at the head of a considerable army, to establish the old parliament, revise the laws, and recal Charles the Second, who was proclaimed king of the three kingdoms. He it was who founded the Royal Society, to accelerate the progress of knowledge. He entered into a compact with Louis the Fourteenth against the Dutch, and died without issue. The duke of York, his brother, who took the name of James the Second signalized his accession by the defeat of the dukes of Monmouth and Argyle, who conspired against him.

Q. Was the reign of James the Second, peaceable?—A. A catholic at heart, he wanted to take personal advantage of the toleration of all religion in his states, and demanded the repeal of the test act, and

of all pains which pressed upon the catholics. This was sufficient to furnish the adverse party with a pretext for hurling him from the throne. They established an understanding with the Stadtholder of Holland, William of Nassau, whose wife was a daughter of James. William sacrificed the rights of nature to his ambition, fitted out a fleet, landed in England, and after various successes drove out his father-in-law, and took the crown jointly with his wife Mary. James the Second in vain endeavoured to resume it with the succours which Louis the Fourteenth lavished upon him, and died at St. Germaine's Laye. The peace of Ryswick secured to William the Third the title of king of England, in the name of all powers. The Stuart family was set aside. The princess Anne, wife of George prince of Denmark, succeeded; and after her the elector of Hanover, George, son of Sophia, granddaughter to James the First. His son, George the Second, was continually at war with France and Spain. In vain James the Third, son of James the Second, took a favourable opportunity to recover the sceptre of his ancestors; he embarked for Scotland in 1745, with his son Edward; but after some success, was beaten by the duke of Cumberland at Culloden, and re-crossed to France. The English crown was quietly transmitted to George the Third, who in the nineteenth century still reigns one of the best and most generally beloved princes that ever adorned the British throne.

Q. What are the most remarkable events of his reign?—A. The success which accompanied the English arms in France, brought about the peace of 1763, which secured to England Canada, and the island of Minorca, restored to it the electorate of Hanover, and regulated for the French the right of fishing on the banks of Newfoundland, on their restoring the factories in India. Two years had scarcely passed over, when England trembled for its northern colonies of America; they incessantly demanded to be less arbitrarily governed, until 1774, when the genius of Franklin and Washington, shaking off the yoke which had long lain heavy, made a commencement of the famous American war, in which France acted a principal part, and which was not ended until

1783, when the United States were made independent, and the English renounced the rights they had assumed over the French navy, its colonies, and the port of Dunkirk.

Q. What were the principal occurrences in Spain?—A. The reign of Philip the Fourth was a series of misfortunes. He recommenced war with Holland, saw the Portuguese crown the duke of Braganza, and Catalonia given to France. The treaty of the Pyrenees restored it to him for Roussillon and a part of Artois. Charles the Second, his son, lost Franconia, and was a victim to the famous league of Augsburg; but the treaty of Ryswick again gave him back something. Being near his dissolution, he declared the grandson of Louis the Fourteenth, the duke of Anjou, his heir. He took the name of Philip the Fifth, but did not come into peaceable possession, until he had waged a long and sanguinary war, and abandoned all his states in Italy. This religious prince had abdicated the reins of government, in favour of Louis his eldest son, but his decease restored them to him again. The kingdoms of Naples and Sicily went into the hands of don Carlos, Philip's son, by the treaty of Vienna, in 1788. The new king of Portugal, who had taken the name of John the Fourth, maintained his throne with glory, and reconquered Brazil from the Dutch. He left the crown to Alphonso the Sixth, then very young, who withstood the Spaniards, and gained several battles from them: but the contempt of his subjects obliged him to give up the sceptre to Peter the Third, who governed with great wisdom. Unfortunate in his league against Philip the Fifth, he was beaten at Almanza, and owed his tranquillity to the peace of Utrecht.

Q. Did Spain and Portugal take any part in the affairs of Europe, in the sequel of this period?—A. The commerce of America, and the boundary of the colonies, were a great subject of division between Spain and England, in which France took part, and which resolved itself into a continental war, from the pretensions of Spain to the inheritance of the house of Austria. The duchy of Parma had devolved to the infanta, who had married a daughter of Louis the Fifteenth. Spain retook Minorca, by the assistance of France, under marechal Richelieu and retained it until the peace of

1763. Ferdinand, who had succeeded his father, Philip the Fifth, in 1746, was succeeded in 1769 by his brother Charles the Third, previously king of Naples, under the name of don Carlos. For the remainder of the period Spain was merely an auxiliary to France, especially in the American war, and to the time of the French revolution. In Portugal, John the Fifth succeeded Alphonso, and left the crown to his son Joseph, without the occurrence of any particular event. The English have retained, from the middle of the eighteenth century, the greatest influence over the court of Lisbon, on account of the commercial interests whereby the two courts are united.

Q. What became of Germany after the peace of Westphalia? —A. The emperor Leopold, who had replaced his brother Ferdinand the Third, had various commotions to quiet in his hereditary states, particularly in Hungary. He, however, dared to defend Holland against Louis the Fourteenth, which merely tended to the increase of the military renown of France, the Palatinate being overrun by marechal Turenne. The peace of Nimeguen, in 1708, restored calm to the empire, but the league of Augsburgh renounced the pretensions of the house of Austria to Spain, whose king, Charles the Second, had no children. The crown of Hungary was declared hereditary, and in 1689 war again broke out with fury. The Palatinate was once more ravaged. The emperor was at the same time obliged to defend himself against the Turks, and put at the head of his armies Charles the Fourth, duke of Lorraine, and Sobieski, king of Poland. The treaty of Ryswick apparently settled Europe on a lasting basis, when the will of Charles the Second, calling the second son of the dauphin to the Spanish crown, set all Europe on fire. The duke of Bavaria, jealous of the greatness of the house of Austria, alone seconded Louis the Fourteenth. The opening of the eighteenth century seemed to bury France under the exertions of all Europe, and when the treaty of Utrecht even had been signed by all the princes, the emperor still carried on the war, which finished in 1704, with the peace of Radstadt.

Q. Did the house of Austria still preserve its greatness? —A.

The death of Charles the Second had extinguished the branch of Spain; that of Germany consisted only of the emperor Charles the Sixth, whose succession would be a new subject of war. The imperial crown went to the house of Bavaria, and the hereditary states to that of Lorrain, by the marriage of Maria Theresa, a princess of the highest character, who made head against all Europe, repulsed the armies of France, which had entered the very heart of Bohemia, in like manner compelled the retreat of the king of Prussia, and succeeded in crowning her husband, already Grand Duke of Tuscany, and a stem of the new house of Lorraine Austria, emperor. The peace of Aix-la-Chapelle, restored all the conquests made by France, to the empire.

Q. What were the other wars of Germany during the eighteenth century?—A. Prussia was continually seeking to aggrandize its power since 1700, when Frederick got it acknowledged as a kingdom, united to his electorate of Brandenburg. His military government made it formidable to his neighbours. Silesia was the great Frederick's first conquest. In the seven years' war he developed all his military talents; the partition of Poland carried his power to its zenith. Russia in vain resisted it, and at length made it advantageous, by taking, as well as Austria, that which adjoined their respective states, thereby preparing, in 1773, the entire dissolution of that crown, which was consummated by the same powers in 1794, by Frederick, Catharine, and Joseph, the son and successor of Maria Theresa.

Q. Were there not other notable changes in the Germanic body?—A. The house of Bavaria, which had for three years possessed the imperial crown, and even disputed the inheritance of Austria, witnessed its elector Maximilian-Joseph, son of the emperor Charles the Seventh, obliged to recal the branch Palatine to its succession, which effected the junction of the two electorates in the person of Charles Theodore, in 1777.

Q. Had Italy any great events at this epoch?—A. The north of Italy was several times the theatre of war with France and Austria. The Duke of Savoy, Victor Amedea, after having married his daughters to the heirs of the crowns of France and Spain, got him-

self acknowledged king of Sardinia. The states of Parma and Placenza were ceded by Austria to the infant don Philip. Tuscany, at the death of the last Medicis, had for grand duke, in 1737, Francis of Lorraine, since emperor : France having preferred Lorraine to the rights it had over the succession to Tuscany. Naples twice received Spanish princes for kings, who afterwards went to take up the paternal crown. Corsica oppressed by the Genoese, thought it was on two occasions set free : first by a king Theodore, and thirty years afterwards by the brave Paoli ; at last, being obliged to submit to the assistance of France, it was united thereto.

Q. Did the court of Rome take any part in political events ?—

A. The popes no longer sought to extend their ministry beyond objects of interest to their religion. Benedict the Fourteenth protected art and science in the most distinguished manner. Clement the Fourteenth gave way to the importunities of all Europe, in pronouncing the dissolution of the jesuits, whose power gave umbrage to the policy of courts. He survived this grand act of authority but one year. Pius the Sixth, who succeeded him, thought it his duty to defend the religious orders of which the emperor Joseph was breaking every tie. He repaired to Vienna, where he received all the pompous demonstrations of an useless, because ineffectual, respect. He returned to his occupation with the arts, the formation of a magnificent museum, and draining the Pontine marshes, and could not have expected that a pontificate, so long and so usefully filled, would bring upon his latter days those misfortunes which happened at a later period.

Q. Who occupied the throne of Sweden after the death of Gustavus Adolphus ?—A. His daughter Christina, whom his states had acknowledged to be his heir, before his departure for Germany ; she being but six years old, the chancellor Oxenstiern was the principal regent. The Swedes met with good and ill success in the war against Germany and Denmark, until the treaty of Osnabruck. Christina took the opportunity of the peace, to give up the crown to her nephew Charles Gustavus, travelled to the different courts of Europe, conversed with men of letters, and fixed her residence at Rome. The ambitious views of Charles Gustavus again embroiled

Europe. He made an irruption into Poland, of which he made himself master, and drove out John Cassimir : but the Danes and Imperialists, whose succour Cassimir implored, recalled him to Sweden, where he died of grief for his failure. His death re-established peace, and Charles the Eleventh employed it to his people's happiness ; unlike Charles the Twelfth, whose warlike turn was their misery. He first turned his arms against Denmark, then against Peter the First, czar of Russia, whom he several times vanquished, and likewise against Poland, the king of which he dethroned : but met at Pultawa the rock on which he split. Obligated to retire at Bender to the Grand Seignior, he then displayed the singularity of his character for four years, and returning into his states, no more felt the necessity of settling his affairs. His passion for war prevailing he again commenced it against the czar Peter, and was killed at the siege of Frederickstadt.

Q. What became of Sweden under the successors of Charles the Twelfth ?—A. After having been governed by Ulrica Eleonora, sister to Charles the Twelfth, then by Adolphus Frederick, son of that queen, Gustavus the Third, who, at his father's death, was in France, became king in 1771. Assured of that power's support, he was not satisfied with the limited rights which his ancestors had enjoyed, and in recognizing the authority of the states, he without shedding a drop of blood, annulled the sovereignty of the senate. He afterwards continued his travels into France and Italy, and signalized himself in person, to great advantage, in the wars against Russia. The cause of his assassination at a ball, in 1791, has never been satisfactorily explained.

Q. Had not Denmark also a revolution ?—A. In the same year, 1771, the king, Christian the Seventh, had, in the month of January, discovered a conspiracy to place the queen at the head of the government. Struensee and Brandt, the principal agents, were condemned to die, and the queen Matilda, was sent to the electorate of Hanover. The king retained that impression of it which was fatal to him, upon his mind, and his authority was obliged to be transferred to the regency of the hereditary prince, who still in the nineteenth century retains it.

Q. Was it not at this time that Russia became a considerable empire?—A. The czar, Peter the First, son of Alexis, after having secured his state against every species of invasion, resolved to travel into all the courts of Europe, not as a sovereign, but as a private individual. He visited Holland, England, and Germany, applied himself in particular to the study of navigation, and even to ship-building, to which he did not disdain to go through an apprenticeship, in England. On returning to his states, he built the city of Petersburgh, in the gulph of Finland. His failures against Charles the Twelfth, were profitable lessons to him, and he learnt to conquer at Pultawa. His war with the Turks cost him the city of Azof, on the Black-Sea, and forced him into a peace. In the year 1717, not having undertaken it before, he made the tour of France, and was received with all the splendour of sovereign majesty. On his return, he had the mortification to be obliged to punish a son who conspired against him. Before he died he crowned his wife empress. He was the founder of the academy of Petersburgh, to which he attracted many literary foreigners.

Q. By whom was he replaced?—A. First, by his widow Catharine the First; then, by his grandson Peter the Second; and Anne, niece of Peter the First, afterwards reigned ten years. Russia also had a czarina, daughter of Peter the First, whose nephew, Peter the Third, remained on the throne only six months. The famous Catharine the Second, his wife, declared him incapable of governing, in 1762, and during forty years gloriously sustained the imperial dignity. Independently of the partition of Poland, the unfortunate king of which had been her favourite, she made her name illustrious by her wars against the Turks, whom she expelled from the Crimea, which immense country she added to her states, then extending almost to China, and equalling in territory the whole of Europe. She did not acquire less celebrity by her protection of men of letters, whom she brought from all parts of Europe; and the multitude of her favourites, and the great power which some of them attained, will long be a theme of conversation and surprise.

Q. What events took place in Turkey at this period?—A. Mahomet the Fourth, succeeded Ibrahim, the third son of Achmet.

That ambitious prince had declared war against the Venetians and the empire, but was beaten by the famous Montecuculi. To make amends he took Candia, after losing nearly a hundred thousand men; again repeatedly beaten in Germany, he so soured the minds of his people, that he was deposed. The reigns of Soliman the Third, and Achmet the Second, were tranquil enough; but Mustapha the Second, beaten by prince Eugene, was also stripped of his crown, which his subjects gave to Achmet the Third, who was in turn dispossessed of it in 1730.

Q. Were there any other remarkable events in Turkey?—

A. Independently of its wars against Hungary and Russia, it had likewise great trouble to resist the Beys in Egypt, and could not extinguish that spirit of insubordination, which France turned to advantage in a subsequent period, to settle itself there under the orders of general Buonaparte.

Q. What occasioned the war of faction which broke out in 1648 in France?—A. The absolute power which the cardinal Mazarin had over the mind of the queen, made him generally hated. The parliament stirred up by the restless spirit of cardinal Retz, wished to make head against the court; some members of parliament were arrested, and many lords were parties in it. The parliament had its generals; Paris was besieged, and Turenne and Condé were opposed to each other. At length a pretended pacification induced the princes to go to the royal palace, but they were arrested and taken to Havre. This civil war lasted nearly seven years. Condé left the kingdom, and entered into the service of Spain, whose armies he commanded, and did all the mischief in his power. Mazarine to please the different parties, had been several times obliged to leave the kingdom. Louis the Fourteenth advanced in years, and was fast approaching to the close of his minority. Spain, which had been a great sufferer in the war, was happy to make its peace, and to cement an alliance with the French monarch. It was called the peace of the Pyrenees, and tended materially to the aggrandisement of France on the side of the Netherlands.

Q. At what time did Louis the Fourteenth take the reins of government into his own hands?—A. On the death of Mazarine in

1661. It was little thought that a young prince surrounded with pleasures, could take charge of business. However, fixing to each minister the bounds of his power, he worked regularly with them; gave a daily account of every thing; applied himself to ascertaining the merit of men, and making use of it, put his finances in order; re-established discipline among his troops, and protected the arts; formed a navy and made his flag respected in every sea.

Q. What are the great men who lived in his time?—A. In the church, Bossuet, Arnauld, Fenelon, Huet, Godeau, Pavilion, Flechier, Bourdaloue, and Massillon. In the military art, Condé, Turenne, Vendome, Villars, and Catinat. In the ministry and finance, Colbert, Louvois Believre, and Le Tellier. In literature, Corneille, Racine, Moliere, Regnard, and Boileau. In painting, Poussin, Lebruns', Lesueur, and Magnard. In sculpture, Girardon, Coyzevox, and Coustou. In engraving, the Audrans, Drevet, and Edelinck. In architecture, Mansart, Perrault, and Blondel.

Q. What monuments did Louis the Fourteenth raise to the glory of the arts and welfare of the state?—A. The academies of inscriptions, and belles lettres and sciences: factories of glass, tapestry, and soap. Great additions were made to the Louvre, in particular the fine front or colonnade. Versailles was built; the observatory, canal of Languedoc, hotel of invalids, house of St. Cyr, for the education of young ladies; schools for navigation; the establishment of several colonies, and many hospitals throughout the kingdom, bear testimony to the munificence and bounty of his views.

Q. Was not this reign celebrated likewise for its reforms?—A. Colbert after having established commerce, and placed the finances in a regular train, prevailed on Louis to direct his attention to the reform of the law, police, and navy. Thence those fine ordinances which are the basis of the jurisprudence of almost the whole of Europe; thence that organization of the military state, which was classed in regiments, distinguished by their uniforms, disciplined by a hierarchy which secured the glory of the corps; thence too the establishment of a corps of engineers, a particular

breed of horses for the cavalry, and the safety of France, rendered permanent by above a hundred and fifty fortified places, and numerous arsenals.

Q. Did not Louis the Fourteenth make many conquests?—A. His ambition unfortunately plunged him into many wars which did not tend in any great degree to aggrandize France. Being a formidable neighbour the different powers combined against him, and he several times had to contend against the consolidated power of Europe. He frequently conquered Flanders, Holland and Franconia; carried desolation into the Palatinate and Westphalia, and made ten different peaces, which were the forerunners of as many different wars. But they are no subjects of commendation, since he himself, on his death-bed, acknowledged he was in the wrong in this respect, and by the disorderly state of his finances, he entailed so many misfortunes upon his successors and his country. He may be praised for wisdom of government, depth of policy, taste for the arts, magnificence, greatness of mind, arrangement in the administration of justice, politeness, and lastly for the piety of which he gave an example towards the close of his life.

Q. Who succeeded Louis the Fourteenth?—A. The son of his grandson, Louis the Fifteenth, who was only five years of age. This was the third minority since Henry the Fourth, and it was not disturbed. The Duke of Orleans, first prince of the blood, was declared regent by parliament at a court of peers. The first use he made of his authority was to apply remedies to the exhausted state of the finances and public debt: he established seven different councils to regulate all his affairs. It seemed as if nothing remained but to reap the fruits of his happy government, when a war with Spain was fomented by his minister, Alboroni, who wished to balance the regent's power. It was soon put an end to by banishing the minister.

Q. What was there worthy particular notice during the regency?—A. Law's system. John Law was a Scotchman, who proposed a paper money to repay the state debt, amounting to more than two thousand millions, by granting privileges to a commer-

cial company to the Mississippi and the East Indies, and announcing that the profits should be applied in payment of the national debt. Avarice in a short time produced an universal illusion. They came to change money for paper with the greatest eagerness; the shares which at first were a thousand crowns, rose prodigiously. The state creditors were paid with these notes; but in the sequel they were fabricated in so great quantities, that money disappeared, and paper only remained. Law was obliged to take himself off. A *visa* (act) was passed to oblige the holders of these notes to declare how they came by them, and at what price, that they might be reduced in proportion; but there remained above seventeen hundred millions, which could not be discharged, and innumerable families were thereby ruined beyond redemption, while others made immense fortunes.

Q. Who had charge of the state at the majority of Louis the Fifteenth?—A. The duke of Orleans having resigned the reins of government, Louis the Fifteenth transferred the direction of his affairs to cardinal Dubois, then secretary of state, but this minister soon died. The duke of Orleans resumed them, and died in the same year. His successor was the duke of Bourbon, who married the king to the princess of Poland, and retired soon after. Cardinal Fleury at seventy-three years of age, the king's old tutor, was nominated prime minister. It was a heavy burthen for his years, but his ministry would have ranked amongst the wisest, had he not neglected the navy, and been too favourable to religious disputes, which should rather be extinguished than promoted.

Q. Was not the repose of France troubled shortly after?—A. The king was obliged to declare war against the empire in support of the just rights of Stanislaus, king of Poland, his father-in-law, and those of don Carlos, infant of Spain; but this war, which lasted only two years, and in which France was assisted by Spain and Sardinia, increased the French territory, and heightened the glory of the king, by his cession of Lorrain. A short time only had elapsed when Louis the Fifteenth could not dispense with becoming a party in the German war, on account of the death

of Charles the Sixth, and he maintained it with glory against Hungary, Sardinia, Holland, and England. He entered into an alliance with the king of Prussia against Maria Theresa, sent a first army of forty thousand men to support the elector of Bavaria, and a second on the Meuse against the English, and crowned the elector at Frankfort, by the appellation of Charles the Seventh. However, Maria Theresa, supported by her great courage, made a separate peace with Prussia, by giving up Silesia, and being supplied with money by England, and by Holland, she retook all she had lost. The circumstances of the war became daily more critical, and Charles the Seventh was on the point of renouncing his pretensions, when Louis set out for Flanders to take the command in person. In a few days he subdued it by the ability of the marshal Saxe, and overrun Alsace, into which the Austrians had carried terror. He was taken ill at Metz, the consternation became general; but his health soon returned, and Louis thereby knew, from the enthusiasm of his people, the full extent of their affection. From this moment he was called Louis the Well-beloved. He went to Germany, penetrated to the Brisgaw, and laid siege to Fribourg. In Italy, Conti gained the battle of Coni: in Flanders, marshal Saxe kept his ground by the resources of his genius against armies much more powerful than his own, and at this moment the emperor Charles the Seventh died.

Q. Did not his death make a great change in the affairs of Europe?—A. Maria Theresa still persisting in the design of placing her husband on the Imperial throne, continued the war with English money: her principal exertions were against Flanders, whither the king repaired. The armies met at Fountenoy, and both sides fought with the most determined fury, but France was victorious. A chain of successes followed, and peace was signed at Aix-la-Chapelle in 1748.

Q. Did this peace last long?—A. Only seven years. Some unforeseen difficulties on the subject of the limits in Canada, between France and England, occasioned a new war termed the seven years war. The outset was advantageous to France: the English were beaten in Canada; Port Mahon was taken, and

France and Austria, which had been at war above two hundred years, now united. The war concluded entirely to the advantage of the English, who obtained by the treaty of Paris, Canada, and other immense countries in Africa and Asia. At the same time France and Spain concluded a treaty called the Family Compact, by which they reciprocally guaranteed their states.

Q. What was the good of the peace?—A. Louis thereby found leisure to form five establishments. Agricultural societies, as well as academies of belles lettres, rose in the provinces; colleges at La Fleche, and elsewhere, and gratuitous schools for drawing. The situation of curates was ameliorated by an increase of salary to those which were not sufficiently endowed.

Q. Was Louis the Fifteenth happy in his family?—A. The queen, Maria of Poland, was a model of domestic virtue, and ten children were the fruit of their union; but the king's inclination for pleasures made him frequently have recourse to favourites, which morality in general suffered for. The dauphin, the only surviving son, gave examples of virtue, religion, and prudence; but he was carried off in 1765 by a languid disorder, leaving three princes and two princesses. The dauphiness and the queen soon followed him, and nothing could check the luxury and depravity of a court, where every one was master. The finances were exhausted, the loan system only made the evils worse; scarcity still added to the misery, when in the midst of such a crisis Louis the Fifteenth, by his death, left the state to his grandson Louis the Sixteenth, who was married at four years old to Marie Antoinette, of Austria.

NINTH EPOCH.

REIGN OF LOUIS THE SIXTEENTH, AND THE
FRENCH REVOLUTION.

A. D. 1774 to 1806.

Q. What was the state of France at the accession of Louis the Sixteenth?—A. The weakness and dissipation of the preceding reign had repaired none of the evils occasioned by the profusion of Louis the Fourteenth. A new class, unknown in former ages, the financiers, had made themselves masters of the public credit, and involved the state in a labyrinth of taxes and loans. Louis the Sixteenth thought it a point of honour to respect the debts of his predecessors, and confiding in his personal inclination to economy, he hoped to be able to replace the equilibrium of the public wealth. He was surrounded by wise ministers, known for their love of the public weal: he re-established parliaments, gave provincial administrations to several parts of the kingdom, annihilated the last vestiges of personal service in France, and rallied round the throne every thing calculated to restore the confidence of the public; but too honest himself to harbour guile, he did not suspect the intrigues of the old courtiers and plunderers. The ministry was in a constant ferment: he could not see all the vice which prevailed in the different orders of society, and at last fell a victim to that ease which he had given France the enjoyment of, more than any of his ancestors.

Q. How did the revolution break out?—A. The king, led by M. Neckar into great reforms, thought that he could overcome the resistance of the court, by obtaining the support of an assembly of the notables: it was unavailing; they only gave publicity to the general misfortunes, and to the remedies which might be applied. Scarcely had they separated, before they lost the firmness

requisite to do what was necessary. The parliament refused to sanction a tax on timber, and an equal application of the land-tax; they assembled the states-general, whose operations were prepared by a second assembly of the notables. At last, on the 4th of May 1789, that famous assembly commenced its sitting, which, converting itself on the 17th of June into a national assembly, was no longer employed, except in overturning the old order of things, and commencing that revolution of which France, and every European state, has since felt the fatal effects. The taking of the Bastille in July 1789, was followed by progressive acts of rapine, revenge, and massacre, which, in 1793, brought the king to the scaffold, and shortly after effected the murder of the queen, dauphin, and principal nobility of France. France, after some short lapse of time, involved in desperate wars, was almost uniformly successful by land, and as constantly defeated by the heroism of the English fleets at sea. Change upon change followed in rapid succession as to the form of government, and those who were hardy enough to seize the reins, until at length it resolved itself into a most tyrannical and arbitrary empire, of which Napoleon Buonaparte, who married a discarded mistress of Barras, was the self-created emperor on the 20th of May 1804, and where he still continues, after such a career of good fortune, and infamy of public and private character, as has scarcely ever marked the life of any former usurper.

Q. When did the American revolution break out?—A. On the 19th of April, 1775, the first blood was drawn at Lexington and Concord in New England; and, in 1775, general Washington headed the American forces with extraordinary success, which however arose, perhaps, quite as much from the misconduct of those he had to contend with, as from his own abilities, which were very great. In 1778 France joined the Americans, and the advantages by land were various on either side. In 1780 admiral sir George Rodney defeated the Spanish fleet, and fought three indecisive actions with that of France. About the close of the same year Holland joined the combination, and admiral Parker engaged its fleet off the Dogger Bank in 1781; and, in October,

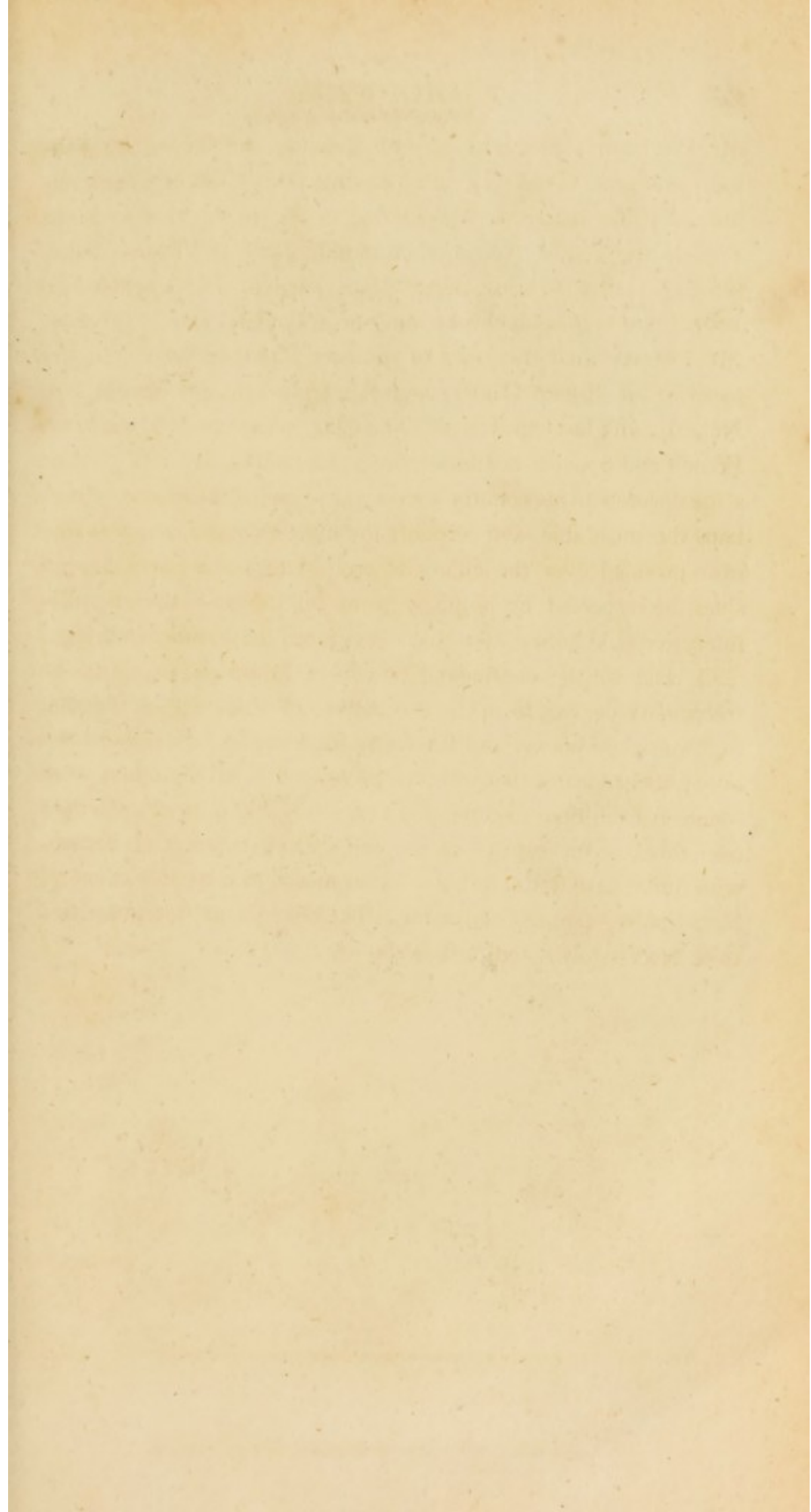
the whole British army, under lord Cornwallis, surrendered to Washington. In 1782, lord Rodney conquered the count de Grasse with a large French fleet in the West Indies; and, in 1783, a general peace was signed.

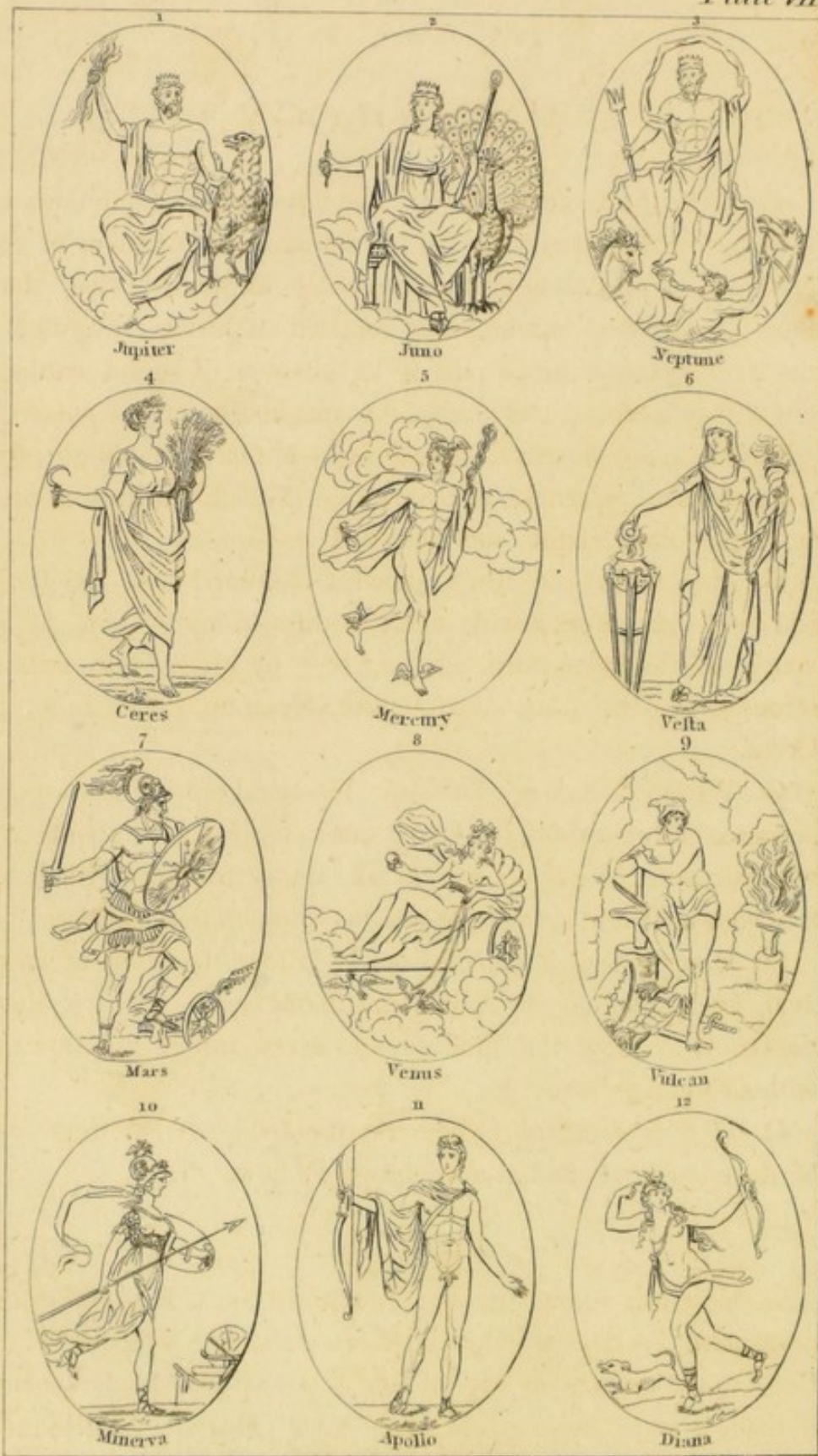
Q. What were the principal occurrences of England from that period?—A. In 1788, George the Third was afflicted with a derangement of intellects, which proved to the world the affection with which he was regarded by his subjects, to whose fervent prayers the Almighty restored him in 1789; and on the 23d of April, the day appointed for thanksgiving, such sincere rejoicings took place as are perhaps without a parallel in any country or age. In 1792, the effects of the French revolution began to show themselves in England, and particularly in the capital; and in February 1793, the British troops were embarked to rescue Holland, which they could not effect, from the aggrandisement of France. On the 1st of June, 1794, lord Howe obtained a signal victory over the French fleet; and on the 3d of March, 1797, sir John Jervis beat a much superior Spanish fleet off Cape St. Vincent. However, in the middle of April, England trembled for itself, owing to a most serious mutiny in its grand fleet, which extended universally throughout the navy in every part. Shortly after this was quelled, the sailors regained the esteem of their country by the victory obtained with admiral Duncan over the Dutch fleet off the Texel; and on the 1st of May, 1798, sir Horatio Nelson obtained the most celebrated victory ever known over a much superior French fleet in Aboukir. Sir John Borlase Warren too defeated another French fleet off the coast of Ireland; and in May 1799, Tippo Saib was destroyed in the East Indies, and his capital, Seringapatam, was taken by storm by general Harris.

Owing to a confederacy formed in the north, sir Hyde Parker and lord Nelson were sent in 1801 to humble those powers; and on the 12th March, 1801, effected the till then deemed impracticable passage of the Sound, and lord Nelson, on the 2d April, nearly destroyed the Danish navy moored before Copenhagen, which put an end to the confederacy. On the 1st January, 1801,

Mr. Pitt completed the union with Ireland; and on the 6th February, resigned his places, after having been seventeen years minister. The battle of Alexandria, in Egypt, gained over the French troops by sir Ralph Abercrombie, who lost his life there, tended greatly to bring about peace, which was concluded in 1802; but war again broke out the following year. In 1804, Mr. Pitt resumed the seals of ministry; and in 1805, the victories of sir Robert Calder, and the truly splendid one of lord Nelson, who lost his life off Trafalgar, were obtained over the French and Spanish combined fleets. In 1806, Mr. Pitt resigned a life devoted to his country's service, and ended the course of perhaps the most able, and certainly the most eloquent, minister that ever presided over the affairs of any country; and he must, besides, be respected by posterity as one of the most upright, disinterested, and honest men that ever graced his country's annals.

Q. Did not the continental powers of Europe suffer, in an extraordinary degree, from the usurpations of France?—A. Prussia, by its crooked policy, and Russia by its distance, were almost the only principal states that were not plundered. All the others were reduced, from time to time, and new kings and princes appointed over them at the caprice of the self-created emperor of France, who unfortunately has hitherto found means to carry into effect all his purposes upon the continent. The changes are too numerous to be successively noted in these limits.





MYTHOLOGY.

Q. What is mythology?—A. The knowledge of fabulous history, or of the stories invented by the antients in honour of their gods and heroes, whom they regarded as the principal chiefs. One part of these narrations is founded in history disguised by the marvellous; another part is an allegory of moral truths, or physical properties; and, lastly, the imagination of the poets.

Q. Which are the oldest of the gods?—A. Ocean and Night, from whence came Uranus, Heaven; and Tithea, Earth, of whom sprung Saturn or Time, and Rhea or Cybele.

Q. Had Saturn and Rhea likewise children?—A. As destiny had threatened Saturn with being dethroned by his son, he devoured all that were born. It was only by giving him swathed stones to eat, that Rhea saved Jupiter, Neptune, Pluto, Juno, and Ceres.

Q. What was Saturn's lot?—A. He could not witness the appearance of Jupiter without laying snares for him; but, being himself overcome, he was obliged to take refuge in Italy with Janus, to whom he taught agriculture and the computation of time.

Q. How is Saturn depicted?—A. Under the form of an old man, fig. 17, holding an hour-glass in one hand, and a scythe in the other, to show that time ravages every thing, and flows on without interruption.

Q. How is Rhea or Cybele represented?—A. With a crown of towers, fig. 18, and in a car drawn by lions.

JUPITER.

Q. How was Jupiter (fig. 1.) brought up?—A. His mother, apprehensive lest Saturn should hear his cries, had him carried into Crete to the caverns of Mount Ida, and charged the Corybantes to make a great noise round his cradle. He was nourished by goat's milk, or, as others say, by the nymph Amalthea.

Q. What were his first actions?—A. He compelled Saturn to give up the empire of the world, which he shared with his brothers, assigning the waters to Neptune, and the infernal regions to Pluto. He remained master of the heavens, and was called father of the gods and men.

Q. Was not that empire disturbed?—A. The giants, descended from his uncle Titan, disputed it with him. Some of them having a hundred arms and fifty heads, and also being of an incalculable size, thought that nothing could resist them: they piled the mounts Ossa and Pelion one upon another, and threw immense rocks to the very arch of heaven itself; but Jupiter, aided by his brothers, and his daughter Pallas, crushed them. The names of the principal were Typhon, Briareus, and Enceladus.

Q. Had not Jupiter many adventures?—A. Almost all the gods and heroes owe their birth and glory to him. He metamorphosed himself into endless shapes to gain confidence, or deceive vigilance; for example, into a bull for Europa, a shower of gold for Danae, a shepherd for Mnemosyne, a king for Alcmene, a swan for Leda, Diana for Calista, an eagle for Ganymede.

Q. What are his principal attributes?—A. Thunder in one hand, an eagle at his side, and the majestic air of an old man with a venerable beard, and his hair fastened up by a diadem. His chief sacrifices were bulls; the beech and oak trees were sacred to him.

JUNO.

Q. Why is Juno (fig. 2.) called the queen of the gods?—A. As the wife of Jupiter, whose sister she was. She is likewise considered the goddess of air.

Q. Which were her children?—A. Hebe, goddess of youth; Vulcan, god of fire; and Mars, of war.

Q. What was the character of Juno?—A. She is usually noticed for haughtiness and jealousy. Jupiter's inconstancy always furnished her with new rivals to persecute. She persecuted Latona, Alcmene, and Semele: changed Io into a cow, Calista to a she bear; delivered the family of Athamas over to the furies;

impelled all the labours of Hercules, and prolonged the misfortunes of the Trojans for ten years; to conclude, by burying them with their city.

Q. By what attributes is she known?—A. By the peacock; on the tail of which she placed the eyes of Argus. She is commonly represented under a rainbow, with a sceptre in her hand, and crown on her head.

NEPTUNE.

Q. Was not Neptune (fig. 3.) Jupiter's brother?—A. Yes; and the empire of the waters devolved upon him. He had been of great help to Jupiter in the war with the Titans; but having supported Apollo against Jupiter, he was, with him, banished to the earth.

Q. Where did they pass their exile?—A. On the plains of Troy, where Apollo kept the flocks of Admetus, and joined with Neptune to rebuild the walls of that city; but Laomedon having refused to give them the stipulated price, Neptune let loose the waves, and a dreadful monster, in the midst of them, to which the daughter of Laomedon was to be a prey. Hercules however delivered her.

Q. What is the name of Neptune's wife?—A. Amphitrite. He had many children by her, and underwent various metamorphoses for the love of different mistresses.

Q. Has Neptune any particular attributes?—A. The sceptre which he carries is a trident; his head is crowned with reeds or rushes; and his car, a conch drawn by sea-horses or tritons. The victims sacrificed to him were the horse and bull.

CERES.

Q. What is the dominion of Ceres? (fig. 4.)—A. This sister of Jupiter and Juno is the goddess of agriculture, and consequently of harvests.

Q. On what occasion did she instruct men in agriculture?—A. As a recompence to Triptolemy, who had saved her life when

she was traversing the earth in search of her daughter Proserpine, whom Pluto had carried off from the plains of Sicily.

Q. How is she represented?—A. By a woman in full vigour, crowned with ears of corn; in one hand holding a sickle, and in the other a sheaf.

MERCURY.

Q. Whose son was Mercury? (fig. 5.)—A. Of Jupiter and Maia, one of the daughters of Atlas.

Q. What were his functions?—A. Interpreter and messenger of the gods: he carried them their orders from Jupiter, and conveyed them to the celestial council; he was also the god of travellers, commerce, and eloquence; to him was attributed the invention of the lyre. He conducted souls to hell. Robbers paid him particular worship. He had stolen the herds of Admetus which Apollo kept, and he was charged by Jupiter to deliver Io from her keeper Argus.

Q. How is Mercury known?—A. By the caduceus, a kind of winged sceptre, round which are twisted two serpents; and by wings to his hat and heels, which equally indicate the celerity of his motions.

VESTA.

Q. Had Vesta (fig. 6.) no other name?—A. She appears to be the same with Ops, Rhea, or Cybele, the wife of Saturn, and mother of the gods; but, under the name of Vesta, she is only goddess of fire. She is represented with a torch in her hand, and a kind of cup to pour the perfume upon the sacred flame.

Q. Which was her worship?—A. A perpetual fire was kept up on her altars by virgins, called, by the Romans, vestals, and who were punished very severely for any negligence in that august occupation.

MARS.

Q. Is not Mars (fig. 7.) the son of Juno?—A. Yes; and he presides over war. He is represented with a helmet on his head,

and lance in his hand, and frequently on a chariot breathing only hostility and arms.

Q. Which nation paid him most honour?—A. The Romans, who built many temples to him. The Salians were his priests, and they celebrated his festival by jumping and striking their shields.

Q. Was he not a favourite with Venus?—A. His amours with that goddess have been often sung by poets, as well as the jealousy of Vulcan, who, having one day surrounded them by an iron net, called all the gods to bear witness to it.

VENUS.

Q. How was Venus (fig. 8.) born?—A. The generally received opinion is, that she sprung from the foam of the sea, wherefore her name of Aphrodite. She was the goddess of beauty, and no sooner made her appearance in Olympus, than all the gods disputed who should marry her. Jupiter gave the preference to his son Vulcan, to the great dissatisfaction of Venus, who could not live on good terms with so deformed a husband.

Q. Did she not endeavour to console herself for it?—A. She was the goddess of Pleasure; Paphos, Gnide, Cytherea, and Cyprus, opened temples to her voluptuousness. She divided her favours with the gods, heroes, and simple huntsmen; Mars, Anchises, Adonis, &c., and was the mother of Love, the Graces, Smiles, Priapus, and Eneas.

Q. How is she represented?—A. Most frequently naked, or encircled by the famous cestus, with an apple in her hand. Her car is a conch, drawn by doves or swans; the graces follow, and playfulness and smiles fly around her.

VULCAN.

Q. Whose son was Vulcan? (fig. 9.)—A. Of Jupiter and Juno; but Jupiter found him so ugly when he was born, that he gave him a kick, which precipitated him from heaven to earth. Vulcan's thigh being broken by the fall, he remained lame all his life.

Q. What were his employments?—A. He first served the gods with drink at the feasts of Olympus; but, to shelter him from their ridicule, Jupiter made Hebe take his place, and he was only afterwards employed, together with the Cyclops, in forging thunder-bolts for Jupiter, or arms for Mars. It was as a reward for the service he was of in the war with the giants that Jupiter gave him Venus.

Q. Under what form is he depicted?—A. A cap on his head, hammer in his hand, and resting on an anvil.

MINERVA.

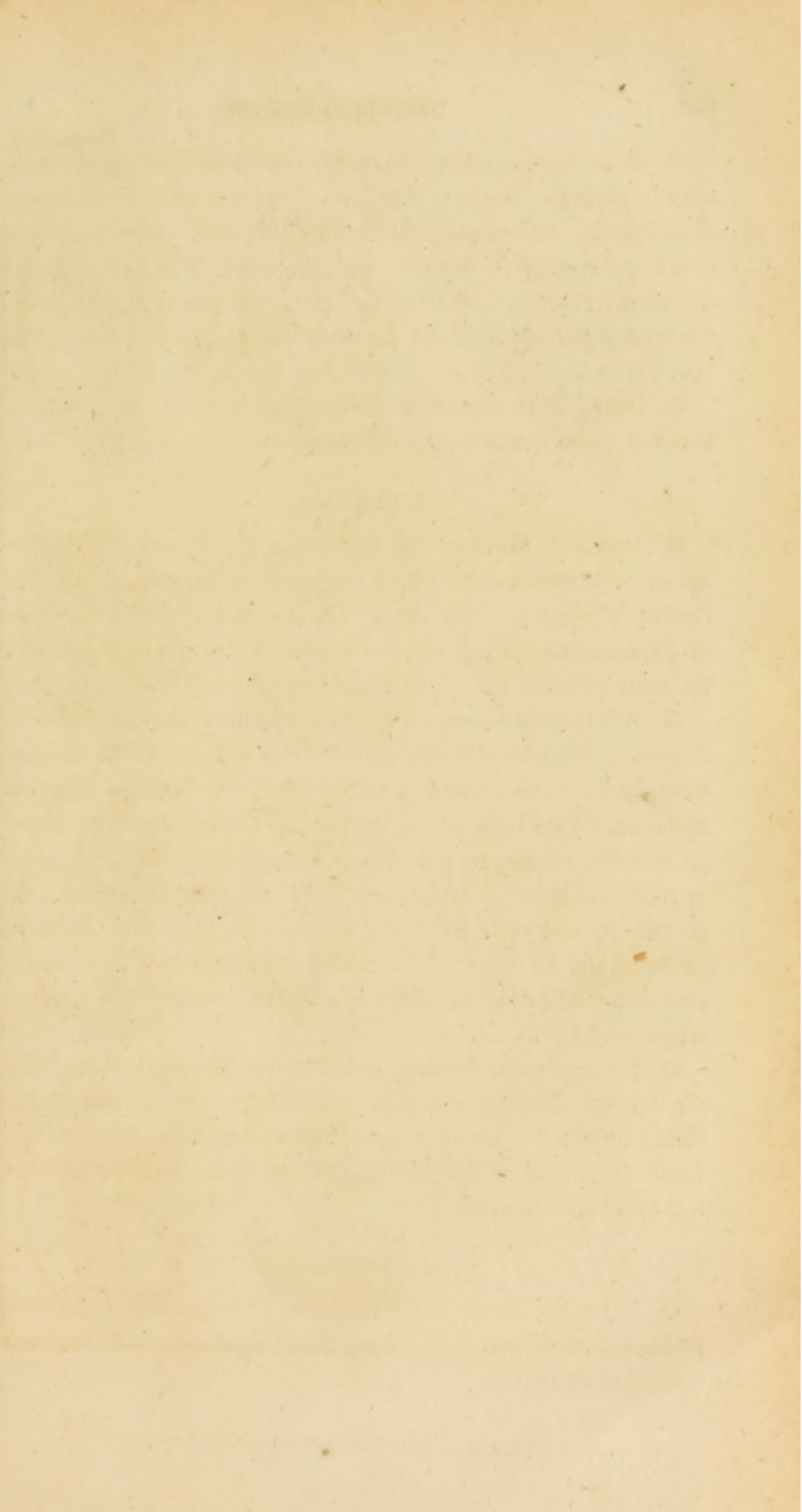
Q. Had not Minerva (fig. 10.) some other name?—A. The names of Minerva and Pallas were given indifferently to the goddess of Wisdom and the Arts. She was said to be the daughter of Jupiter, and sprung completely armed out of his brain, from the blow of a hatchet which Vulcan gave him.

Q. Are there not some adventures peculiar to Minerva?—A. Arachne having dared to challenge her to needle-work, was changed by the jealous goddess into a spider. She was likewise a rival to Neptune, for the right of naming the city built by Cecrops. Jupiter pronounced that the right should belong to the one who should produce the most useful object. Neptune struck the earth with his trident, and made the horse rise from the place; but Minerva produced the olive, which, considered as the emblem of peace, bore away the prize, and the city took the name of the goddess, which is in Greek Athenes.

Q. Under what denomination is Minerva exhibited?—A. With the majestic shape of a woman armed cap-a-pee, a spear in her hand, the egis, or goat-skin, on her breast, with the head of Medusa. This head is also on the goddess's shield, and her attribute is the owl and the olive.

APOLLO.

Q. What are Apollo's (fig. 11.) principal names?—A. Apollo, Phœbus, god of day, sun, son of Latona, father of the muses, and conqueror of Python.





Q. Who was his father?—A. Jupiter; who, to protect Latona from the insults of the peasants of Lycia, changed them into frogs, and sent Latona and her children, Apollo and Diana, to the isle of Delos.

Q. Whence are derived Apollo's other names?—A. From his different occupations: he conducted the radiant chariot of the sun, presided on Parnassus over the labours of the muses, inspired poets, gave lessons on eloquence to orators, and interpreted the oracles at the temple of Delphos by the mouth of Pythia, in the very country which he had saved from the ravages of the serpent Python.

Q. How was the remembrance of the victory over the serpent preserved?—A. By the beautiful statue of Apollo, which has been kept in the Belvidere at Rome, and is outlined in fig. 11. The commanding attitude of the god is there shown at the moment of his having let fly the last arrow at the serpent.

Q. What are his other attributes?—A. He is likewise depicted in a shining car (fig. 14.), drawn by four horses, Eous, Pyrois, Æthon, and Phlegon, escorted by the four seasons, or hours, and preceded by Aurora, frequently standing with a lyre in his hand, and always as in the brilliancy of youth, his hair bound with a diadem, and the quiver on his shoulder.

DIANA.

Q. What are the functions of Diana (fig. 12.)?—A. Sister to the Sun and Apollo: she presided over night; was called Phœbe, or the moon, in heaven; Diana, or the goddess of hunting, in the forests; and Hecate, or the goddess of darkness, in hell.

Q. How is she represented?—A. To the chaste Diana is given all the splendour of virgin beauty. A quiver on her shoulder, bow in her hand, and crescent on her forehead; she runs swiftly in the chace, and is drawn by stags.

BACCHUS.

Q. From whom was Bacchus (fig. 13.) born?—A. From Semele, the daughter of Cadmus, who was loved by Jupiter, and

had the imprudence to force him into her presence in all the splendour of divine majesty : her palace was thereby consumed, and she perished in the flames. Jupiter saved the child, which was not yet born, by concealing it under one of his thighs until the instant destined for its birth.

Q. How was Bacchus brought up ?—A. Mercury took him to the nymphs of Nyssa, who were afterwards changed into a cluster of stars named the Hyades. Bacchus distinguished himself in war, pushed his conquests into India, aided the gods in combating the giants, taught men the culture of the vine, and married Ariadne, whom Theseus had abandoned in the isle of Naxos.

Q. By what attributes is he recognised ?—A. Mostly by the figure of a fine child or young man, crowned with vine-leaves or ivy, a tyger's skin on his shoulder, thyrsis in his hand, and leopards either at his feet or drawing his car.

THE GRACES.

Q. What are the names of the three graces ? (fig. 14.)—A. Aglaia, Thalia, and Euphrosyne : they were the daughters of Bacchus and Venus.

Q. How are they represented ?—A. Almost naked, holding hands, or bound by garlands of roses, and serving as an escort to Venus.

CUPID OR LOVE.

Q. Who was love (fig. 15.) said to spring from ?—A. From Mars and Venus ; but Jupiter thinking to avoid the ills which love would occasion, would not permit him to be brought up in the heavens. He was kept in the woods, where he very soon tried upon the animals those arrows which were one day to make him one of the most powerful of the gods.

Q. Did Cupid experience no other persecution ?—A. Himself inflamed for Psyche, to whom Venus had taken an aversion, he was a butt to all her jealousy, and shared all the pains of Psyche, who ultimately was made immortal, and given to him as a wife.

Q. What is the characteristic of Love?—A. A young child; its eyes covered with a bandage, the quiver on its shoulder, bow in the hand, and sometimes a torch: his worship was principally exercised at Cytherea.

AMPHITRITE.

Q. Who was Amphitrite? (fig. 16.)—A. The daughter of Oceanus and Doris, and wife of Neptune, who was obliged to run away with her from Atlas, with whom she had taken refuge. This marriage rendered her goddess of the sea, and she had many children; amongst others Triton and Rhodes.

Q. How is she represented?—A. In a car, or conch, drawn by Tritons or sea-horses.

SATURN, FIG. 17; AND CYBELE, FIG. 18,

Have already been described in the first paragraph.

PLUTO.

Q. Where did Pluto (fig. 19.) reign?—A. In hell, that is, in the bowels of the earth, whereto the souls of the dead were conducted, either to expiate their crimes in Tartarus, or to taste the peaceful charms of the Elysian fields.

Q. How was he honoured?—A. By sacrificing black bulls and sheep to him in couples. His crown is iron; his sceptre a trident or fork; he has a stern look, thick beard, and the three-headed Cerberus at his side.

BELLONA.

Q. What is the meaning of the word Bellona?—A. It indicates the goddess of war, who was the daughter of Phorcys and Ceto, and whose priests celebrated her festival, by running one upon the other, armed with sabres, so violently as to shed blood.

Q. What are her attributes?—A. Bellona (fig. 20.) is represented armed cap-a-pee, and holds a torch, or the thunder of war, in her hand.

HERCULES.

Q. Of whom was Hercules (fig. 21.) born?—A. Of Jupiter and Alcmena, who, in the absence of her husband Amphytrion, king of Thebes, thought he was with her again, Jupiter having assumed his form. Juno's jealousy could not prevent the birth of Hercules; in vain she sent two snakes to destroy him in his cradle; the Alcides strangled them, and thus made his divine origin known.

Q. What did Hercules perform afterwards?—A. He for a long time had to contend with the snares of Juno, who required of him twelve labours, independently of other actions, by which he found opportunities of signalising himself.

Q. What are the twelve labours of Hercules?—A. The Nemean lion which he killed in that forest, to deliver the kingdom of Mycenae, and the skin of which was his finest ornament during life. The hydra of Lerna, which had seven heads, that came again as often as one was cut off: he triumphed, by cutting them all off at one blow. The wild boar of Erymanthus, of a prodigious size. He brought it alive to Eurystheus, suspended by the feet over his shoulders. The hind, with horns of gold, and feet of brass, which was sacred to Diana, and could only be overcome by running down. The birds of Stymphalus, which he was successful in destroying the numberless flocks of by arrows. The stables of Augeas, which he could only cleanse out by turning the river Alpheus to run through them. The bull of Crete, which Neptune had let loose, raging in the plains of Marathon, and which Eurystheus obliged Hercules to take away. The horses of Diomedes, which that king fed on human flesh, and to which Hercules gave their own master to devour. The defeat of the Amazons, and capture of their queen Hypolita, whom he gave in marriage to his friend Theseus. The oxen of Geryon, which he was to carry off by killing the king of Spain, terrible on account of his triple body, and to take from Spain to Greece. The golden apples of the garden of the Hesperides, guarded by a dragon with a hundred heads, which Hercules killed with his club. Cerberus

brought from hell, to which Hercules went twice, first, in obedience to Eurystheus, to bring Cerberus to her, and then to fetch away queen Alceste, who had devoted herself to death for her husband Admetus.

Q. What was the end of Hercules?—A. The centaur Nessus had carried away from him the beautiful Dejanira. Hercules pursued, and struck him with an arrow poisoned with the blood of the hydra of Lerna. Nessus, expiring in the most excruciating torments, prevailed on Dejanira to carry to Hercules, as a mark of reconciliation, a tunic stained with his blood. Hercules no sooner put it on, than he found he was being consumed by the same poison, and in his rage he had a pile raised on Mount Ætna, and finished his days in the flames; but Jupiter received him into Olympus, placed him in the rank of gods, and gave him Hebe, the goddess of youth, to wife.

Q. How is Hercules figured?—A. As a most robust man, and often standing upright with his hand on a club; the skin of the Nemean lion over his shoulders, and apples of the Hesperides in his hand.

POMONA.

Q. Was not Pomona (fig. 22.) the goddess of fruits?—A. Yes; and Vertumnus, the god of autumn, long loved her, without being successful in meeting a return. At length, disguised as an old woman, he persuaded her, by such enchanting discourse, that she consented to see him again in his proper form, and to make him her husband. She is represented with baskets of fruit round her.

PAN.

Q. Who was the god Pan? (fig. 23.)—A. The first of the rural gods. According to some, the god of all nature, the word Pan signifying *all* in Greek. He is said to be the son of Jupiter or Mercury.

Q. How is he described?—A. With the body of a very ugly man, the legs of a goat, and horns on his forehead. He loved the beautiful Syrinx, and when she escaped, changed her into a

arose. He formed from his pipes a flute, which still retains his name.

FLORA.

Q. What is there to say of the goddess Flora? (fig. 24.)—

A. She was the goddess of flowers, and the wife of Zephyrus. She was honoured by the dances of young girls, who adorned her altar with garlands, and is represented crowned with flowers, and spreading them around her.

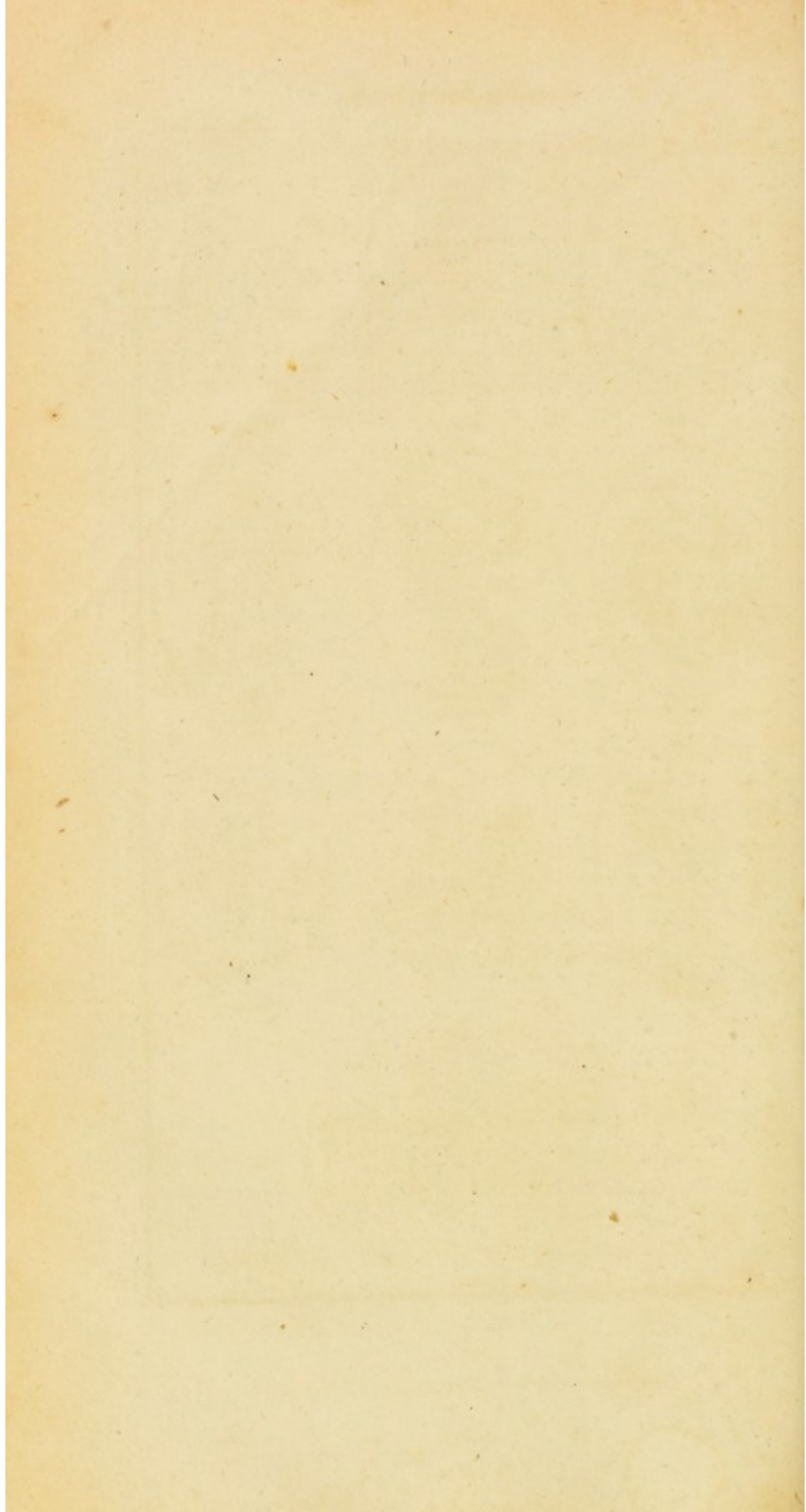
THE MUSES.

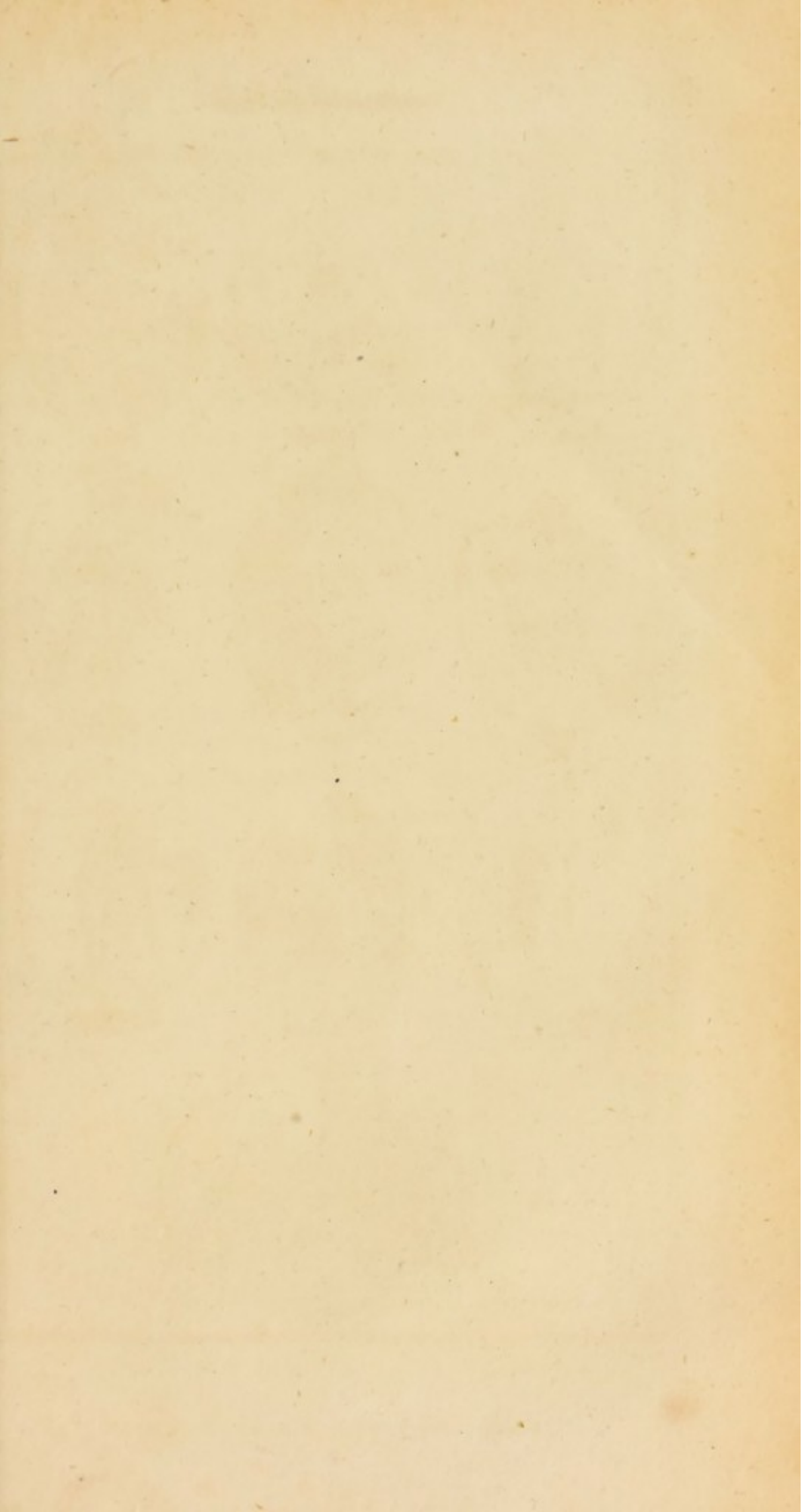
Q. What is known of the Muses?—A. The nine chaste sisters, fig. 25 to 33. were born of Jupiter and Mnemosyne, the goddess of memory, and their attributes were every thing which referred to the operations of the mind. They inhabited Mount Parnassus, on the banks of the Permessis and Hypocrenes.

Q. What were their names?—A. Clio, Thalia, Melpomene, Euterpe, Terpsichore, Erato, Polymnia, Urania, and Calliope.

Q. What are the functions and attributes of each?—A. Clio, the historic muse, an attendant on the glory of heroes, is crowned with laurels, and holds the book of immortality in her hand. Thalia, the comic muse, holds the mask of satire, and is sometimes crowned with ivy. Melpomene, the tragic muse, grasps a poignard, and is represented as the image of heroic grief, bending over a funeral urn. Euterpe, the muse of music and pastoral poetry, has a double flute in her hand. Terpsichore, the muse of dancing, is represented dancing, and accompanying her steps upon the lyre. Erato, the muse of lyric and eratic or amorous poetry has a lyre, torch, and not unfrequently little Cupids for her attributes. Polymnia, the muse of eloquence, to whom the invention of the lyre is attributed by some, is wrapped in a mantle. Urania, the muse of astronomy, is crowned with stars, and measures with a compass the different proportions of the celestial globe. Calliope, the muse of heroic or epic poetry, has a trumpet in her hand, and rests upon military trophies. Phœbus,









(fig. 34.) is likewise added as the conductor of the muses, to words which he accompanies with the sound of his divine lyre.

ESCULAPIUS.

Q. Is not Esculapius (fig. 35) the son of Apollo?—A. Yes; and of the nymph Coronis, whom Apollo in a fit of jealousy changed into a crow. He confided the young Esculapius to the centaur Chiron, to be taught botany, the properties of plants, and all the secrets of medicine, by which he was entitled to immortality.

Q. How is he represented?—A. As an old man with a long beard, resting upon a stick, round which a serpent is twisted.

PROSERPINE.

Q. What is Proserpine's (fig. 36.) history?—A. She was the daughter of Jupiter and Ceres, and lived in Sicily with her mother when Pluto, overcome with love, carried her off to place her upon the throne of hell. Ceres run over the whole world with a torch in her hand; and when she had learnt her daughter's fate, demanded vengeance of Jupiter, who promised to restore her, if she had not eaten any thing since her abode in the gloomy empire. Proserpine, convicted by the indiscretion of Esculapius of having eaten some pomegranate seeds, was constrained to divide her time, six months with her husband, and six months with her mother.

EOLUS.

Q. Is not Eolus (fig. 37.) the god of winds?—A. He kept them shut up in a grotto of Thrace, to let them loose when he thought proper.

Q. What are the principal winds?—A. Boreas, Aquilo, Zephyrus, Eurus, and Auster.

Q. Did not Boreas make a figure on some occasion?—A. He

ran away with Orythia, daughter of the king of Athens and mother of Calais and Zether, two of the Argonauts.

Q. How is Eolus delineated?—A. As a venerable old man, with a scythe in his hand sitting on a group of clouds, or at the mouth of a cavern, from which the winds are coming out in the form of inflated heads.

HEBE.

Q. Whose daughter was Hebe (fig. 38.)?—A. The daughter of Jupiter and Juno, who made her the goddess of youth, and employed her in pouring out nectar at the celestial table.

Q. How happened she to be removed from that occupation?—A. Being one day too much in a hurry, she had a fall which alarmed her modesty, and she would not show herself again. She was afterwards married to Hercules. Ganymede was chosen by Jupiter to fill her place.

Q. What are her attributes?—A. She is crowned with flowers, lightly clad, and holds a vase and ewer for serving out nectar.

MORPHEUS.

Q. What is said of Morpheus (fig. 39.)?—A. He is the god of sleep and dreams, and he presides over the sweets of repose, and the illusions by which people are soothed or agitated in their slumbers.

Q. How is he represented?—A. Crowned with poppies, and sleeping soundly on a bed strewn with the same flowers. He likewise has the wings of a butterfly, and birds of night hover around him.

FORTUNE.

Q. What origin is given to Fortune (fig. 40.)?—A. According to Homer, she is the daughter of Oceanus, and from her emanates all our good or ill fortune.

Q. By what marks is she known?—A. By the bandage tied

over her eyes and cornucopia in her hand. She is almost naked; her veil flies in the wind, and one foot is always placed on a wheel or ball.

MOMUS.

Q. What was Momus's (fig. 41.) fate?—A. To preside over the games and amusements of Olympus. He is the god of joy, and passes for the son of Sleep and Night. He is also the god of criticism, and it is said of him, that being desired to judge of the master-pieces presented by Minerva, Neptune, and Vulcan, he considered none of them exempt from blame.

Q. How is he represented?—A. With a jovial air, a fool's head in one hand, and sometimes a mask in the other, and on his head a cap hung with bells.

SYRENS.

Q. Were the Syrens goddesses (fig. 42.)?—A. They were only nymphs, daughters of the river Achelous, and resided in the island of Sicily.

Q. How many are they?—A. Three: Parthenope, Lygea, and Thelxiope. Their heads and upper parts of their bodies were of the most irresistible beauty, and their lower parts like those of a fish. Their charming voices fascinated navigators, whom they then destroyed in a cruel manner.

HARPOCRATES.

Q. Who is Harpocrates (fig. 43.)?—A. The god of silence, son of the first Egyptian deities, Osiris and Isis.

Q. What is his figure?—A. Either a child or a handsome young man, with his finger upon his mouth. The Egyptian representations give him a whip in his hand.

FATES.

Q. Of whom were the Fates (fig. 44.) daughters?—A. Of

Erebus and Night. They were three in number : Clotho, Lachesis, and Atropos.

Q. What were they employed in ?—A. In directing the destinies of mortals, and holding the thread of their lives. Clotho presided at the birth, and held the bed-post ; Lachesis wove the different events of life, of which Atropos cuts the thread at the moment of death.

DEMI-GODS AND HEROES.

Q. What are understood by Demi-gods ?—A. Those heroes who, having a deity for their parent, have been entitled from their great actions to be received into Olympus after death. Such is Hercules, who has been already described.

CASTOR AND POLLUX.

Q. Are not Castor and Pollux demi-gods ?—A. Yes ; they were sons of Leda and brothers of Clymnestra and Helen. Jupiter was the father only of Pollux and Helen, but the friendship of the two brothers was such as to entitle them to joint divinity, each passing six months alternately in Olympus.

BELLEROPHON.

Q. What were Bellerophon's adventures ?—A. Obligated to absent himself from Corinth, on account of having killed his brother, he went to Jobates, king of Lycia, who, to effect his destruction, appointed him to combat the Chimera which desolated the country.

Q. What was this Chimera ?—A. It had the head of a lion, body of a goat, and tail of a serpent, and vomited flames.

Q. Was Bellerophon successful ?—A. Minerva lent him Pegasus ; and, mounted on this winged horse, he escaped the attempts of the monster, and gave him him wounds with certain effect. Bellerophon having obtained the victory, turned his arms

against the Amazons, where he again had the advantage ; but one day rising too high in the air, Pegasus was stung by a gad-fly, and threw the hero, who was killed by his fall.

JASON.

Q. What was Jason's origin?—A. He was the son of Eson, king of Thessaly, by whom his guardianship was confided to another son, Pelias, who, dreading the moment when he was to give the sceptre to Jason, prevailed on him to attempt the conquest of the celebrated Golden Fleece, from which it was not probable he would ever return.

Q. Where was the Golden Fleece?—A. The gods had given Athamas, the son of Eolus, a ram, the fleece of which was gold. Phrixus, the son of Athamas, flying from the anger of his step-mother, crossed the sea with his sister Helle on the back of this ram ; and when he arrived on the coasts of Colchis, sacrificed it to Jupiter, and presented the fleece to king Ætes, who consecrated it to the god Mars, under the custody of a furious dragon.

Q. Did Jason undertake this alone?—A. He was accompanied by the most famous heroes ; and on this occasion they built the first ship, called the Argo, and from that they were named Argonauts. They met with a variety of adventures on their way, and Jason overcame the dragon by the magic aid of Medea, whom he afterwards abandoned for Creusus, daughter of the king of Corinth.

PERSEUS.

Q. Who was Perseus?—A. The son of Jupiter and Danaë, whom her father Acrisus kept shut up in a tower, which Jupiter penetrated by means of a shower of gold. Acrisus, enraged at his disgrace, exposed Danaë upon the sea, together with the son she had borne, and whom Polydectus adopted.

Q. Had not Perseus to encounter some other dangers?—A. Polydectus wishing to get rid of him, sent him to cut off the head of Medusa, one of the Gorgons, which were laying waste

the country. They had but one eye amongst the three; but whosoever was looked upon by it was converted into a stone. Perseus took the opportunity, while the eye was being changed from one to the other, and cut off Medusa's head, with which he ornamented his shield.

Q. What use did he make of it?—A. He changed Atlas into a stone, for having refused him the rights of hospitality, and delivered Andromeda by petrifying the monster that was going to devour her.

THESEUS.

Q. What is the history of Theseus?—A. He was the son of Ægeus, king of Athens, who entrusted him to deliver his country from the shameful tribute imposed upon it by Ninos, king of Crete, to whom seven young boys, and the same number of girls, were to be sent every year to be devoured by the Minotaur. Theseus, assisted by the love of Ariane, daughter of Minos, reached, by means of a clew of thread, the centre of the labyrinth where the Minotaur was waiting for him, and he attacked and killed it. But on his return, he ungratefully deserted Ariadne in the isle of Naxos, where she was found by Bacchus, and made the companion of his triumphs.

Q. What other exploits did Theseus perform?—A. He was the friend and often the companion of Hercules, who delivered him from hell, where he had been with Pirothous to bring away Proserpine, and gave him for a wife Hyppolita, the Amazonian queen, whose son afterwards underwent so many sufferings for the love of Phedra, Theseus's second wife.

CADMUS.

Q. What was the origin of Cadmus?—A. He was the son of Agenor, king of Syria, and brother of Europa, who, when ran away with by Jupiter, Cadmus was sent to look for.

Q. What was the result of his expedition?—A. The oracle having told him to build a city in the place to which he should

he led by an ox, he laid the foundation of Thebes, in Bœotia, and saw all his companions devoured by a dragon. But Minerva supporting his courage, he killed the dragon, pulled out its teeth, and sowed them in the earth. Numerous armed men sprung up from the places, and all killed each other except five, with whom Cadmus completed the erection of Thebes.

Q. Was he not famous for something more?—A. The Greeks say he was the inventor of the alphabet. He was at last changed into a serpent, together with his wife Hermione.

SIEGE OF TROY.

Q. What was the cause of the siege of Troy?—A. The judgment of Paris, who carried off Helen.

Q. What was the judgment of Paris?—A. Discord, not having been invited to the nuptials of Thetis, threw upon the banquet-table a golden apple, on which was written, "For the most beautiful." Juno, Pallas, and Venus, disputed which should have it. Jupiter referred its decision to Paris, a shepherd on Mount Ida, and youngest son of the king of Troy. Paris decided in favour of Venus, who promised him in return the love of Helen, daughter of Jupiter, and wife of Menelaus. Paris ran away with her to Troy. All Greece, stirred up by the rage of Juno, and the wounded pride of Pallas, combined to avenge the insult, and embarked in the siege.

Q. Which were the principal Grecian chiefs?—A. Agamemnon, king of Mycena, eldest brother of Menelaus, and generalissimo. Menelaus, Achilles, the two Ajaxes, Nestor, Idomeneus, Ulysses, Diomed, Philoctetus, Patroclus, and afterwards Pyrrhus, the son of Achilles.

Q. Who were the Trojan chiefs opposed to them?—A. Hector, Paris, Deiphobe, Helenus, all Priam's sons, Eneas, Memnon, Sarpedon, Rhesus, and Penthesilea, queen of the Amazons.

Q. Which of the heroes were the most valiant?—A. Achilles of the Greeks, and Hector of the Trojans. Achilles, the son of Thetis, overcame Hector, but he was afterwards killed by an ar-

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row discharged by Paris, and which struck his heel, the only part where he was not invulnerable.

Q. How long did the siege last?—A. Ten years, in the course of which the greatest part of the leaders perished.

Q. What part did the gods take in the war?—A. Jupiter alone left it to fate. Venus, Mars, and Apollo, defended the Trojans; and Juno, Minerva, Neptune, and Vulcan, protected the Greeks.

Q. By what stratagem did the Greeks put an end to the siege?—A. They seemed tired with so long an expedition; and after having demanded to retreat without molestation, they left an immense wooden horse on the field of battle, as an offering to the tutelar saints of the country. The Trojans, misled by the deserter Simon, wished to introduce the horse within the walls, of which part must be taken down to admit it; and in their joy at the retreat of the Grecians, they gave themselves up to the wildest transports. Drunkenness and fatigue had overcome the whole city, when on a signal given by Simon, the horse's flanks opened, and fifty warriors who had been concealed in it, with Ulysses at their head, came out, and ordered the Greeks in ambush without the city to advance. They delivered Troy to the flames, sword, and plunder.

Q. Who were the Grecian heroes that got back to their country?—A. Agamemnon no sooner returned, than he fell a sacrifice to the new husband which Clytemnestra had taken. Menelaus went back with Helen; Idomeneus, Philoctetes, and Nestor, regained their own fire-sides; but Ulysses wandered about for ten years before he effected his return to Ithaca.

Q. What were Ulysses's principal adventures?—A. That king, considered as the most eloquent and artful of mankind, was kept several years in the island of Calypso, and had great difficulty to escape the snares of Circe and the charms of the Syrens, was near being devoured by the Cyclops Polyphemus, was received by the king of Pheacia, and found upon his return his palace full of numerous suitors for the hand of Penelope. This faithful wife had contrived means to escape their pursuit, and Ulysses, without

making himself known, assisted by his son Telemachus, and old servant Eumeus, exterminated the whole of them.

Q. Which of the Trojans survived their country's misfortunes?

A. Æneas and his companions. His mother Venus protected him in his flight, that he might be the founder of Rome. He embarked with his father Anchises and son Ascanus; likewise saw the Cyclops Polyphemus, and the dreaded Syrens; was stopped at Carthage by the love of the queen Dido, landed twice in Sicily, and went to Italy to make an alliance with king Latinus, by marrying his daughter Lavinia, and destroying Turnus, to whom she had been promised.

Q. Is not this the close of the fabulous history?—A. This is the close of the ancient mythology. Some princes have been honoured with deification. Ovid has interspersed some touches of the marvellous amongst the primitive Romans, but those adulatory tributes of flattery are never identified with the Olympus of the antient Greeks.

GYMNASTICS.

Q. What are gymnastics?—A. The art of strengthening the body, and keeping it in health?

Q. Wherein does it consist?—A. In the practice of exercises capable of gradually unfolding the strength of the body; afterwards, adding to it address; and lastly, giving to the external habit a grace devoid of effeminacy and affectation.

Q. Which exercises are best adapted to promote strength?—A. Jumping, running, and wrestling.

Q. What is meant by jumping?—A. Jumping, properly so called, consists in springing over a barrier, more or less high. A standing-jump, performed by both feet close together. Running-jump, jumping with a pole, which is of great use in passing wide ditches, and is an exercise which requires courage and a proper equilibrium; it tends to give strength to the muscles of the chest, and invigorates the shoulders, arms, and hands; jumping down, perhaps from an elevation of fifteen or twenty feet; it adds to courage and intrepidity, and its use may be felt under all cir-

cumstances of life. Jumping forward, by which means a ditch, or brook, may be escaped by an elevated spring. Some will spring to the distance of five yards ; it gives us confidence, and strengthens the body, inasmuch as it requires a constant exertion of the legs and thighs. The continued jump, which is with the feet close together, and the one which reaches the goal in the fewest springs, is the winner. Hop, step, and jump, or jumping on one foot, alternately : it is a very pleasant game, gives exercise to the muscles, legs, and thighs, and requires particular equipoise. Care must be taken always to make the first spring on the right foot.

Q. What are the advantages of running ?—A. This exercise, perhaps the most simple that man can take, is likewise the most useful for lengthening his days. It materially strengthens the limbs and lungs. The art of running comprehends first, a race, which is to arrive first at an object agreed upon. In training ourselves for it, we should begin by running a short distance, and increase it gradually. Running a distance. This is a violent exercise ; it depends upon being accustomed to continued exertion. It should only be resorted to in winter and autumn. The coat, waistcoat, and hat, should always be taken off, and the chest be uncovered. When it is over, the runner should instantly resume his clothes, and walk about for a considerable time, that he may not take cold. Sledges, which is an agreeable amusement. A race of sledges is a very salutary exercise on safe ice, where the depth is not so great as to endanger the life, should the ice break ; and its pleasure makes the rigour of the season forgotten. Bars, prison-bars, or prisoner's base ; a game peculiar amongst us, to boys, or young men, but females might adopt it with advantage to their health, grace, and elegance. Puss-in-the-corner, blindman's buff, &c. are well-known games, which make the house comfortable to young people, during bad weather, and prevent self-weariness, fashionably termed ennui, than which, a more dangerous enemy cannot be guarded against.

Q. What is wrestling ?—A. Two people lay hold with the arms, or hands, and endeavour to throw each other down. There are several kinds of wrestling. In the light contest, he is victorious

who first pushes back his adversary, so as to make his foot give way. The semi-contest requires the adversary to be lifted from the ground, and thereby deprive him of power to act. The double contest requires the adversary to be thrown down twice. The complicated contest requires the adversary to be thrown down, and kept there, and the one who is tired first is the loser. The contest for an apple, or stick, is practised to exercise and give strength to the wrist. An apple, or stick, is taken into the hand, and endeavoured to be wrested out of it. Wrestling is an exercise which contributes greatly to strength of body. It should be performed on a moist grass plot, or deep sand, from which stones, or hard substances, have been cleared away. The wrestlers should take off all superfluous dress. Anger and blows are not allowed, nor must the clothes or hair be laid hold of, but merely the body. Persons of irascible dispositions should not be allowed to contend, as it is in that case very liable to promote quarrels.

Q. Which exercises are best calculated to increase strength and agility?—A. Swimming, throwing, and climbing.

Q. What is the advantage of knowing how to swim?—A. Bathing, of itself, is of the greatest utility; and a good swimmer can frequently, not only save his own, but his neighbour's life. Young people should make use of cold baths, which increase the muscular powers, and harden them against cold; in the summer, they temper the ardour of the blood, give it more free circulation; and keep the body in health, which cannot be preserved without attention. The proper time for bathing is before sun-rise in the morning, but never immediately after eating. We should not go into the water unless perfectly cool, and then we should jump into it, so as to be immersed instantaneously, as otherwise the blood will fly to the head. Those who cannot dive should wet the head before they go in. Ten or twelve minutes is quite long enough to remain in the water.

Q. What is the principal method of swimming?—A. In learning without a master, advance boldly, and lay aside all apprehension. We may be assisted by a bunch of rushes, inflated bladders, or corks. Lay gently along the water on the belly, the

head and neck elevated, chest forward, and back rather bent ; then raise the feet to a short distance from the surface, extend them, bring them back, and thrust them out again ; at the same time extend the arms, and bring them round extended, right and left, to the chest again. The arms must always act in unison with the feet in pushing against the water, and every motion should be as slow as possible in beginners. When experience is once acquired, and we can stir about, and dive without fear, we may offer assistance to others who are in danger. A good swimmer should know how to dive, that is, to swim under water, to accomplish which he must use himself to hold his breath five or ten minutes. To regain the surface, with the hands he should draw down the upper, and press the feet against the lower water. There are many ways of swimming, which are acquired by use, and it is well to know them, as by varying the attitude we may rest ourselves, when obliged to be long in the water.

Q. What is meant by the art of throwing ?—A. It is an exercise which, while it gives strength and activity to the muscles, likewise adds to the quickness and accuracy of the sight. It consists in throwing, or slinging a body, either with the hand, or by means of some instrument, as the bow, racquet, &c. The other principal games are archery, which is well known. Foot-ball, also much used, but subject to nearly the same objections as wrestling. Tennis, a game of celebrity ; and fives, very pleasing. Quoits, battledore and shuttlecock, much used by the ladies. Bowls, nine-pins, and billiards, also combine art with exercise. The swing is a delightful lady's game. It requires weight, the head straight and erect, and favours every movement of the body. Of all amusements proper for children, this has the greatest combination of ease, grace, pleasure, and health. The kite is a play in which children begin to display their ingenuity in making it, and their taste and elegance in its formation and ornaments.

Q. What is the art of climbing ?—A. The knowledge how to use the hands, arms, thighs, and legs, to ascend a tree, or a mast. The exercise taken in climbing, at the same time, accustoms youth to patience, perseverance, and disregard of pain.

Q. In what does the art consist?—A. The learners first suspend themselves by the hands, or arms, to a cord, or beam, and he who remains longest is the winner. The next step is to scramble up the trunk of a tree, &c. &c. an art, when acquired, which frequently adds to our personal protection.

Q. Are there no other games which tend to agility?—A. Many. The principal are walking on the edge of a plank, and walking upright on a round beam; walking in stilts; skating; and rope-dancing.

Q. Which exercises are best adapted to giving grace to the body?—A. Three essentially requisite: equitation, dancing, and fencing.

Q. What is equitation?—A. The art of riding on horseback, which is obtained by learning the exercise of the menage. The object of it is to know the use of the horse, as well for service as for pleasure. A man's position on horseback must be upright and natural; every part of the body should be in so easy an attitude as not to fatigue him; and the less constrained his position to himself, the easier it is for the horse, which must have the free action of its powers. A good horseman is distinguished by the grace and nobleness of his air. He should study the disposition and qualities of his horse, and not neglect those general notions which bring him acquainted with that interesting animal. The horse does every thing for caresses, mild words, and kind treatment. Violence and anger irritate, discourage, and degrade it, without having any good effect.

Q. What is dancing?—A. The art of stepping in cadence to the sound of instruments: the motion of the body being light, pleasant, and void of affectation. Dancing has been in use amongst all nations. There are several kinds of it, grave, noble, lively, foolish, &c. It regulates the movements of the body, and gives it that grace, without effeminacy, which renders the gait free and confident, and which sits so well on either sex.

Q. What is fencing?—A. The art of making use of the small sword, to wound an adversary, and protect oneself. It is acquired by means of foils, a very flexible kind of sword, without an edge, and the extremity of which has a button affixed to it, to prevent

its wounding. The principal parts of fencing are the pass, or thrust, parade, and assault. This exercise has the advantage of breaking the body to every attitude, and giving great pliability to the whole machine. Although its utility is great, it cannot be too strongly impressed upon the minds of youth, that the knowledge must never be abused, and that it should only be employed in the service of the country, or in personal defence.

AGRICULTURE.

Q. What is agriculture?—A. The art of cultivating ground, and making it fruitful. It is the science of rural affairs. Agriculture is an art of the first rank; it feeds us, and is a source of that actual wealth and property, which have a real value, as not depending upon opinion. It supplies our necessities, and is the principal revenue of a state.

Q. What knowledge is essential to agriculture?—A. First, To know, at a glance, by the appearance and colour of trees, what is their quality. Second, To prepare the earth, so as to make it productive of fine fruits; understand thoroughly every thing connected with the cultivation of soils, and the rules necessary for giving them the requisite portion of labour; sowing at the proper time, and being informed of the qualities of good corn, and other seeds. Third, To have a competent knowledge of meadow and woodland, and the plantation and shape of trees, which embrace an infinity of details. Fourth, The management of cattle; the favorite and proper food for every kind of herd, or flock; the diseases they are subject to, and remedies to be applied. Fifth, The good and bad qualities of horses, which are essential to the use of the agriculturist. In short, he should, to be perfect, understand geology, mineralogy, botany, physics, and chemistry.

Q. Which are the most common instruments of agriculture?—A. The plough, yoke, harrow, mill, sieve, spade, hoe, mattock, rake, and pruning-knife.

Q. In what do rural affairs consist?—A. Rural property is composed of different objects. First, Land which is a domain, or sometimes a manor. A farm is a small domain let on hire. The

farmer is the tenant who takes it, agreeing to pay a certain annual value, and who should regulate and manage it with due regard to œconomy, and as a good father to his family.

Second. Woods are the most lucrative rural property, as that requiring little expence, they are subject to fewer accidents, and timber is an article of great consumption. A wood is known to be good when the trees are well-grown, close, and lively. The most ready manner of making a wood, is by fine young plants that have already got root. Woods newly planted are cultivated. The thinning, or underwood, will in ten years produce abundant cuttings. Brush, under, or copse wood, is any wood suffered to grow twenty-seven, or thirty years without being thinned. Forests are those which stand longer. Underwood is used for faggots, poles, perches, hoops, &c. Forest wood is used for timber, carriages, &c.

Third. Meadows are lands which, without being sown, bring forth grass, are mowed once or twice a year, and are called natural meadows. Among the latter are pastures, which are damp lands, where cattle are turned to graze. There are too cultivated meadows, in which certain grasses are sown, as trefoil, sainfoin, lucern; and these are the best meadows. There are meadows also by the sides of rivers, or near a pond or brook that yield three times the crop of natural meadows. Those on the sides of hills are called grass-land, and the grass is better; that of marshes is of the worst kind. The water-meadows are of great help in rearing herds of cattle and cows.

Fourth. Pastures are lands so advantageous to husbandry, that they are by many preferred to corn lands. They are of two kinds; upland, which lies high, and meadow, which is frequently overflowed. When its surface is clayey, or cold, it may be improved by paring and burning; but if it is hot and sandy, then chalk, lime, marle, or clay, are the proper manures, but they must be laid on in large quantities, or their effects are lost.

Fifth. Ponds are reservoirs of water, situate in low places, and inclosed by a dyke, or causeway. They are used for keeping fish, which feed and multiply in them. They are stocked by throwing in a quantity of small fish. Proper fish-ponds are reservoirs of

running water, generally kept for carp, tench, perch, and jack, or pike.

Sixth. Marshes are great spaces of land, filled with water, which stagnates, and produces large weeds, as reeds and rushes; they may generally be drained by trenches, and are converted into gardens and meadows.

Seventh. Warrens are a certain extent of land for keeping rabbits; some are surrounded by walls, and are planted with rosemary, thyme, and sweet herbs, for the nourishment of the rabbits. The coney-burrows are an inclosed place where rabbits are kept to supply the warren.

Eighth. Dove-cot is a house like a tower for keeping pigeons.

Ninth. Parks are extensive lands, walled round. They sometimes include every description of land, garden, pasture, meadow, forest, &c. They are very ornamental, as in the case of Stowe, the noble property of the Marquis of Buckingham; and may be turned to great profit, as at Woburn, the seat of the Duke of Bedford.

COMMERCE.

Q. What is commerce?—A. In its extended sense, it includes also trade, and is one of the most important and most valuable advantages that nature has bestowed upon us. It connects countries, which vast seas, inaccessible mountains, or dreadful deserts, seemed to have separated for ever; brings all nations into one commonalty, and may be said to make them one family. It communicates to the one those remedies and treasures which nature appeared to have reserved wholly for the other, and spreads plenty where the irregularity of seasons had occasioned barrenness and scarcity. By commerce the most savage race of man is rendered gentle, learns to know itself, and be friendly with others. But for commerce, a superfluity would be lost in one place, though necessary to another; and without it, the different nations would have no bond of union, each would be isolated in its own limits; but commerce alone puts every one in possession of the whole world.

Q. On what are founded the connection of different nations?—

A. Upon the reciprocal wants which each nation feels, and which

occasion a necessary tie of interest and friendship between them. One wants to sell what the other wants to purchase, particularly in the produce of the soil which nature has often confined to one country. Whoever is in possession of a commodity or merchandize that I want, will bring it to me, because his riches consist in the sale; and if I afford a certain market, he is sure of gaining by it. Nature, one must be convinced, has taken care to disperse its favours in different places of this world, to establish traffic, and this mutual correspondence, that men should depend one upon another, and be united by common interest; for there scarcely is a single climate but produces something that cannot be had elsewhere. For these reasons, there cannot be in society more useful members than the merchants. They unite men together by a mutual interchange of good offices; distribute the gifts of nature, employ the poor, and increase property and riches. To no country under heaven can these observations apply with so much force as to the united kingdom of Great Britain at the present day. Its merchants are indeed the honourable of the earth.

Q. In what consists the science of commerce?—A. In every description of sale, purchase, or exchange of merchandize, and the business which is transacted in money and paper. Commerce is of several kinds. First, Commerce by land, that which is carried on from city to city, county to county, or kingdom to kingdom, by means of wheel-carriages, or canals. It is likewise termed internal commerce, because it is carried on between the subjects of one same empire, within the extent of the state, and from neighbour to neighbour, and even by sea, from coast to coast. Second, Naval commerce is carried to every part of the globe that can be reached by sea. It is likewise called external commerce, because it is carried beyond the frontiers. Third, Wholesale commerce is the sale of merchandize in bales, or trunks, or whole pieces, and is the first in rank. Fourth, Retail commerce is known to every one, and consists in the sale of merchandize, by small parts, or quantities, in shops, warehouses, and stores, by measure or weight, according to the custom of the places, and the different kinds of merchandize. Fifth, The commerce of money is that of bankers and merchants, who make engagements and remittances from one

city or country to another, for those who may want it; that is to say, on receiving ready money, they give a letter of credit to the place, drawn upon the correspondents, so that the sum paid to them may be paid to the bearer of the letter: this is a commerce which requires great capital. Sixth, The commerce of paper, which is conducted without any kind of gold or silver, but only with promissory notes, bills of exchange, letters of credit, orders, acts of companies, or firms, public effects, and other good paper, which the debtor transfers to his creditor, who takes it in payment.

Q. How is wholesale commerce divided?—A. Into three kinds: that of the manufacture, or fabric of a country, and the merchandize which is grown in it, which can be stored in the principal towns; that transacted with a foreigner, by sending him the merchandize, or produce of a country, which is suitable to those nations with which he trades, and receiving from them what grows in their countries, and are in request with the first: or, again, by taking some, and bringing back others: that effected by the aid of governments, by the great trading companies of Europe, to the Indies and other parts of the world. This is the most extensive, and consisting in long voyages, requires a great number of ships, establishments, and factories, in the different countries they go to: and though the expences are great, the profits are very considerable.

Q. Which are the most important of these kinds of commerce?—A. The East India trade, including that of the coasts of Coromandel and Malabar, to Bengal, the Mogul, China, Cochin China, Siam, and the spice islands. The Levant trade, with the islands of the Archipelago, Constantinople, Smyrna, Aleppo, Cyprus, Alexandria, Cairo, the coasts of Barbary, &c. The Northern trade, by Dantzic, Lubeck, Hamburgh, Riga, St. Petersburg, Archangel, &c. The trade of Africa and its islands, which likewise includes that of Arabia, Persia, and the Persian gulph. The trade of North and South America. The West India trade, or that of the American islands, which produce, in particular, sugar, coffee, cocoa, &c.

Q. What is the meaning of bankruptcy?—A. A merchant, banker, or any person in business, who has the money belonging

to another, is said to commit an act of bankruptcy when he disappears, for the purpose of avoiding the payment. If he carries off some of his effects, and leaves the rest for his creditors, he is termed a fraudulent bankrupt, is severely punished, and marked as infamous. It is frequently termed a failure when the derangement of a merchant's affairs happens by accident or without fraud. So when a trader cannot pay his notes, or that he has met accidents from losing his ships, fire, or the fault of his partners, or losses from bad debts, his creditors sensible of his honesty, grant him time, or in other words, extend the period for the completion of his payments. That is considered a stoppage, because though the credit and reputation of the party is diminished, he is not held up to the world with infamy, nor indeed does his name appear in the government paper or gazette for such stoppage, though it would had he been made a bankrupt. A man in trade cannot have too great a dread of such an event. It generally either breaks down his spirits, and renders him unhappy as long as he lives, or otherwise hardens him so as to contemplate unmoved every possible dishonour. In the one case his peace of mind is for ever ruined, in the other, he experiences well-merited and universal disgrace. There have been some few instances of bankrupts, who feeling as honest men, have at a future opportunity, when their concerns proved equal to it, paid off the balances of the losses occasioned by their bankruptcy, with full interest for the payment having been delayed. Such failures, indeed, add lustre to a character, but wherever a different line of conduct has been pursued, it must take from it.

Q. What are manufactories?—A. They are places where many workmen are employed in the same species of work, under the direction of a foreman. There are manufactories of every kind throughout Great Britain, which is the greatest manufacturing, as well as commercial kingdom in the world. The principal objects of manufacture are cloth of every description, silk, glass, china, earthenware, carpets, furniture, hats, paper, lace, straw, stockings, jewellery, arms, and last and most important, printing.

THE MILITARY ART.

Q. What is military science?—A. The art of war, which in its details requires great judgment and acquired knowledge, amongst others, that of fortification, and courage which can never be shaken.

Q. Which are the different kinds of war, and the cases in which they are adopted?—A. War is offensive, defensive, auxiliary, and civil. Offensive war is undertaken to keep up the honour and support the rights against a nation by which the one has been wounded, and the other violated. Defensive war is to repel invasion, and protect home. Auxiliary war is by sending auxiliary troops to a friendly nation which is attacked, or making a diversion by attacking the enemy's territory. Civil war is the greatest scourge that a people can be afflicted with. It is the most horrid of all, for it is carried on between fellow-subjects of the same state. France has, since the revolution, been well acquainted with it to its greatest excess.

Q. Which is the best mode of making war?—A. Having left no honourable ways untried to avoid it, for it is, even when most successful, a dreadful alternative, the force should be ascertained and compared with that of the enemy. Thus, if the principal or best part of our forces consist in cavalry, we must court the plains and uninclosed countries; but if we rely more upon the infantry, prefer mountainous, narrow, and intricate places; if one army is strong and warlike, and that of the enemy weak, composed partly of new levies, or enervated by repose, he should seek to give him battle; and if the enemy has that disadvantage on his side, he must avoid it. For this purpose, an advantageous ground for encampment is chosen, the passes are strengthened, and it is sufficient to impede him; temporise, get a little time after a check, not absolutely avoid fighting, but lay hold of every opportunity to do it to advantage. Flank the enemy by heights and positions; secure the avenues of the camp; observe which way he must move; keep him within his lines; not engage him to any disadvantage, and have recourse to art and stratagem.

Second, A general ought to know the country which is the theatre of war : and, besides, reconnoitre by parties under the command of intelligent officers, capable of giving a good account of it. This knowledge is absolutely indispensable in putting an army in motion, with its artillery, provisions, and forage, by the shortest and most practicable routes ; to be aware of the rivers and brooks, woods and defiles, which are to be passed. By this a general is enabled to encamp his army in a place where he can be reinforced himself, or prevent the junction of a body of troops sent to the enemy : separate his army into different bodies and post himself advantageously for fighting and annoying his opponent : this knowledge likewise acquaints him with what the country produces in grain, forage, drink, bullocks, and sheep ; and what supply it has of carriages and horses, so as to secure the subsistence of his troops, and the conveyance of every necessary for his army.

Third, A general must likewise understand the detail of all that is necessary to subsist his army ; how many rations of forage and bread are required for the different bodies, from which he can tell the consumption of his whole army in a day, and for a given time.

Fourth, He must be aware of the quantity required of warlike stores, or cannon, bullets, balls, bombs, and powder he will stand in need of, if he carries on a siege, or expends it in a battle.

Q. What is an army ?—**A.** A collection of several bodies of troops divided into regiments of infantry, cavalry, and artillery, under the command of a chief who regulates their movements and all their operations. A regiment of infantry consists of from two to four battalions ; each battalion of ten or fifteen companies of from forty to a hundred men each, besides officers. A regiment of cavalry is composed of two squadrons, of four troops of forty men, exclusive of officers. The arms are firelock, bayonet, sabre, pistol, cannon, and mortar.

Q. What is a camp ?—**A.** A space marked out upon a plain to lodge an army in. A regular camp should have so much space in front of it, that the army could range itself there in order of battle, and perform all its evolutions with ease. It should be of suf-

ficient depth to rally the troops, and range them in lines. Its head should be fortified by some good barriers, such as a river or morass, and its flanks well supported or protected. It must be within reach of its convoys of provisions morning and evening, and have water, wood, and forage, in its vicinity.

Q. What is a battle?—A. When two armies are drawn out opposite each other, and the cavalry and infantry reciprocally charge and shock so, that they must either be destroyed or conquer, this general action is called a battle. A decisive battle is that where the victory is complete; when there was no body of the enemy unbroken, and all take to flight, and give up the field of battle.

Q. What is a combat?—A. It is an action where the infantry or cavalry only charges or receives a charge, and that the surplus of the troops take no part. The art of war is a science, the perfection and knowledge of which, are most necessary to the preservation of states. Every citizen should contribute to it according to his inclination, talents and fortune: it is, therefore, with justice, that warriors of distinction are honoured and respected by their fellow-citizens, and that great officers have always enjoyed the highest celebrity.

THE MARINE.

Q. What is the marine?—A. The science of navigation, and consequently of the first importance to a state; for it contributes to its greatness and glory, by procuring plenty and riches. By means of navigation it is, that a nation can collect within itself the productions of the four quarters of the world, and carry them in exchange the fruits of its labour and industry: by this the useful arts flourish, and in defence of the state, a wise government can, aided by ships of war, procure means of power, which makes the marine a primary object with an insulated and commercial kingdom, and second only to the military establishment of a continental power.

Q. How is the marine divided?—A. Generally into trading and military marine; but it should be divided into three parts, viz.

naval architecture, and navigation : both of which have been described at page 24, 27, &c. and the art of manœuvring, which is that of ordering many ships together as fleets.

Q. How are manœuvres performed ?—A. By different signals. The movements required are understood, whether they refer to a single ship, a whole fleet, or part of a fleet. All signals for the direction of a fleet are made from the ship which carries the admiral's flag.

Q. Is the art of naval evolution confined to the conduct of fleets ?—A. It is likewise of great assistance in the art of war. By this a naval army, composed of ships of war of different sizes, is made to act or fight together or separately, and arranged so, that in case of necessity they may give assistance to each other.

Q. What is a naval action, engagement, or battle ?—A. A general action is between two fleets drawn out in line, one opposite to another. Its success depends on the wind, and on the skill of the admiral in taking an advantageous position, and giving his orders properly : it also depends upon great decision and celerity in manœuvres, and in particular upon the steadiness and courage of the ship's company. If the engagement takes place with part only of a fleet, or even between two ships, it likewise goes under the same denomination.

Q. Which are the principal officers of a fleet ?—A. The commanding officer or general is called an admiral ; the commander of a squadron vice-admiral ; and that of a small division rear-admiral : and of these again there are different gradations, as of the white, red, and blue. The officer who commands a ship of the line is a captain ; and he has a lieutenant, two second lieutenants, and other subaltern officers ; and all those who are on ship-board, either for its defence or manœuvres, go under the name of ship's company. The commanders of frigates, &c. are also captains, and smaller ships of war are commanded by a master and commander, lieutenant, &c.

Q. What qualities are requisite to make a good sailor ?—A. A perfect knowledge of his ship, geometry, astronomy, and geography ; extraordinary promptitude of judgment, and immoveable

courage, that he may decide properly, and face the multiplied dangers of navigation. It is also essential that he should have made several long voyages, and in different climates. It is further necessary for a thoroughly good officer to be perfectly acquainted with the mathematics, and have absolutely studied the evolutions, manœuvres, artillery, masts, rigging, building, and generally whatever is connected with a ship of war.

So many united qualities, and such a variety of knowledge, make the merit of those who distinguish themselves in the navy very great. And as a man must really be a man of abilities to rise to eminence in this career, it is with great justice that sailors enjoy such universal respect, high esteem, and that glory which appertains to them alone.

THEOLOGY.

Q. What is theology?—A. The knowledge of divine things. Its objects are God and all the tenets which religion inculcates, and it is a study necessary for all, but more particularly for the clergy.

Q. How is theology divided?—A. Into positive theology, which consists in the simple exposition of religious tenets, as they are contained in holy writ, or explained by the church itself. Moral theology, which conveys a knowledge of the divine laws, for the regulation of morality, treats of virtue and vice, and ascertains the difference between good and evil. Divine theology, or divinity, which is deduced by reason from the knowledge of divine things, founded on the principles of faith.

Q. What are meant by the divine sources?—A. They are the sources whence theology derives its principles.

JURISPRUDENCE.

Q. What is jurisprudence?—A. The knowledge of the laws, and of every thing connected with doing justice to all the members of society. Its aim is to acquire the regulations of justice,

and to conform to the exercise of them. Justice is the firm and unalterable will to give to every one his own, and comprehends not only property and rights, but actions and duties, even those of decorum and civility, and also rewards and punishments.

Q. How is justice divided?—A. Civilians divide it into administrative and commutative. The administrative consists in the equal and reasonable distribution of rewards and punishments, according to the individual merit of each and quality of persons. The exercise of this justice is placed in the hands of princes and magistrates. Commutative justice is the preservation of equality and good faith in contracts, and all sorts of concern which men have jointly, and to prevent either taking advantage of the other by theft or fraud. In the exercise of this justice, jurisprudence consists. The first principles of the science, therefore, are derived from the fundamental precepts of morality, which are, to live honestly, and do unto others as we would wish to be done by.

Q. What are the divisions of this science?—A. It is divided into natural right, right of nations, and public right. Natural right is neither more nor less than the light of reason, which leads us to embrace what is good and reject what is bad, and principally what is injurious to the safety and good order of society. But as this reason is often blended with the passions which contest its precepts, it has been necessary, for the purpose of avoiding dispute, to ascertain it. That has been done by the establishment of the civil code; one part of which comes back to the natural light which God has impressed in the hearts of men, such as the care of parents for their offspring, and defence of our lives and liberties. The other part is founded on the right of nations, because natural reason has established it for the safeguard of society; as, for instance, religion, duty to parents, fidelity to the country, charity for a neighbour, and not to do to another what we should not like him to do to us.

Q. What is understood by the right of nations?—A. The customs and conventions established by general consent or long use, which serve reciprocally as law between all nations, and which prevent an unjust attack, violation of hospitality, &c. It takes

place particularly for the security of commerce, suspension of arms, and safety of the persons of ambassadors.

Q. In what consists public right?—A. In every thing to be observed, either by princes or their subjects, to maintain the government of the state, and contribute to the commonwealth. This right first establishes the authority of government for the maintenance of justice and public tranquillity; making war and peace, raising troops, coining money, granting dispensations and privileges, &c. Its object likewise is the controul of the powers of the state, which may be employed in its defence against the enterprises of foreigners, and even to forestall them. The establishment of officers to command the armies, judges for the administration of justice, punishment of crimes, regulation of police for common and public places, as the seas, navigation, rivers, fisheries, and highways; also those for the direction of commerce, arts, trades, sciences, &c.

Q. To what class is the study of jurisprudence necessary?—A. To magistrates, judges, and lawyers, and those who fill the dignified offices of the state. In regard to the civil code, it is interesting to every citizen.

MEDICINE.

Q. Wherein does this science consist?—A. Medicine is the art of applying remedies, the effect of which is, to keep life healthy, and restore health to the sick. Its aim therefore is to remove pain, preserve present health, and to re-establish it when injured. The art of medicine is formed from a long series of multiplied observations on diseases; their description, history, causes, progressive increase and diminution, and consequences; the inspection of the bodies of those who have died of disease; the knowledge, preparation, and application of remedies, and their effects, known from experience. Great discoveries have been made by anatomy, botany, chemistry, pharmacy, and by practical observations, which have infinitely extended the progress of that so useful and necessary science.

Q. How is medicine divided?—A. The science commonly embraces five parts, viz. physiology, pathology, semeioticy, hygiæna, and therapeutics.

Q. What is physiology?—A. The structure of the human body and its parts, which is the particular object of anatomy. The life, health, consequent effects, and, in short, the whole economy of the body is thereby explained.

Q. In what does pathology consist?—A. In the description of diseases to which the human frame is liable, and the explanation of their difference, causes, and effects.

Q. Of what does semeioticy treat?—A. Of the symptoms of maladies, the use they may be put to, and how the different degrees of health or disease may be known.

Q. What does hygiæna mean?—A. The remedies and their application.

Q. What is therapeutics?—A. It treats of medical matters, the preparation and use of remedies. It embraces pharmacy, surgery, and the cure of diseases. The medical profession requires such extensive knowledge, various studies, and experience drawn from such painful exertions, that those cannot be too highly thought of and esteemed who rise to eminence in the art, and are the benefactors of suffering humanity.

STENOGRAPHY.

Q. What is this science?—A. The art of writing as quick as we speak; or, in other words, fixing the transient sounds of the voice. It is accomplished by very simple signs for the complicated forms of the alphabet, cutting off the mid-vowels of words, and by reducing words, expressions, and sentences to monograms or cyphers.

Q. What is the use of this art?—A. To economise time, take down the speeches of great orators as they are delivered, strengthen the memory, and mature the judgment of young men, by making them use stenographic characters in their translations, and to facilitate in a very great degree the study of languages.

PASIGRAPHY.

Q. What is pasigraphy?—**A.** A word of Greek derivation, signifying, write to all. It is the art of writing, even to those whose language is not understood, with characters which are the image of thought. The characters are twelve in number, and have no resemblance in form, value, or intention, to any of the letters of the alphabet. The other elements of the science are very simple. They consist first, in twelve general rules, which are applicable to all languages as to all dialects, and are subject to no exception; second, in the accents and punctuation generally used throughout Europe.

PRINTING.

Q. What is printing?—**A.** The ingenious arrangement of moveable characters, each of which represents a letter of the alphabet. It therefore follows from this arrangement and the assistance of a press, which passes over and preases upon these characters, that all one side of a sheet of paper is printed at one stroke in the proper form, and in an instant we see before us, for example, eight pages, the same as this work.

Q. What is the progress and mechanism of this extraordinary art?—**A.** To give an idea of the method of printing, we must first say something upon the characters. Their substance, which is called a fount, is a composition of lead or pewter mixed with a portion of antimony. This substance is boiled over a quick fire; the founder then fills a little iron ladle with the liquid, which he immediately pours into a mould by a hole at the top of it. At the bottom of the mould is a bit of copper, into which the engraved letter has been impressed by means of a punch. This is called the womb; it forms the eye of the character. The founder then opens the mould, which displays a small piece of thin fount about an inch high, and at the top of which is the form of the letter in relief. It is only that form which receives

the ink which touches in like manner the whole of the letters that make the pages by means of being put together.

Q. In what does the composition consist?—A. In the arrangement of the letters. For this purpose there are in printing-offices great tables raised like a pulpit, called cases. These cases are divided into little squares, into each of which is put a certain quantity of the same letters, and from which they are taken out as wanted to be arranged. The man who arranges the letter is termed a compositor. Part of the copy or work to be printed lays before him, and he takes out of every partition, with great celerity, the letters proper to form what he reads. He ranges the letters one by one on the ledge of a small iron rule called a composing-stick, which by means of a groove makes the lines always equal. He puts one or two spaces between every word, and gives to his lines an equal length, which is termed justification. As he finishes the lines, he places them in the galley, a square piece of wood with a ledge, which forms the page. Every page being completed, the compositor ties it with a packthread, takes out the galley, and lays it aside. When all the pages of the sheet are done, he arranges them in their proper order on a table of solid stone, called a marble, and shuts them up in an iron chase containing the pages of a half-sheet impression, and he fixes them there by wooden rules enchased all round. This wood is called garnish, and serves for the margin of the book. The garnish is terminated by bits of wood which fit, so that the corners which are driven in with a hammer, close the whole in the chase. When the arrangement of the pages and garnish is done, it is termed the form, and the act of making the form is imposing. This form is next lifted up, to see that all is fast, and is then taken to the press, and a first proof is pulled, the proof is collated by the original copy, and the reader marks upon the proof all the errors. The compositor loosens the form, corrects the errors by means of a point with which he raises the wrong letters, and puts others into the place. The paper is next wetted down, a quire together, and is covered with a board, on which a weight is placed, that the wet may be imbibed equally, as if any part of the paper is dry, it will

not take the ink. The form is then slid on the marble of the press, which is ready to be worked. To have an idea of what working is, it is necessary to know something of a press, which is a machine composed of different pieces that concur in producing the effect of impression; but it cannot be so well described within these limits as is necessary, and therefore it is better to take an opportunity of seeing it.

Q. What is the method of printing?—A. The form which we have just entioned being laid on the press, a man with a ball, in shape, not unlike a funnel stuffed with wool, and covered with leather, dabs them both into ink, which is very little liquid, composed of oil boiled to a certain consistency, and lamp-black: he knocks them together to diffuse the ink, and forcibly strikes them several times against the face of the form. He at the same time spreads out a sheet of wet paper upon a moveable tympan, on which are two points, that pierce the sheet and hold it fixed. He then lowers the tympan on to the form, and turns with his left hand to make part of the train or form roll under the platten of the press. He almost at the same moment puts his right hand to the bar, and draws it towards him; to lighten the pressure, he lets go the bar, finishes advancing the form under the platten, and gives a second pressure of the bar. That done, he takes the form out of the press, lifts up the chase, and the sheet is taken away entirely printed, and faithfully representing all the characters which the form was composed of. When the whole number of sheets to be worked off is completed, the form is raised, and that which makes the reverse of the sheet is substituted; but that the pages may answer, they fasten the sheets to be printed on the back in the same holes as were made at first: and the same operation is then performed for the reverse as before. When all is done with, the form is washed with a lye that is spread over it, and rubbed with a brush to clean out the characters. The form is then undone, or broken up, and the letter distributed into the partitions. Such is the mechanism of this wonderful art, by means of which the copies of a same book are instantaneously

multiplied to any extent, and the republic of letters is enriched by all the productions of the human mind.

PAPER.

Q. What is the origin of paper?—A. The word comes from the Latin papyrus, an Oriental plant, the rind of which was used for writing upon before the invention of paper. The Egyptian paper was first in use towards the eighth century. It was made with cotton bruised and ground. Europeans having subsequently remarked, after several attempts, that flax and hemp could be perfectly ground, succeeded in making what we call paper; a discovery of the utmost importance, as we are indebted to it for the use of books, letter-writing, and many other essential services.

Q. How is paper manufactured?—A. A considerable quantity of every kind of old linen rags is put into a vat of water to steep. They are chopped small, and ground by means of mills constructed for the purpose, till they are reduced to a pulp in a great mortar. The pulp is reground till it becomes somewhat whiter, and it is then put into buckets, where it dries at leisure. When it is wanted for use, it is again broken in another mortar with mallets, and put into other water to rinse the whole mass and give it a greater degree of whiteness.

Q. How is this substance made into sheets?—A. They take a wooden chase, similar in form to what the sheet is to be, and within the chase are threads of brass wire very close like a sieve. The chase is plunged into the vat, from which it brings out as much of the mash as the sieve will retain; all that is liquid runs through the interstices. The matter which remains in the sieve soon dries and becomes a connected body, which makes the sheet of paper. This sheet is then turned out of the chase on to a spread blanket, and another is covered over it, and so on successively. A great heap of these sheets are put into a press, which squeezes out all the particles of wet: they are washed and spread on square boards in the open air, pressed again, and hung upon

lines to dry. That is not all. To prevent the paper from sinking, all the sheets are sized, which is done by emersing them in a copper, in which is a size composed from shavings of leather and scrapings of parchment mixed with a little alum. They are again put into the press, that the paper may take the size perfectly and equally. The sheets are hung on lines, and next smoothed by a stone rubbed with mutton fat. They are afterwards folded together in the middle in quires of twenty-four sheets to each. Twenty of these quires are put together to make a ream, which is tied up and put into the press for the last time.

GUNPOWDER.

Q. How is gunpowder made?—A. Gunpowder is composed of three-fourths of saltpetre, an eighth of refined brimstone, and an eighth of charcoal, each pulverized separately, and then incorporated in wooden mortars by the aid of pestles, which the powder-mill works by falling water upon them from time to time. It is the saltpetre which gives strength to the powder by the hardness of its particles, which dilate in being thrown to a distance, and the sulphur catches the spark.

Q. What causes the effect of gunpowder?—A. It arises from the elasticity of the air shut up in every grain of powder and in the vacancies left between the grains. This spring consists in the compression or dilatation of the air. The air being extremely compressed by the wadding rammed into fire-arms or any other instrument, and afterwards dilated by the powder taking fire, is the principal cause of those astonishing effects. For the fire which is put to powder again compressing the springs of the internal air which were already compressed, and those springs being thus forced into a violent tension, separate themselves and throw the fired saltpetre on all sides with a swiftness which is incomprehensible. If a long tube, such as that of a gun or cannon, carries the effect of the powder further, it is because it stays within it longer exposed to the inflammation. Therefore the explosion of a great quantity being longer shut up within the caliber has a

much stronger motion, and impels balls and bullets with greater violence. The cause of the great report of a cannon, powder-horn, &c. is, that the powder having been extremely rarified in the explosion, all at once comes in contact with a great mass of external air, and drives it with violence. The springs of this mass of air being likewise closed, and coming to resume their station, are again compressed as they come together, which makes a sort of trembling, and is the cause of the noise and clatter we hear.

The rockets of artificial fireworks rise, because the powder finding a resistance on every side of the tube which surrounds it, does not act sideways. Its whole action is exercised at the two ends: thus it escapes at the one which it finds open, and after having pressed against that which is closed, it always rises from the other. The rod keeps the two actions equal, because its length is equivalent to all the weight of the rocket; so that the discharge of the powder takes place in a right line. Those brilliant stars which we see in certain rockets are little solid balls composed of charcoal, sulphur, and saltpetre, placed above the rest of the rocket, and taking fire at last, the particles of saltpetre thrown by the violence of the lighted sulphur communicate the vibrations which they have received to the ethereal matter or light, and occasion a splendor resembling that of a star.

GEOGRAPHY FOR CHILDREN,

OR GENERAL NOTIONS RELATIVE TO THE FOUR QUARTERS OF THE GLOBE.

EUROPE

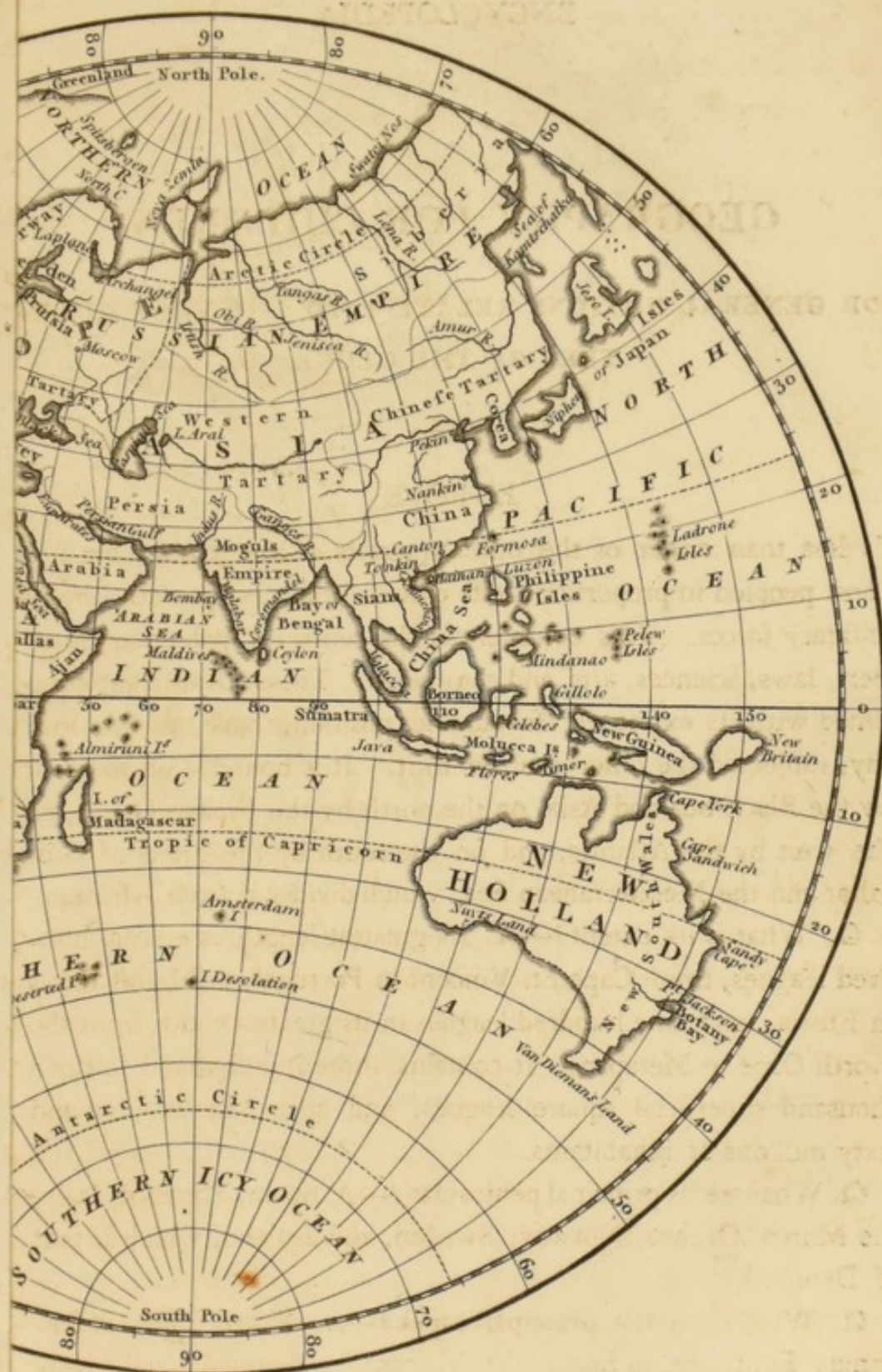
Is less than either of the other quarters of the world; but it is most peopled in proportion to its extent, and most powerful by its military forces. This continent is the centre of politeness, manners, laws, sciences, arts, and commerce. These advantages, combined with its extremely favourable position, have, as we may say, subjected the other quarters to it. It is bounded on the east by the Black Sea and Asia, on the north by the Frozen Ocean, on the west by the Atlantic, and on the south by the straits of Gibraltar and the Mediterranean Sea, which divides it from Africa.

Q. What is its extent?—A. Its greatest length is eleven hundred leagues, from Cape St. Vincent in Portugal, to Mount Poyas in Russia; and nine hundred leagues in its greatest width from the North Cape to Metapan. It contains three hundred and thirteen thousand superficial square leagues, and about one hundred and sixty millions of inhabitants.

Q. What are its principal peninsulas?—A. Spain, Portugal, Italy, the Morea, Crimea, Norway, Sweden, and Jutland, which is part of Denmark.

Q. Which are the principal capes?—A. North Cape, in Lapponia; Finisterre, in Spain; St. Vincent, in Portugal; and Metapan, in the Morea.

Q. Which are the principal islands?—A. Corsica, Sardinia, Sicily, Malta, Candia, Majorca, Minorca, and Ivica, in the Mediterranean; Zealand and Funen, in the Baltic; Great Britain, Ireland, and Iceland, in the ocean.



Q. Which are the principal straits?—A. The Sound, at the entrance of the Baltic, between Sweden and Denmark; St. George's channel, between England and Ireland; the straits of Dover, between France and England; straits of Gibraltar, between Europe and Africa, at the mouth of the Mediterranean; straits of Messina, between Sicily and Italy; the Dardanelles, at the entrance of the sea of Marmora; the channel of Constantinople, between Europe and Asia.

Q. Which are the principal gulphs?—A. Those of Bothnia and Finland, in the Baltic; Moray, to the north-east of Great Britain; and the bay of Biscay, between France and Spain, in the ocean; the gulph of Lyons, to the south of France; the gulph of Genoa, east of the preceding; the gulph of Venice, between Italy and Greece; and gulph of Lepanta, between Greece and the Morea, in the Mediterranean.

Q. Which are the principal mountains?—A. The Kamenoi-Poyas, which separate, on the north side, Russia in Europe from that of Asia; the Krapacks, between Poland and Hungary; Daasa-Fielo, between Norway and Sweden; the Pyrenees, which separate France and Spain; the Alps, between France, Italy, and Germany; and the Apennines, which cross Italy.

Q. Which are the principal rivers of Europe?—A. The Wolga, Don, Dwina, and Dnieper, in Russia; the Vistula, in Poland; the Rhine, Rhone, Seine, Loire, and Garonne, in France; the Thames, in England; the Danube and the Elbe, in Germany; the Po and Tibur, in Italy; and the Tagus, in Spain.

Q. Which are the principal lakes?—A. Ladoga and Onega, in Russia; Weser and Meler, in Sweden; lake of Geneva, between Switzerland and Savoy; lake of Constance, between Switzerland and Germany; and lakes Major, Coma and Garda, in Italy.

We will describe Europe on a simple plan, by running over, first, the continents of which it is composed, and then the islands and its dependencies.

THE CONTINENT OF EUROPE.

The terræ firmæ, or principal states of the continent of Europe, are fourteen; north, Russia in Europe, Sweden, Denmark, Poland, and the kingdom of Prussia; in the centre, France, the Batavian Republic, Switzerland, Germany, Austria, Bohemia, and Hungary; south, Spain, Portugal, Italy, and Turkey in Europe.

RUSSIA IN EUROPE,

Long called Muscovy, is the largest state in Europe. It is an empire which likewise occupies all the northern part of Asia, but its population is not equal to its extent. The boundaries of Russia in Europe are Asia on the east, the Frozen Ocean on the north, Polish Prussia and Sweden on the west, and the Don and Lesser Tartary on the south.

Q. What is its extent?—A. One thousand nine hundred and sixty miles long, by one thousand eight hundred and fifty broad, and one million two hundred and twenty thousand square miles, with twenty-five inhabitants to each. The whole empire is four millions nine hundred thousand square miles, with less than seven inhabitants to each.

Q. What is its produce?—A. Timber, hemp, iron, tallow, salt, brimstone, pitch, rosin, honey, furs, skins, Russia hides, drugs, and isinglass. The mountains abound in metals and minerals; and gold, iron, marble, and jasper, is found there.

Q. Which are the principal rivers?—A. The Wolga, which discharges itself into the Caspian Sea after having crossed the whole of Russia; the Dnieper, the Don, the mouths of which are in the Black Sea; and the Dwina and Newa, which fall into the Baltic. The principal lakes are the Ladoga, Onega, and Peypus, or lake of Tschondes.

Q. How is Russia in Europe divided?—A. It has been recently divided into forty-one governments, almost the whole of which

bear the names of their capitals. Russia in Europe contains thirty, eight of which are to the north, and twenty-two to the south. Russia in Asia contains the other eleven.

Q. Which are the governments of the northern part?—A. Archangel, Volodga, Novogorod, Olonetz, Wibourg, Petersburg, Revel, and Riga, comprehending Livonia.

Q. Which are the southern governments?—A. Nispries, Novogorod, Tambow, Woronets, Kursk, Karkow, Catharineslaw, including New Russia; and Lesser Tartary, in which is the Crimea; Kiow, containing part of Ukraine; the Cossacks country, on the Dnieper; Tcheanigow, Novogorod-Sieversk, Orel, Tula, which made part of that of Moskow on the Upa; Rezan, Wolodimer, or Uladimir, Kostroma, Jaroslaw, Twer, Pleskaw, Smolensko, Moskow, Kaluga, Mohilow, and Polotzk.

Q. Which are the Russian possessions in Poland?—A. The governments of Mohilow and Polotzk, arising from the partition in 1773. The possessions of 1793 and 1795, are six hundred miles long, by three hundred broad: they are Courland, part of Samogitia and Lithuania, with the palatinates of Minski, Novogrodeck and Braclaw, Polesia, Volhinia, and Podolia, a very fertile country. The principal cities are Wilna, the capital, on the Wilna; and Grodno, on the Niemen, in Lithuania; Mittau, the capital of Courland; Braclaw, on the Bog; and Kaminieck, a fortified place in Podolia.

Q. What is the government of Russia?—A. It is hereditary even to the female line. The sovereign, who is called the czar, now has the title of emperor: his authority is absolute. There is a senate which approves, and carries into execution, the emperor's ordonances. The people are bondsmen, but have of late enjoyed the right of redemption.

Q. What is the religion?—A. The schismatic Greek, under the direction of several archbishops and bishops, and a perpetual synod. The conquered provinces have retained freedom of worship. In Russia are idolaters, Mahometans, catholics, and protestants, all whose worship is permitted.

Q. What are the manners and character of the Russians?—A.

They are generally coarse, ignorant, and even savage, in many provinces. In others, they have the marks of civilization: the nobility is polished. The Russians are robust, good soldiers, well adapted for art and science, and inclined to commerce: they are said to be superstitious.

SWEDEN

Is bounded on the north by Danish Lapland and the Frozen Ocean, on the east by Russia, south by the Baltic, and west by Norway, the strait of the Sound, and gulph of the Categat, which divides it from Denmark. The inhabited part of Sweden is well shut in. Lakes and uncultivated land occupy a great part of the kingdom.

Q. What is its extent?—A. It is 970 miles long, and 600 in breadth. The whole kingdom is 210,000 square miles, and a population of fourteen inhabitants to each. Sweden Proper has fifty.

Q. How is Sweden divided?—A. Into five principal governments. Upland, or Sweden Proper, which is divided into six provinces: they are Angermania, Jemptie, Medelpadia, Helsinguen, Delecarlia, Gestricia, Westmania, Upland, Upsal, Sudermania, and Nericia.

Gothia, which is divided into nine provinces. Ostrogothia, or Eastern Gothia, Smaland, Bleking, Scania, Halland, Westrogothia, or Western Gothia, Dalia, Bohusland, and Wermeland.

Lapland, which has no cities, because its inhabitants are never stationary with their herds of rein-deer, which nourish and clothe them. They are divided into six marcks, or prefectures, which take the name of some considerable river that flows there: Asele-lap-marck, Umea-lap-marck, Pitea-lap-marck, Lulea-lap-marck, Torno-lap-marck, Kimi-lap-marck. This country is 51,735 square miles, and has 00,000 inhabitants. It is nothing but mountains separated by lakes and rivers, and arid plains covered with forests and marshes. The Laplanders are very small, but coarse and squat: their manners are pastoral.

The Bothnia gives its name to a considerable gulph in the Baltic: it is divided into east and west. Ulea is the capital of the former; and Torneo, on a river of the same name, of the latter.

Finland comprehends five provinces : Finland Proper, Nyland, Tavastie, Savolax, and Cajania.

There are several islands dependent on Sweden in the Baltic Sea ; the principal are Aland, Gothland, and Æland. Sweden still retains western Pomerania, in Germany, and several districts in Saxony, of which Wismar is the chief place.

Q. What are the productions of Sweden ?—A. Timber, iron, copper, pitch, pearl-ash, different sorts of corn, and crystals. It likewise has great trade in hides, furs, and salt-fish, especially herrings, of which the Swedes annually take, on an average, 600,000 barrels near Gothenbourg.

Q. What is the government ?—A. The kingdom, which was elective, is now hereditary even to princesses. The king assembles and dissolves his states at will. The states are composed of four orders ; the clergy, nobility, third state, and peasantry.

Q. What religion is professed ?—A. Lutheranism ; but all others are tolerated.

Q. How are the manners of the Swedes ?—A. They are polished and warlike. The Swedes are brave, active, friendly to science, and luxurious.

DENMARK

Is bounded on the north and west by the Northern Ocean, south by Germany, and east by the Baltic.

Q. What is its extent ?—A. It is 240 miles long, and 180 broad ; 12,896 square miles, and eighty-four inhabitants to each. All the states of Denmark together contain 54,342 miles square.

Q. What are the divisions of the Danish states ?—A. Five principal parts.

Denmark Proper, or Zealand. This kingdom lies between the North and Baltic Seas. Nature has made three different passages from the one sea to the other. The first of these straits is called the Little Belt : it is a channel of four leagues broad, between the island of Funen and the peninsula of Jutland. The second is the Great Belt, between the isles of Funen and Zealand : it is between seven and eight leagues wide. The third is the Sound, between

the island of Zealand and Schonen, in Sweden : it is the passage most frequented, is a short league across, and is only deep on the side of the castle of Cronenbourg, which obliges ships to pass within cannon-shot, and to pay the duty as an indemnity for the light-houses and watches kept up by Denmark for the security of navigators.

Jutland.

Norway, formerly a separate kingdom : it is a coast which extends at the side of the ocean, and is 1200 miles long, and 225 in its widest part, divided into four dioceses ; Christiania, Christiansand, Berghen, and Drontheim : its population is 850,000. The Norwegians are industrious, excellent sailors, and good soldiers.

The islands, which are those of Zealand, Funen, Langeland, Laland, Falster, and Bornholm. The island of Funen, in the Danish language, signifies fine country, and abounds in grain, pasture, fruits, beasts, and horses. The climate is very hard and cold.

And Iceland, which is a large island, situated 250 leagues west of Norway, is 360 miles long, and 225 wide, and 50,000 inhabitants. Skalhof is the capital. It does not produce much corn and wood, and gardens are very rare. The commerce consists in dried fish, salt meat, whale-oil, and furs. The Icelanders are honest, benevolent, and hospitable. The mountains are very numerous, and perpetually covered with snow. There are many volcanoes ; amongst others Heckla, so celebrated for its eruptions : it is in the southern part of the island.

Denmark still possesses the isles of Fero between Iceland and Scotland, part of Lapland, Spitzbergen, Greenland, and the duchy of Holstein, in Germany : it also has possessions in America, and factories in Asia and Africa.

Q. What are the productions of Denmark ?—A. Wood, oil, pitch, oxen, excellent horses, iron, and copper.

Q. What is the religion of the country ?—A. Lutheranism predominates.

Q. What are its manners ?—A. They are simple and mild. The Danes are well made, affable, brave, strong-minded, and good sailors.

POLAND

Is bounded on the north by Prussia and Russia, east by Russia, south by Hungary, and west by Bohemia and Germany.

Q. What is its extent?—A. It is 720 miles long, and 645 wide; 53,598 square miles, 9,000,000 inhabitants, 600,000 of whom are Jews.

Q. Which are its mountains?—A. The Krapacks, by which it is separated from Hungary.

Q. Which are its principal rivers?—A. The Dnieper and the Niester, which disembogue into the Black Sea; the Vistula and Niemen, which fall into the Baltic; the Bug, which loses itself in the Vistula; and the Bog in the Dnieper.

Q. How is Poland divided?—A. Into three great parts, viz:

Great Poland, which comprehends three provinces: Great Poland Proper, Cujavia, and Mazovia. These provinces form ten palatinates.

Lesser Poland, which takes in three provinces; Lesser Poland Proper, Volhinia, and Podolia. This country is divided into seven palatinates.

The Grand Duchy of Lithuania, which contains three provinces: Lithuania Proper, Samogitia, and Duchy of Courland. This great territory is divided into seven palatinates, and three captainries.

Q. What does this country produce?—A. Timber, saltpetre, hemp, great quantities of corn, salt-mines, lead, silver, copper, iron, brimstone, and coal. The pastures abound in horses and good cattle.

Q. What is the actual situation of Poland?—A. This state, which formed a military republic, was governed by an elective king: the right of election was vested in the nobles alone. The country-people were slaves to the nobility. Divided for several years by civil war, this kingdom has at last been reduced to such a state of weakness, that by a treaty concerted with Austria in 1772, Austria, Russia, and Prussia, the following year, dismembered great provinces of it; and, in 1793 and 1795, these same powers finished by dividing the whole kingdom, after having forced the king to renounce his crown.

Q. Which are the limits of the three co-partaking powers ?—

A. The Pilena and the Bug may be said to separate Austria from Prussia and Russia, and the Niemen to divide Russia from Prussia. The provinces which Russia appropriated are the most extensive, Austria most peopled, and Prussia most commercial.

Q. Which is the prevailing religion ?—A. The Catholic : however Jews, Protestants, and Greeks, are tolerated.

Q. What are the manners of the Poles ?—A. They are fastidious among the nobles, and simple among the people. The Poles are well made, brave, hospitable, and honest ; but are said to be great eaters and drinkers.

THE STATES OF PRUSSIA

Are bounded on the north by the Baltic, east by Lithuania and Samogitia, south by Poland, and west by Bohemia, the Baltic, and Swedish Pomerania.

Q. What is its extent ?—A. With its Polish possessions it may be 330 miles long, and 225 wide : its population is 3,500,000. The whole monarchy, including the countries of Munster, Paderborn, &c. which have been given as indemnity, contain 10,000,000 souls.

Q. Which are the principal rivers ?—A. The Elbe, Oder, Warthe, Spree, Havel, and Ucker.

Q. How is Prussia divided ?—A. Into Eastern, Western, and Southern Prussia. The first comprehends the German department, of which Koenigsberg, the capital of Prussia, is the principal place. The department of Lithuania, which came from the partition of Poland in 1772.

Q. What does Western Prussia contain ?—A. The department of Western Prussia, which includes the palatinates of Marienbourg, Culm, Lesser Pomerania, and some territories of Upper Poland, ceded in 1773 and 1793. The district of Netze, formed of the palatinates of Posnania, Gnesne, Inowsaclaw, and Brescia, ceded in 1773.

Q. Which are the departments of Southern Prussia ?—A. Posen, Kalisch, Varsovia, Byalistock, and Ploezko, formed from

the palatinates of Mozovia, Podlaquia, Siradia, Ploezko, and part of that of Gnesne, ceded in 1793.

Q. Are there no other states dependent on Prussia?—A. Besides the countries which the king of Prussia has just obtained as indemnities from Germany, he has, in the circle of Upper Saxony, the margravate of Brandenburg, and greater part of Pomerania; in the circle of Lower Saxony, the duchy of Magdeburg, and principality of Halberstat; in Bohemia, the comté of Glatz, Lower Silesia, and part of Lusatia; in the circle of Westphalia, the principality of Minden, the comtés of Ravensbery and Lamerck, and part of the duchy of Cleves; and in Switzerland, the comté of Neufchatel.

Q. What are the productions of these different countries?—A. Generally a great quantity of wood and rosin, grain, wool, flax, amber, honey, and wax.

Q. What is the government of Prussia?—A. An hereditary crown. The king's authority is absolute: the administration of the kingdom is submitted to a regency, councils and bailiwicks.

Q. What are the religions?—A. The Calvinistic and Lutheran are prevalent; but all are permitted the free exercise of their worship.

Q. What are the manners?—A. They are little different from the other German nations. The people are strong, laborious, and good soldiers.

FRANCE

Was, in former times, known by the name of Gaul; its first inhabitants being denominated Gauls. It took the name of France after the Franks, or French, had established their empire in it towards the year 420. Its boundaries are, on the north, the Channel and Batavian Republic; on the east the Rhine, which separates it from Germany; the Helvetic Republic and the Alps, which intervene between France and Italy; on the south the Mediterranean and Pyrenees, by which it is shut out from Spain; and the ocean on the west.

Q. What is its extent?—A. It is now about 750 miles from

north to south, and 660 from east to west. Its surface is 279,000 square miles, and population 31,000,000, or about 111 to a square mile. It contains 780 cities, and 48,000 towns or villages.

Q. Which are its principal mountains?—A. The Pyrenees, Alps, Cevennes, Vosges-Jura, Puy de Dome, Cantal, and Cote d'Or.

Q. The principal rivers?—A. In the north, the Somme, Schelde, Meuse, Moselle, Rhine, and Seine; the Loire in the centre; in the south the Garonne, which at its mouth takes the name of the Gironde; the Charente and Rhone. The lakes are those of Bourg and Annecy, and Geneva or Leman.

Q. What are its productions?—A. Almost every thing: it is a rich, pleasing, and celebrated country. The air is pure, and very wholesome. The fertile soil produces abundance of all that is necessary for life. Sciences and arts flourish. Its commerce and manufactures, in times of tranquillity, are very extensive.

Q. What was the old division of France?—A. It is no longer in existence: it fell with its lawful sovereign. It is however desirable to know it, for the better understanding of the history of the country. It consisted of thirty-three governments; French Flanders, Artois, Picardy, Normandy, Isle of France, Champagne, Lorraine, Alsace, Brittany, Maine, Anjou, Touraine, Orleans, Berri, Nivernois, Burgundy, Franche-Comte, Poitou, Aunis, Marche, Bourbon, Saintange, Limosin, Auvergne, Lyonnese, Dauphiny, Guienne, Pearn, Province of Foix, Roussillon, Languedoc, Provence, and the island of Corsica.

Q. Which are the new divisions?—A. Since the establishment of the republic, the French have extended their conquests far beyond their antient limits: we shall mention them in the order of the departments, or prefectures, which have replaced the former division.

Q. How many departments is it now composed of?—A. One hundred and eight, without including the colonies. They all derive their name from the rivers, mountains, or other distinguishing objects contained in them. There is in each, for its judicial administration, a court of criminal judicature; and in every sub-

department, a tribunal of the higher order. Also thirty courts of appeal, which decide on appeals from the decisions of the higher tribunals, and from commerce; and a court of repeal for the whole Republic, which is held at Paris.

Q. Which are the departments in alphabetical order?—A. Ani, Aisne, Allier, Lower Alps, Upper Alps, Maritime Alps, Ardeche, Ardennes, Arriege, Aube, Aude, Aveyron, Bouches, Calvados, Cantal, Charente, Lower Charente, Cher, Correze, Cote D'Or (Gold Coast), Cotes du Nord (Northern Coasts), Creuse, Doire, Dordogne, Doubs, Drome, Dyle, Escaut, Eure, Eure and Loire, Finisterre, Forêts (Forests), Gard, Upper Garonne, Gers, Gironde, Golo, Herault, Ile de Vilaine, Indre, Indre and Loire, Isere, Jemmapes, Jura, Landes, Leman, Liamone, Loir and Cher, Loire, Upper Loire, Lower Loire, Loiret, Lot, Lot and Garonne, Lozerre, Lys, Maine and Loire, Manche, Marengo, Marne, Upper Marne, Mayenne, Meurthe, Meuse, Lower Meuse, Mont-Blanc, Mont-Tonnerre, Morbihan, Moselle, Deux-Nethes, Nièvre, Nord (North), Oise, Orne, Ourthe, Pas de Calais, Po, Puy de Dame, Lower Pyrenees, Upper Pyrenees, Eastern Pyrenees, Lower Rhine, Upper Rhine, Rhine and Moselle, Rhone, Roer, Sambre and Meuse, Upper Saone, Saone and Loire, Sarre, Sarthe, Seine, Lower Seine, Seine and Marne, Seine and Oise, Sesia, Deux Savres, Somme, Stura, Tanaro, Tarn, Var, Vaucluse, Vendee, Vienne, Upper Vienne, Vosges, and Yonne. All the foregoing departments are divided into sub-departments, and the whole empire into twenty-seven military divisions.

FRENCH COLONIES.

Q. Are not the French foreign possessions formed into departments?—A. The colonies make fourteen departments, regulated like the others.

Q. What are the names of these departments?—A. In Asia, the East Indies. In Africa, Senegal, Isles of Reunion and Bourbon, and Isles of France, Sechelle, &c. In America, St. Domingo makes five departments, the Northern, Samana, Western, Southern, and Inganne. Guadaloupe and Desirade, Martinico, St.

Lucia, and Tobago; Grenada, Miquelon, and St. Peter; and French Guiana and Cayenne.

Q. What is the government of France?—A. From an absolute and hereditary monarchy it became a republic, which republic has since been usurped by a French general, born in Corsica, who has assumed the title of Emperor of the French, and made it hereditary. He is assisted by a privy council, composed of eight grand titularies and dignitaries of the empire, and a council of state of fifty counsellors and ministers. Laws are proposed by the government to a legislative body, formed of a certain number of deputies named by the departments; this assembly accepts or rejects them, after they have been discussed at the tribunate, another body, consisting of fifty tribunes. There also is a senate, preserver of the constitution of the republic, which consists, at most, of one hundred and twenty senators for life.

Q. What is the religion?—A. All religions are tolerated, but the catholic is most general.

Q. What are the manners and dispositions of the French?—A. The old French politeness seems to have sunk under the storms of the revolution, but is again returning very slowly. The French love the arts and sciences, different exercises, games and exhibitions, are lively in conversation, polished, gallant, and courageous, but light, inconstant, and excessively vain.

BATAVIAN REPUBLIC

Is bounded on the north and west by the North Sea, south, by France and the Rhine, and east by Germany.

Q. What is its extent?—A. One hundred and fifty miles long, and one hundred and thirty-five broad, and contains two millions inhabitants.

Q. Did it not bear the name of the United Provinces?—A. Yes. They were seven in number: Guelders, Holland, Zealand, Utrecht, Friesland, Over-yssel, and Groninguen.

Q. Which are its principal rivers?—A. The Rhine, Meuse, and Schelde, which divide into many branches, and fertilize the country, the whole surface of which is intersected by canals.

Q. What are its productions?—A. Cattle, butter, and cheese. The industry of the inhabitants have added thereto a commerce, only inferior to that of Great Britain.

Q. Wherein rests the sovereignty?—A. In the general assembly of the representatives of the nation, denominated a legislative body : its seat is at the Hague.

Q. What is the government?—A. It is confided to a state regency of twelve members, renewed every year. This regency has the disposal of the fleets, armies, and finances of the republic, concludes treaties, which must, however, be ratified by the legislative body, which can alone authorize the declaration of war, and levying of taxes.

Q. What is the prevailing religion?—A. Calvinism, but all others are tolerated, and both catholics and jews are very numerous.

Q. What are their manners?—A. Mild, firm, and phlegmatic. They understand money transactions, and commerce better than any other people, but they are narrow, and not disinterested.

Q. What is the new division of the Batavian republic?—A. It is divided into eight departments : Texel, Amstel, Delft, Schelde, and Meuse, Dommel, Bois-le-duc, Rhine, Vieux-yssel, and Ems.

SWITZERLAND, OR, THE HELVETIC AND VALAIS REPUBLICS,

Which comprehend the Grisons, is bounded on the north by Alsace and Swabia ; east, by the Tyrol ; south, by Italy, Savoy, and the lake of Geneva ; and west, by Franconia.

Q. What is its extent?—A. About two hundred and ten miles in length, and one hundred and thirty-five in breadth. Its population is about 1,850,000.

Q. What are its mountains?—A. The country is perfectly covered with them. They are called the Alps, and among them are particularly observable, on account of their terrifying height, the Furca, whence the Rhone takes its source ; Eiger, which is bored through ; Pilate, Blanc, great and lesser St. Bernard, St. Gothard, and those of Hasli. Immense bodies of ice in the recesses of

these mountains, keep up a never-failing supply of water to the largest rivers in Europe.

Q. Which are the principal rivers of Switzerland?—A. The Rhine, Rhone, Inn, Tesin, Aar, Adda, Reuss, and Limmatt, which rise in the Alps.

Q. Which are the principal lakes?—A. Geneva, Constance, Zurich, Neufchatel, and Lucerne.

Q. What does it produce?—A. It is a cold country, but the sides of the hills are covered with vines and pastures. It produces white wines, grain, fruits, and esteemed medicinal plants. A great number of cattle are reared, and they make large quantities of cheese, in particular that called Gruyere, from the milk of goats. The mountains contain mines of iron, crystals, brimstone, and mineral waters.

Q. How is Switzerland divided?—A. Before the revolution it was divided into thirteen cantons: Zurich, Berne, Lucerne, Uri, Schwitz, Unterwald, Zug, Glaris, Basle, Fribourg, Soleure, Schaffhausen, and Appenzel.

Q. Had not Switzerland once both subjects and allies?—A. It had subjects which belonged to the territory, shut up within itself. These territories were Baden, the free districts, Turgau, Rheintal, Val Maggia, Locarno, Lugano, and Mendrisio. It likewise had allies associated with, and for the protection of the Helvetic confederacy, viz. the principality of Neufchatel, the Valais, Grisons, Tookenbourg, city and abbey of St. Gall, Geneva, Mulhausen, and the bishoprick of Basle.

Q. What is the division of the Helvetic republic?—A. It is now divided into nineteen cantons, namely, Basle, Soleure, Berne, Fribourg, Vaud, Argovia, Lucerne, Schaffhausen, Zurich, Zug, Schwitz, Glaris, Unterwald, Uri, Tesin, Thurgovia, St. Gall, Appenzel, and the Grisons.

Q. What is the government?—A. Each canton has a distinct constitution, and all the cantons are confederated. They reciprocally guarantee their constitution, territory, and liberty. Each sends a deputy to the general diet, which must be held from year

to year at Fribourg, Berne, Soleure, Basle, Zurich, and Lucerne, the cantons of which are called directors. A supreme magistrate, denominated the Landamman, presides at the diet.

Q. What is the religion?—A. Calvinism is professed in the cantons of Zurich, Berne, Basle, Schaffhausen, and Vaud. Glaris, Appenzel, Argovin, and Turgovia, authorize the two communions. The other cantons are Catholic.

Q. What are the manners of the Swiss?—A. They are simple, mild, hospitable, distinguished for fidelity, and good soldiers, but rather given to liquor.

Q. What is the Valais republic?—A. An antient republic, allied with Switzerland, whose independence has just been established: it is bounded on the north by the canton of Berne; south, by the Milanese; east, by the Fourche mountain: and west, by France. It is eighty-one miles long, and thirty wide, and contains one hundred thousand inhabitants. The Rhone, which crosses the Valais from east to west, divides it into upper and lower.

Q. What are its productions?—A. This country, which is a valley surrounded by mountains, produces good wines, fruits, saffron, and a small quantity of corn and cattle. The mountains contain copper, silver, lead, and coal-mines.

Q. What is their religion and manners?—A. They profess the Catholic religion; their manners are simple and hospitable; they are robust, courageous, and sincere; many of them are idiots, and frequently deaf and dumb, and those are called cretins.

Q. What is the government?—A. It is governed by a diet, which holds the legislation, and by a council of state, which has the executive power. It is divided into twelve dixains, tenths, which send deputies to the diet. The president of the council is called grand-bailli (high bailiff).

GERMANY

Was an empire established in 800 by Charlemagne, king of France. Its boundaries are, on the north, the North-Sea, Jutland, and the Baltic; east, Poland, Bohemia, and Hungary; south, Italy and Switzerland; west, France and the Batavian republic.

Q. What is its extent?—A. About 620 miles long, and 530 broad, containing 180,000 square miles, and 128 inhabitants to each.

Q. How is it divided?—A. Into nine great portions, termed circles, viz. Westphalia, Lower Saxony, Lower Rhine, Upper Rhine, Franconia, Swabia, Bavaria, and Austria.

Q. What are the productions of Germany?—A. They consist generally in silver, lead, iron, copper, and salt-mines, grain, horses, wines, cattle, game, manufactures of every description, mineral waters, and vast forests. The environs of the Rhine and Danube are particularly fruitful.

Q. Which are the principal rivers?—A. The Danube, Rhine, Weser, Elbe, and Oder.

Q. What are the manners of the people?—A. They are, in general, open, laborious, good soldiers, and quick in the sciences, but haughty, and addicted to intemperance in eating and drinking.

Q. What are the different religions?—A. Catholic christianity of the sects of Luther and Calvin. The Jews and other sectaries are tolerated.

Q. What is the government?—A. A kind of republic, at the head of which is the emperor. The sovereignty is in the diet, or general assembly of the states, which consist of three colleges, that of the electors, princes, and imperial cities.

Q. Which are the electors?—A. The first princes of the empire; they are called electors, but in them alone is the right of electing an emperor. They are ten in number: the Arch Chancellor, Prince of Ratisbon, King of Bohemia, Comte-Palatine, Duke of Bavaria, Duke of Saxony, Marquis of Brandenburg, Duke of Hanover, Grand Duke, Prince of Saltzburg, Duke of Wirtemberg, Margrave of Baden, and Landgrave of Hesse.

Q. Which are the princes of the second college?—A. They are all the other princes of the empire, dukes, marquises, comtes, &c. who are sovereigns in their states.

Q. What are the imperial cities?—A. They are cities governed in the form of republics, and have no immediate dependence but on the empire, and the emperor. They were very numerous, but

as in other instances, have felt the effects of revolutionary power, and are reduced only to six, viz. Augsburgh, Nuremberg, Franckfort on the Maine, Bremen, Hamburgh, and Lubeck.

AUSTRIA.

The states of the house of Austria are very considerable. The monarchy has a surface of 90,000 square miles, and a population of 25,006,000 inhabitants.

Q. Which are the states that make up the Austrian monarchy ?
—A. It is formed of the circle of Austria, electorate of Bohemia, Hungary, great part of Poland, and the greatest part of the republic of Venice.

Q. What is the extent of the circle of Austria ?—A. It is 444 miles long, and 270 in its greatest width, and has 1,806,000 inhabitants.

Q. What does it produce ?—A. Grain, wine, fruit, and saffron, in abundance. Styria contains iron, copper, and lead mines ; Carinthia is rich in steel ; Corniola, in oil ; and the Tyrol, in silk, flax, and valuable wines.

Q. What are its principal rivers ?—A. The Danube, Ens, and Inn, in Austria ; the Muerh and Drave, in Styria ; and the Adige, in the Tyrol.

Q. Which are the principal cities ?—A. Vienna, Lintz, Saltzburg, Gratz, Clagenfurt, Lanbach, Inspruck, Brixen, Trente, Bregentz, Lindau, Trieste, and Goritz.

Q. What is the national character ?—A. They are sensible, polite, versed in art and science, and warlike.

Q. What is Bohemia ?—A. An electorate which has the title of kingdom. It is bounded on the north by the marquisate of Brandenburg and Poland ; east, by Poland ; south, by Hungary, and Austria ; and west, by the circles of Franconia and Upper Saxony.

Q. What is its extent, population, and productions ?—A. It is 270 miles long, and 225 across. It contains about 2,922,000 inhabitants, and produces silver, lead, copper, grain, and tobacco. It has many manufactures, and in particular, that of glass.

Q. What are its rivers ?—A. The Elbe, Oder, Moravia, Muldaw, Neiss, and Eger.

Q. How is Bohemia divided?—A. Into four provinces: Bohemia proper, Moravia, Lusatia, and Upper and Lower Silesia.

Q. What is the character of the people?—A. Their manners are simple; they are stout, sensible, and good soldiers, but subject to intoxication.

Q. What is Hungary, its extent, and productions?—A. It is a kingdom bounded on the north by Poland; east, by Moldavia and Valaquia; south, by the Adriatic sea; and west, by Germany and Bohemia. Its length is 540 miles, and width 360, and its population amounts to 8,038,000. It abounds in corn, fruit, horses, large cattle, and favorite wines; has rich gold and silver mines, and other metals and minerals, and is famous for its mineral waters.

Q. Which are the principal rivers and mountains?—A. The Danube, Save, Drave, Morwa, and Teisse. It also has many lakes: the largest, that of Balathon, is forty-eight miles long, and nine across. The Krapacks, which separate it from Poland, are its most remarkable mountains.

Q. How is Hungary divided?—A. Into four: Hungary proper, Upper and Lower with Bannat, Transylvania and Buchovina; Illyria, which includes Esclavonia and Croatia; and Dalmatia, comprehending both Austrian and Venetian.

Q. Which are the principal towns of these provinces?—A. Presburg, Tokai, Strigonia, Temeswar, Hermanstadt, Czernovetz, Esseck, Peter-Waradin, Zagrab, Carlstadt, Segda, Zara, Sebenico, Spalatro, and Cattaro. In this province, too, is shut up the little republic of Ragusa, an aristocratical state, whose chief, a rector, is changed every month. It is under the protection of the Emperor of Germany, the Porte, and the king of Naples.

Q. What is the Hungarian character?—A. They are well made, brave, hardy, and military, but proud and vindictive.

Q. Which are the Austrian possessions in Poland?—A. They are about 300 miles long, and 240 in breadth, and are divided into eastern and western Gallicia. They are formed of the palatinates of Lublin, Sandomir, Lemberg, and part of those of Cracovia, Betz, Chelm, Mazovia, &c.

Q. Which are the towns of the two Gallicias?—A. Cracovia, Lublin, Sandomir, Leopold, or Lemberg, Premisle, and Zamoses.

Q. What possessions has Austria in Italy?—A. They are all provinces which were dependent upon the state of Venice. They now form the duchy of Venice, which is divided into seven provinces, or governments: The Dogado, or territory of Venice, Padonan, Vicentine, Veronese, Marche-Trevisane, Bellunese, and Frioul. The countries are very productive in corn, pasture, wine, oil, oranges, and other excellent fruits. They also produce fine silk, a great deal of ship-timber, and plenty of game and fish. The Venetians are lively, ingenious, and witty, and are passionately fond of public amusements.

Q. Which are the principal cities?—A. Venice, Padoua, Vicenza, Trevisa, Belluno, and Udina.

Q. What is the religion of the Austrian states?—A. Catholic, but others are tolerated.

Q. What is the form of government?—A. An hereditary monarchy. The head of the state, whose titles are king of Hungary and Bohemia, Archduke of Austria, &c. has always, for 400 years, been elected Emperor of Germany.

SPAIN

Is bounded on the north by the Western Ocean and France; east and south, by the Mediterranean; and west, by Portugal and the Atlantic.

Q. What is its extent?—A. 720 miles long, and 531 in width, and has 11,202,000 inhabitants.

Q. What does the country produce?—A. Wine, silk, oil, fine wool, metals, and minerals. The land is less productive than it was in corn, because less cultivated. It produces, almost naturally, citrons, lemons, oranges, pomegranates, almonds, and figs. The Andalusian horses are the finest in Europe.

Q. Which are the principal mountains?—A. The Pyrenees, Mont-Serrat, and those of Asturias, Leon, and New Castille, and Sierra Morena.

Q. Which are the chief rivers?—A. The Duero, Minho, Tagus, Guadina, Guadalquivir, and Ebre.

Q. How is it divided?—A. Into thirteen provinces, most of

which, formerly, were separate kingdoms. They are, Biscay, Asturias, Galicia, Navarre, Arragon, Old Castille, the kingdom of Leon, and principality of Catalonia. These eight are in the northern part. The five southern provinces are, New Castille, Andalusia, the kingdoms of Grenada, Valenza, and Murcia.

Q. Does the foregoing include the whole Spanish dominions?—

A. The islands of Majorca, Minorca, Ivica, and Formentera, in the Mediterranean, are dependant on Spain, which also has, in Africa, the towns of Ceuta, Pennonde, Velez, Mellilla, Mazalquivin, and Oran; and the Canary islands. In Asia, the Philippine and Larone islands. In North America, Mexico, or New Spain, California, New Mexico, Florida, the islands of Cuba, and Porto-Rico. In South America, the greatest part of Terra Firma, Peru, Chili, and Paraguay.

Q. What is the government?—A. Monarchical, and the crown goes to the female, in default of heirs male of the direct line.

Q. What is the religion of the kingdom?—A. The Roman-catholic religion, alone, is tolerated.

Q. What are the manners of the people?—A. Simple and superstitious, grave, serious, prudent, and politic, patient in labour, and faithful to their king: they are celebrated for sobriety and probity; but their idleness makes them a miserable people, in one of the finest countries upon earth.

PORTUGAL

Is bounded on the north by Galicia, east by the kingdom of Leon, the two Castilles and Andalusia, and west and south by the ocean.

Q. Is it very large?—A. It may be from north to south 375 miles, and at the utmost from east to west 168, and has 2,980,000 inhabitants.

Q. What does it produce?—A. The climate is not so hot as that of Spain, nor is the soil in general so fertile, or the fruits which it brings forth so rich. Its oranges are very fine, and it has citrons, oil, salt, many sorts of wine, silk, wool, and cattle.

Q. Which are its principal rivers and mountains?—A. The

Tagus, Duero, Min, and Guadiana, are its chief rivers; and its largest mountains are those which divide Algarvus from Alentejo; those which bound Tra-los-montes; Estreilla and the Rock of Lisbon.

Q. How do you divide Portugal?—A. Into six provinces. In the North, Entre Minho and Duero; Tra-los-montes and Braganza. In the centre, Beyra, and Estramadure. In the South, Alentejo and Algarva. Portugal likewise possesses in Asia, Goa and Macao, and some other places; in Africa, Magazan, the islands of Madeira, Cape Verd, and Mosambic; and in South America, Brazil and the Azores.

Q. What is the government?—A. A monarchy, and the crown is hereditary even to the princesses.

Q. What is the Portuguese religion?—A. The Roman-catholic, and no other is tolerated.

Q. Are the manners pleasing?—A. In the towns they are very pleasing but grave; in the country austere, coarse, and superstitious. The Portuguese are vigorous, polite, sensible, and well informed in arts, sciences, and trade.

ITALY

Is one of the finest and most important tracts of country in Europe. It is in the shape of a boot, and is bounded on the North by Switzerland and Germany; East by the Adriatic; South by the Mediterranean; and West by the Mediterranean and France.

Q. What are its dimensions?—A. In length it is 750, and in its greatest width 405 miles, and has from 18 to 20,000,000 of people.

Q. What commodities does it produce?—A. Corn, fruit, and delicious wine, silk, rice, sulphur, and alum. The mountains contain mines of gold, silver, copper, iron, and lead, precious stones, and quarries of very fine marble.

Q. Which are the largest mountains?—A. The Alps and Apennines.

Q. Which are its rivers and lakes?—A. The principal are the

Po, which receives the Tessin and the Adda, Adige, Arno, Tibur, Carigliano and Volturno. The lakes are those of Garda and Coma, Lago Majora, Perouze or Trasimene, and Cesano.

Q. What is the national religion and character?—A. The Catholic religion predominates throughout. The people are generally indolent, but not without numerous exceptions; polite, sensible, and fond of the arts. They excel in sculpture, painting, poetry, and music, and are cunning, jealous, and revengeful.

Q. How is Italy divided?—A. For the facility of geography it is divided into north, central, and south.

Q. Which are the northern states?—A. Those late of the king of Sardinia, now belonging to France; the Italian republic; duchies of Parma and Placenza, and Venice and the Ligurian and Luccan republics.

Q. In what does the Italian republic consist?—A. Its length is about 180 miles, its width 150, and number of its inhabitants 4,000,000. It was established by the treaties of Campo Formio and Luneville. Its head is a president; it is divided into twelve departments, four north, four middle, and four south.

Q. Which countries are included in the northern departments?—A. The Valteline, Chiavenna, and Bormio; Novaroies, part of the Milanese, and Bergamase. The departments are Apogna, Lario, Olona and Serio.

Q. What states do the middle take in?—A. Bressan, Cremase, and part of the Veronese and Milanese; the duchy of Mantua, and part of Modena. The departments are Mella, Upper Po, Mincio and Crostolo.

Q. What do the southern departments comprehend?—A. The other part of Modena, Polesine de Rovigo, Ferrara, Bologna, and Romagna. The departments are Panaro, Lower Po, Rens, and Rubicon.

Q. What is the state of Venice?—A. It is the oldest and most considerable republic in Europe. Besides Dalmatia it did possess fourteen provinces, six of which have gone to the Italian republic, and eight to the house of Austria.

Q. What does the state of Parma contain?—A. Three duchies

united; those of Parma, Placenza, and Guastalla; they are together 48 miles long and 36 wide, and contain 300,000 inhabitants.

Q. What is the Ligurian republic?—A. It is formed by the state of Genoa, canton of Saravella, principality of Oneilles, and Imperial fiefs which did belong to Sardinia. It is 159 miles long, 54 broad, and contains 500,000 inhabitants. It is a democratic state, the chief of which has the title of doge.

Q. Which are its principal cities?—A. Genoa, Novi, Oneilles, Porto-Fino, Porto-Venere, and Spino.

Q. What is the republic of Lucca?—A. A democratic state between the Ligurian republic and Tuscany. The chief is chosen every two months from the twelve elders, and is styled Gonfalonier. It is 27 miles long, 18 wide, and has 120,000 inhabitants.

Q. What are the states which central Italy comprehends?—A. The kingdom of Tuscany, republic of San Marino, and states of the Pope.

Q. To whom does the kingdom of Tuscany belong?—A. This state, which was a grand duchy, belonged to the house of Medici, and afterwards to Austria, which gave it up to the son of the duke of Parma, and this grand duchy has been raised to a kingdom. It is 135 miles long, and 108 wide, and has 1,000,000 inhabitants. It is a monarchy.

Q. What states does Tuscany embrace?—A. Florence south of the Appenines, Pisa, Sienna, and Piombino.

Q. What is the republic of San Marino?—A. A democratic state between the Italian Republic and the state of the pope. It is governed by two magistrates which are changed every six months. This petty state has nothing but the city of San Marino with a territory of six miles in diameter, and about 6000 inhabitants.

Q. What is meant by the states of the church?—A. They are the temporal principalities possessed by the pope; three north, and six south, and are 210 miles long, and 132 wide, and 1,500,000 inhabitants. The northern provinces are the duchy of Urbino, Perugin, and Marche of Ancona. The southern provinces

are Orvietan, the duchy of Castro, Ombria, Patrimony of St. Peter, Campagna di Roma, and Sabina.

Q. Which are the states of southern Italy?—A. The kingdoms of Naples and Sicily, or the kingdom of the Two Sicilies; a monarchical government.

Q. How is the kingdom of Naples divided?—A. This state, which is 300 miles long, and 210 broad, and contains 5,000,000 inhabitants, is divided into four provinces: Abruzze and Pouille, the Land of Laboun, and Calabria. Sicily is an island which will be spoken of afterwards.

TURKEY IN EUROPE.

The boundaries of this part of the Turkish empire are Hungary, Poland, and Muscovy on the North, Asia on the East, the Mediterranean on the South; and sea of Greece, Gulph of Venice, and Germany, on the West.

Q. What is its extent?—A. Its length is 910, width 760 miles, and its population estimated at 16,000,000 inhabitants.

Q. Which are its chief rivers and mountains?—A. Its rivers are the Danube, Save, Niester, Dnieper, and Don: mountains, Mount Athos, Olympus, Parnassus, Pindar, Helicon, and Hemus, so celebrated by the ancient poets.

Q. What are its productions?—A. All sorts of minerals, metals, and valuable marbles; it abounds in garden-stuff, oranges, citrons, grapes, olives, cotton, and medicinal drugs.

Q. How is it divided?—A. Into Northern and Southern provinces.

Q. Which are the Northern provinces?—A. They are nine; Bessarabia, Moldavia, Valachia, Turkish Dalmatia, Bosnia, Servia, Bulgaria, and Romania, or Rumelia.

Q. Which are the Southern provinces?—A. Five; Macedonia, Albania, Jarma, Livadia, whose capital is the renowned Athens, and the Morea.

Q. What are the islands of Turkey in Europe?—A. The Greek isles. There are seven in the Ionian or Grecian sea: Corfu, the

seat of government, St. Maure, Cephalonia, Zarithus, Cerigo, Curzolari and Ithaca. They now form an independant state, under the name of the Republic of the Seven Islands, under the protection of the Grand Seignior and Russia.

Q. Which are the other Greek islands?—A. They are called the islands of the Archipelago, are very numerous, and are divided into Cyclades and Sporades, not including the two greater Candia to the South, and Negropont to the North. The principal of the Cyclades are, Audres, Tinc, Naxos, Paros, and Milo. Of the Sporades, Stalimenes, or Lemnos, Sciro, Coulouri, or Salarnine, Santorin, Tenedos, Scio, and Samos.

Q. What is the government?—A. It is hereditary, absolute, and despotic.

Q. And the religion?—A. Is the Mahometan, but others are tolerated.

Q. What is the Turkish character?—A. They are strong and well made, but dislike labour, and derive no advantage from the fine soil they inhabit. They care nothing for science, and are very ignorant; but they are hospitable, charitable, and trustworthy in trade.

THE ISLANDS OF EUROPE

Are for the most part unimportant, we shall therefore merely notice those which from their political existence are more or less distinguished in this part of the world.

THE MEDITERRANEAN ISLANDS.

CORSICA.

Q. What is known of Corsica?—A. It originally belonged to Genoa, which ceded it to France in 1768; is 120 miles long, and about 50 wide, and contains 166,500 inhabitants. It is divided into two departments, Golo, and Liamone.

Q. What are its productions?—A. Fine wines, wood, fruit, oil, silk, horses and coral; and it has gold, silver, iron, and copper mines. The Corsicans follow the Catholic religion; they are robust, and make good soldiers and sailors, but are rough and malicious.

SARDINIA.

Q. What is its extent and population?—A. It is 150 miles long, 90 across, and its population is 370,000. It is divided into two provinces, Cape Lagodovi, and Cape Cagliari, the capital.

Q. What does it produce?—A. Grain, oil, citrons, oranges, and other fruits, plenty of wine, cattle, and game. It also has silver and lead mines. The Sardinians are unpolished in their manners, and their character is that of the Italian. The Catholic is the prevailing religion.

SICILY.

Q. What is Sicily?—A. An island with the title of kingdom,

like the former. Its length is 180 miles, and width 108, and it has 1,110,000 inhabitants. It is divided into three provinces, Vallies, Demona, Mazara, and Noto. In this island is Mount Etna, which is 10,514 feet high.

Q. What are its productions?—A. Corn, wine, fruit, honey, wax, and silk. The inhabitants are polite and friendly to the arts, but are said to be inconstant and revengeful. They adhere to the Roman-catholic religion.

MALTA.

Q. Is this island very large?—A. It is 21 miles long, and 12 wide, and has 60,000 inhabitants reckoning those of Gozo and Comino, little islands dependent upon it. Its capital, La Valette, is one of the strongest places in the world, with a considerable and extremely important harbour for the trade of the Archipelago, and all the Levant. It belongs to the order of Malta, as the Knights of St. John of Jerusalem, whose chief is a grand master and sovereign of that little state.

Q. What are its productions?—A. The soil of this island, which is merely a rock covered with a light bed of earth, produces notwithstanding all sorts of vegetables, excellent fruit, and in particular fine oranges, sugar, cotton, and silk. The climate is mild and very wholesome. The Maltese are a sober, commercial people, and make good sailors.

CORFU, ZANTE, CEPHALONIA, &c.

Q. What are the names and particulars of all these islands?—A. The capital, Corfu, is 120 miles in circumference, and contains 50,000 inhabitants; St. Maine, formerly Lucados, is 48 miles round; Cephalonia, 180, and 30,000 inhabitants; Zante, 18 long and 12 broad, and the same number of inhabitants as the former. The capitals are of the same name as the islands. Cerigo, Curzolari and Ithaca, are little unimportant islands, but make up the seven islands of the republic, which we have just mentioned under Turkey in Europe.

Q. What do they produce?—A. Valuable wines, and great

plenty of oils, citrons, oranges, excellent pomegranates, and the celebrated grapes of Corinth, all in large quantities. The air is good, though the climate is very hot. The inhabitants are active, industrious, and commercial, and profess the Christian religion according to the rites of the Latin and Greek church.

CANDIA.

Q. Is this a considerable island?—A. It was formerly that of Crete, is 180 miles long and 60 broad, with a population of 300,000 souls. Its capital, Candia, has a harbour. It forms part of Turkey.

Q. What are its productions?—A. Silk, wool, cotton, oil, excellent wine, and fine honey. The people are mild, honest, industrious, and trading. They adhere to the Greek rites. In this island is Mount Iota, and the river Lethe.

NEGROPONT.

Q. Is this extensive or not?—A. It is near Livadia, 120 miles long, and 30 wide; its capital of the same name, has a harbour. It is fertile in corn and wine: the inhabitants are good sailors. The climate of this island, which is a dependency of Turkey, is fine; the air is pure, and the water particularly good.

THE ARCHIPELAGO OF GREECE.

Q. Which islands compose the Archipelago?—A. It includes those of the *Ægean* sea, that lay between Romania, Natolia, Macedonia, the Moreas and Candia. They are divided into the Cyclades and Sporades. They are very numerous, several merely rocks. However, 45 are reckoned to be inhabited. We have mentioned the principal under Turkey in Europe, of which the Archipelago makes a part.

Q. What do they produce?—A. Fine wines, exquisite fruit, sugar canes, honey, oil, silk, wool, cotton, and marbles of the greatest beauty.

MAJORCA, MINORCA, IVICA,

Being very near together, will here be comprehended under one head. They were the Balearos isles, and belong to Spain.

Q. Which is the largest ?—A. Majorca : its length is 60 miles, and width 39, and it has 80,000 inhabitants. The capital, Palina, is a rich city with a good harbour. Minorca is separated from it by a strait, and is 42 miles long, and 21 broad. Mahon, a fortified place with a good harbour, is the capital. Ivica, which is 36 miles in length, and 24 in breadth, has a capital of its own name.

Q. What do these islands produce ?—A. The soil of Majorca is very fertile ; it furnishes abundance of oil, fruit, corn, wine, silk, wool, and cattle. Minorca supplies very good greens, wine, and oil, and contains iron and lead mines, and fine marble. Ivica abounds in salt pans. The inhabitants are very commercial, and profess the Catholic religion. The climate though hot is pleasant.

THE ISLANDS OF THE OCEAN.

ZEALAND, FINLAND AND ICELAND

Have been noticed under the head of Denmark.

THE BRITISH ISLANDS

Is a name generally given to two large, and several smaller ones near them, situate in the North Sea, and subject to the same government.

Q. Which is the largest?—A. Great Britain. It is bounded on the north by the Straits of Dover, which happily separates it from France; East by the German Ocean; south by the Channel, and west by the Irish sea.

Q. What are its productions?—A. Tin, lead, copper, coal, butter, cheese, corn, flax, cloth, stuffs, horses, cattle, and every thing necessary except wine; we may also add every description of merchandize; this country being the theatre of the greatest commerce of the world, supported by its numerous colonies and protected by a navy the terror of the world and glory of its people.

Q. Which are its chief rivers?—A. The Thames, which falls into the German sea; the Severn, which disembogues itself into the Irish channel; and the Humber, which joins the Trent and Ouse, and is discharged into the North Sea. These rivers abound in salmon, and other good fish.

Q. How is Great Britain divided?—A. Into two great parts; England, and Scotland.

Q. What is the extent of England?—A. England and the principality of Wales, are 381 miles long, and 300 broad, 57,700 square miles, and 9,343,578 of souls.

Q. How is England divided?—A. England proper in the east, and the principality of Wales in the west, are divided into 52 counties or shires, of which 40 are in England, and 12 in Wales.

Q. Which are the six northern counties of England?—A. Northumberland, Cumberland, Westmoreland, Durham, York, and Lancaster.

Q. Which are the eighteen midland counties?—A. Chester, Derby, Nottingham, Lincoln, Salop or Shrewsbury, Stafford, Leicester, Rutland, Hereford, Worcester, Warwick, Northampton, Huntingdon, Monmouth, Gloucester, Oxford, Buckingham, and Bedford.

Q. Which are the six eastern counties?—A. Norfolk, Suffolk, Cambridge, Hertford, Essex, Middlesex, county town London, a celebrated port on the Thames. This city is the capital of the British empire; its riches and its commerce are unrivalled, and its population is 864,845.

Q. Which are the ten southern counties?—A. Kent, Sussex, Surry, Hampshire, Berkshire, Wiltshire, Somerset, Dorset, Devon, Cornwall.

Q. Which are the twelve counties in Wales?—A. Anglesea, a fertile island, twenty-four miles long and eighteen wide, Carnarvon, Denbigh, Flint, Merioneth, Montgomery, Cardigan, Radnor, Brecknock, Pembroke, Carmarthen, Glamorgan.

Q. What is the English character?—A. Serious, enterprising, blunt, haughty, and not communicative; they excel in the mechanic arts, are fond of knowledge, and love their country. They are generally inclined to commerce, are the best sailors in the world, and partial to liquors.

Q. What is the prevalent religion?—A. The reformed Protestant religion, or the pure religion of Jesus Christ; but toleration is, from motives of liberality, carried to so great an extent, that it rather promotes dissents, and consequently fills the kingdom with sects beyond any other country.

Q. Are there not some islands dependent on England?—A.

The Isle of Man, Scilly Islands, Isle of Wight (twenty-one miles long and fifteen broad), and Jersey and Guernsey, but five leagues from the coast of Normandy, on which they were formerly dependent.

Q. What is the extent of Scotland?—A. Its length is two hundred and seventy and breadth one hundred and sixty miles, contains 27,794 square miles, and 1,607,760 souls. It was formerly a distinct kingdom, but was united with England in 1602. It is separated from England by the Tweed and the Esch, which fall into the sea opposite each other.

Q. What are the productions of Scotland?—A. The soil of this very mountainous country is better adapted to pasture than to tillage. Cattle and fisheries are the riches of the country; but manufactures are greatly increasing, and iron mines are in great abundance there.

Q. Which are the principal rivers?—A. The Tay, Forth, Spey, Clyde, Nyd, Tweed, and Esch, all of which fall into the sea; the lakes formed by these rivers are very numerous, and well stored with fish.

Q. How is it divided?—A. Into fifteen northern and eighteen southern counties; namely, Edinburgh, Haddington, Merse, Roxburgh, Selkirk, Peebles, Lanark, Dumfries, Wigtoun, Kirkudbright, Ayr, Dumbarton, Bute, Caithness, Renfrew, Stirling, Linlithgow, Argyle, Perth, Kincardine, Aberdeen, Inverness, Nairne, Cromarty, Fife, Forfar, Banff, Sutherland, Clacmannan, Kinross, Ross, Elgin, and Orkney.

Q. What is the Scotch character?—A. They have a sound judgment, are quick and penetrating, affable and hospitable, and good soldiers and sailors.

Q. What is the religion of Scotland?—A. The reformed Calvinistic religion.

Q. What is the extent of Ireland?—A. This second large island of Great Britain, divided from it by a strait, is 280 miles long and 160 wide. Its population is four millions. It was formerly an independent kingdom, but was united to England under Henry II.

It then had separate parliaments, but from the 1st of January 1801, the union with Great Britain was rendered complete, and the king took the title of the United Kingdom.

Q. What are its productions?—A. Nearly the same as England, but the country is not so well cultivated. The cattle is excellent, and is its principal commodity. It has a marble of superior quality, and a great quantity of much-esteemed cloth is manufactured there. The climate is more temperate than that of England.

Q. Which are the principal rivers?—A. The Shannon, Barrow, Boyne, Blackwater, and Bann, all which fall into the sea.

Q. What are the divisions of Ireland?—A. It is divided into four provinces; Ulster, which contains nine counties: Down, Armagh, Monaghan, Cavan, Antrim, Londonderry, Tyrone, Fermanagh, and Donegal. Leinster, which contains twelve: Dublin, Louth, Wicklow, Wexford, Longford, East Meath, West Meath, King's County, Queen's County, Kilkenny, Kildare, and Carlow. Munster contains six counties: Clare, Cork, Kerry, Limerick, Tipperary, and Waterford. Connaught contains five counties: Leitrim, Roscommon, Mayo, Sligo, and Galway.

Q. What is the Irish character?—A. They are lively, hospitable, good soldiers and sailors, and very brave; but irritable, coarse, addicted to liquor, and superstitious.

Q. What is the religion of the country?—A. That of England; but the Roman-catholic religion is more generally followed there.

Q. Has not England any other possessions?—A. It possesses immense territories in the East Indies; many islands and other establishments in Africa, New Britain, Nova Scotia, Canada, and Buenos Ayres; Jamaica, Barbadoes, Trinidad, and several other islands in America, and considerable establishments in the southern parts.

Q. What is the government of Great Britain?—A. The kingly power is limited by parliament, which represents the nation. The House of Peers, or Upper House, has the reins of every funda-

mental law, and the Lower House has the inspection of the finances, that the king may not use them to the prejudice of the people. The acts of parliament must have the king's sanction before they become law. The king may convene and dissolve the parliament at pleasure. The throne is hereditary, and the females may succeed to the crown.

ASIA,

Situated east of Europe, is the greatest of the three quarters which formed the Old World, and the most anciently inhabited. It is bounded on the north by the Frozen Ocean, on the east by the Pacific Ocean, on the west by the Red Sea, Isthmus of Suez, Mediterranean and Black Sea, and Europe.

Q. What is its extent?—A. About 7200 miles from east to west, and 5700 from north to south.

Q. Which are its principal peninsulas?—A. Natolia, formerly Asia Minor, Arabia, India on this side and India beyond the Ganges, Malacca, Camboge, Corea, and Kamtschatka.

Q. Which are the principal mountains of Asia?—A. Caucasus, Armenia, Ararat, and Taurus, and those of Thibet and Gattes.

Q. Which are the principal capes?—A. Rasalgate, Comorin, Romania, and Swatoino.

Q. Which are the principal straits?—A. Babelmandel, Orms, Malacca, and Sundy.

Q. Which are the principal gulphs?—A. Those of Kamtschatka, Corea, Pekeli, Tonquin, Siam, Bengal, Persia, and the Red Sea.

Q. Which are the principal rivers?—A. The Oby, Jenisea, Lena, Hoang or Yellow River, Kiang, Amur, Ganges, Indus, Tigris, Euphrates.

Q. Which are the principal lakes?—A. Baikal, Aral, the Dead Sea, and the Caspian Sea.

Q. Which are the prevalent religions in Asia?—A. Mahometanism in all the interior; the other countries to the south and east are yet in the darkness of idolatry; Christianity is professed in every European settlement.

Q. Which are the Terræ Firmæ of Asia?—A. Asia is divided

into ten parts: four in Northern Asia, viz. Turkey in Asia, Georgia, Russia in Asia, and Tartary; and six in Southern Asia, which are Arabia, Persia, the Mogul, and the two peninsulas of India and China.

TURKEY IN ASIA.

Q. What are its boundaries, extent, and productions?—A. It is bounded on the east by Persia, south by Arabia, west by the Sea of Marmora, and north by the Black Sea, and Russia in Asia. It is 1320 miles long by 1080 wide. The population cannot be estimated with any certainty. It is rich in metals and minerals, and where it is cultivated, produces corn, wine, olives, dates, cotton, silk, and medicinal drugs. The countries which it contains are covered with the wrecks of their antient splendour; they were formerly rich and fertile; there were flourishing kingdoms, and a great number of considerable cities. Now all is barren, the people are miserable, and cities few. The manners are much changed either for the better or worse.

Q. What are the names of the mountains and rivers?—A. Mount Taurus, in Natolia; Caucasus, which extends from the Black to the Caspian Sea, and Libanus and Carmel in Syria. The rivers are the Tigris, Euphrates, Meander, and Sarabat, in Natolia; Orontes, in Syria, and Jordan, in Palestine.

Q. What are the divisions of Turkey in Asia?—A. It contains four great provinces: Natolia, Syria, Turcomania, and Diarbeck; each of which makes several governments; namely, Natolia, or Asia Minor, is divided into eight governments or pachalicks. The coasts dependent on the capitan pacha: Anadoli, Sivas or Amasia, Trebisonde or Jenick, Caramania, Marasch or Aladulia, Adana, and Cyprus.

Syria is divided into six: Aleppo, Tripoli, Leyden, Damas, Jerusalem, which includes Palestine or the Holy Land, Jerusalem, the celebrated city, and Bethlem, rendered so illustrious by the birth of our Saviour, and Adgeloun.

Turcomania, or Armenia Major, is divided into three: Van-

Erzerum, and Kars. These people are shepherds, and live in tents.

Diarbeck is divided into three : Diabekir, formerly Mesopotamia ; Yrac-Arabi, in old times Chaldea (in this government was the famous Babylon) ; Kurdistan, or country of the Kurds. In this country is Erbil or Arbele, near to which was fought the extraordinary battle between Alexander and Darius.

Q. Which are the islands of Turkey in Asia ?—A. The most considerable is Cyprus ; it is 210 miles long and 90 broad, with not more than 20,000 inhabitants, and Rhodes is 60 long and 90 broad. Here is the most considerable arsenal which the Turks have. It was in early days the residence of the knights, now of Malta.

ARABIA

Is a great peninsula 1575 miles in length, and 1410 in width. It is bounded on the east by the Gulph of Persia and the Bay of Ormus ; south, by Babelmandel and the Indian Ocean ; west, by the Red Sea and Isthmus of Suez ; north, by Syria and the Euphrates. It has very few rivers ; and burning winds, frequently fatal to strangers, rage there.

Q. What are the Arabian manners and disposition ?—A. They generally live under tents in the open air ; some are vagabonds and thieves, others very numerous are nomades or shepherds. These few which live in towns apply to trade.

Q. What are its productions ?—A. The best horses in the world, the camel and dromedary, perfumes, excellent coffee called Mocha coffee, balsams, gums, myrrh, incense, manna, cassia, dates, coral, pearls, and every description of wild beast. The coffee-tree, which is cultivated in Yemen, bears two or three times a year.

Q. How is Arabia divided ?—A. Into three : Arabia-Petrea, Arabia-Deserta, and Arabia-Felix, the most fertile. In this is the city of Mecca, where Mahomet was born ; and Medina, where his tomb is shewn.

Q. Which are the chief sovereigns of Arabia ?—A. The grand

seignior, cherif of Mecca, cherif of Medina, and king of Yemen. There are several independent princes or imans, and others dependent on the grand seignior. The interior is inhabited by wandering nations divided into tribes.

PERSIA

Was formerly an hereditary kingdom; but, like Europe, since the commencement of the last century, has been subject to many revolutions, from the ambition of various usurpers, who were all successively either expelled or destroyed. It is 1470 miles long, and 1050 wide, and is bounded east, by the Mogul, south, by the Gulph of Persia, west, by Arabia and Turkey in Asia, and north, by the Caspian Sea and Tartary.

Q. Who is sovereign of Persia?—A. This country at present enjoys a little repose under the dominion of a Tartar prince, who has the title of khan. The king of Persia was in former times styled, grand sophi.

Q. How is Persia divided?—A. Into thirteen provinces, the greater part of the towns of which has been destroyed by civil wars. The provinces are Adherbijan, Chirvan, Masanderan, Khorasan, Candahar, Yrac, Agemi (in which is Ispahan the capital of the empire), Sigistan, Sablestan, Khusistan, Farsistan, Kerman, Meeran, and Persian Armenia.

Q. Which are its rivers?—A. The most considerable are the Kur, formerly the Cyrus, and the Aras or Araxis; they unite and fall into the Caspian Sea.

Q. What is the prevailing religion?—A. The Persians are Mahometans, of the sect of Ali. The Turks, who detest them, are of the sect of Omar. There are still some of the Guebres or antient Persians remaining, who retain the worship of fire.

Q. What does Persia produce?—A. Excellent fruits, wines, cotton, fine wool, silk, pearls, horses, camels, precious stones, and different metals. The soil is sandy, but Persian industry has made it fruitful. From Persia silk-worms were introduced into Europe.

Q. What are the manners and habits of the people?—A. They are luxurious and effeminate, as throughout the whole of Asia, pretty well shaped, robust, neat, sensible, affable, jealous, and revengeful.

INDIA,

The name of which is derived from the river Indus, comprehends the centre of the southern part of Asia, and is bounded on the west by Persia, north by Tartary and China, and east and south by the Indian Ocean. It is divided into two great portions, the peninsula of India on this side the Ganges, and the peninsula beyond the Ganges, or the eastern peninsula.

Q. What are its productions?—A. It is the finest and richest country of all Asia, produces excellent fruits of every kind, the betel, of which the greatest use has been made through the entire coast; the arec, indigo, musk, spices, silk, cotton, ivory, gold, diamonds, and other precious stones. It contains great numbers of elephants and wild beasts of all sorts.

Q. What rivers and mountains has it?—A. The largest rivers are the Indus or Sinda, Ganges, Tsampou, Pegou, and Mecon. The most remarkable mountains, the Naugracut and Gattes.

Q. By what nations is India inhabited?—A. By Tartars or Moors, who are Mahometans, and by Indians called Hindoos or Gentoos, who are idolaters. The Moors are about ten and the Indians 100,000,000.

Q. What are their manners and character?—A. The Tartars are warlike; the Indians extremely mild, and by no means adapted to hard labour or war; despotism reigns amongst them in its greatest force. They believe in transmigration, kill neither beast nor insect, nor eat any animal food. They are divided into five casts: bramins, or priests, which are the men of science; rajahs, or solders; vakeels, or merchants; choutres, or workmen, who are very industrious; and lastly, the parias, which are held in abhorrence by all the other casts, and excluded from the towns and temples for their filthiness. These casts do not intermix.

The women were formerly obliged to burn themselves on the funeral pile at their husbands' death, with the body; but that barbarous custom has nearly lost its force since the conquests of the British government.

Q. What are the states of the peninsula on this side the Ganges?—A. Indostan and Mogul; the British possessions, including the Marhatta country, and the peninsula properly so called.

Q. How is Indostan divided, and what is its extent?—A. This state, the richest in the world, is north of the peninsula, and is divided into twenty governments or soubahs, 12 miles west and 8 east of the Gattes mountains. The western governments are those of Cashmire, Cabul, Labor, Moulton, Tatta or Scindeah, Delhi, Agra, Ashmere, Guzzarat, Candisch, Deckkan, and Bagnala. The eastern governments are Becar, Ellabas, Malva, Ugen, Bahar, Berar, Orisa, and Bengal.

Q. Which are the English possessions?—A. The entire sovereignty of several great provinces, some of which are Bengal, Bahar, Benares, and Orissa. The head seat of the government and council of the English company of merchants trading to the East Indies is Bengal.

Q. Where is the Marhatta country situated?—A. Their possessions extend from the coast of Malabar to that of Orissa 900 miles long and 612 wide. Their king is a rajah, and lives, scarcely known, at Saturah. They obey a general, peschera (signifying one who goes before), who resides at Poonah. They are a formidable warlike people.

Q. What is the Peninsula, properly speaking?—A. A country of the torrid zone, which runs about 900 miles into the sea. The diamond-mines are in the mountains; those of Golconda are the richest, and the finest pearls are fished upon the coasts. The western peninsula is termed the Malabar, and the eastern the Coromandel coast. Although these coasts are in the same latitude, the seasons are opposite. The rainy season, or winter, is at Malabar when it is summer at Coromandel.

Q. What are the cities of the Malabar coast?—A. Bombay, Goa, Cananor, Visapour, Calicut, Cochin, Maissours, and Seringapatam.

Q. What does Coromandel include?—A. Golconda, Bisnaga, Gingi, Tanjore, Madure, Paliacate, Pondicherry, Madras, Negapatam, Meliapour, and Tranquebar.

Q. How is the peninsula beyond the Ganges divided?—A. Into the eastern and western part, which extends almost to the equator, and is 1950 miles long by 1080 broad.

Q. What does the eastern part comprehend?—A. The kingdoms of Tonkin, Lass, and Cochinchina. The kingdom of Camboge has been wholly depopulated by civil and foreign wars.

Q. What does the western part contain?—A. The Birman empire, which was formed by a revolution in 1754, and takes in the kingdoms of Ava, Aracan, and Pegu. Ascan or Acham, is in the north, and Siam in the south. Malacca belongs to the Dutch.

RUSSIA IN ASIA

Is a country of vast extent, occupying all the northern part of Asia. It is 3900 miles long and 2550 wide, and contains 6,000,000 of inhabitants, exclusive of Georgia and part of Circassia, which likewise belongs to Russia. Russia in Asia is divided into eleven governments, two north, four south, and five west. The northern governments are Tobolsk and Irskutsk, South Koolivan, Ufa, Caucasus, and Saratow; west Penza, Sinbirsk, Casan, Victea and Permia.

Q. What do the northern governments comprehend?—A. Siberia Proper, and Kamtschatka.

Q. What is Siberia?—A. A very cold country, where the rivers are frozen, and snow falls from September to May. In one part no vegetation, not even a tree, is to be seen. Fishing and hunting are the only means of livelihood.

Q. What is Kamtschatka?—A. A peninsula north-east of Siberia, whence the Russians navigate to Japan and America. It is not improbable that America was originally peopled from it.

Q. What are the people who inhabit these countries?—A. Samoides, Ostiaks, Tongous, &c. who are idolatrous; Tartars, who are Mahometans and Russians; the new inhabitants, who are

mostly banished sons and criminals, or merchants who have built several towns here.

GREAT TARTARY

Is bounded on the north by Siberia and south by China, Indostan, Persia, &c. It is called Great Tartary, in distinction from the Lesser, which is in Europe, and is divided into three, Russian Tartary, above mentioned, Independent Tartary, and Chinese Tartary.

Q. What is contained in Independent Tartary?—A. Its length 1950 miles and breadth 1800, includes the countries in the centre of Asia, occupied by the Circassian Tartars, Kubans, Dagestans, and others, who inhabit the mountains of Caucasus. The greater part of Independent Tartary is to the east of the Caspian Sea, and has several kinds of Mahometan Tartars, and the Kalmucs or who Eluths, are idolaters.

Q. What are those Tartars?—A. The Mahometans are the Karakalpaks, Turkmans, Casatchias, and the Usbecks, which are the most powerful, and occupy the countries called Kharaom and Great Bucharia. The idolatrous Tartars, are those who occupy the centre. At the extremity of their states is Tangut, a kingdom tributary to China; it comprehends Boutan and Thibet, and is the patrimony of Dalai-Lama, or the sovereign pontiff of the Kalmucks and Mogul Tartars, who adore him as a divinity.

Q. Which is Chinese Tartary?—A. That part of Asia which is in a great measure covered by desarts, and in particular by the desart of Chamo or Cobi, which is 900 miles long. This is altogether 2250 miles long and 1080 wide, and may be divided into east and west. In the first are the Yellow Moguls, or Kalkas, merely vassals to China and the Black Moguls, called by the Chinese Tartars to whom they are subject, Mongous. The desart of Cobi divides the two.

Q. What does the eastern part of China contain?—A. The Manchous Tartars, who 160 years since effected the conquest of China. The country is divided into three governments: Chinyan, Kirin-Oula, and Trit-ci-car.

Q. What are the manners of the Tartars in general?—A. They are for the most part, except the Mantchous, wanderers. The idolatrous Tartars are more just and equitable than the Mahometans. They are all descended from the antient Scythians. Their chiefs, whose authority is limited, are called Khans. The principal wealth of the people consists in camels, horses, a superior race of asses, large cattle, and innumerable flocks of goats and sheep. The country furnishes the best rhubarb, rice, salt, furs, a great quantity of wool, goat, and camel skins.

CHINA

Is one of the most antient and polished nations of Asia, bounded on the north by Great Tartary, south by the ocean and the peninsula this side the Ganges, west by Ava, Boutan, and Thibet, and east by the ocean. The empire is said to have lasted 4000 years, and to have had 237 emperors from 22 different families. The present emperor is of a Tartar family, which has reigned since 1644.

Q. What is its extent?—A. Its length is 1650 miles, and width 1500, or 432,666 square miles. Some writers assert the population of China at 333,000,000; but according to a Pekin gazette, recently copied into the Paris official papers, it is but 59,000,000.

Q. What does it produce?—A. The land is fertile, and the way in which it is cultivated does honour to the country; even the declivities of the mountains being brought into cultivation. It produces a great quantity of fine teas, ambergris, and grain, and fruit of every kind; also silk, rice, fine woods, varnish, sweetmeats, glass, china, calico, carpets, paper, and ink. The most extraordinary tree in China is the tallow-tree, the fruit of which serves for candles.

Q. What are the principal rivers?—A. The Hoang or Yellow river, and Kiang or Blue River. To facilitate commerce, there are many canal which are supplied with water from lake Poyang, the largest in China.

Q. What is the wall of China?—A. It was built 213 years before the Christian æra, and separates the northern part of the empire from Tartary. It is above 1200 miles long, 20 to 25 feet high, and 18 thick, with forts at regular distances.

Q. What is the government?—A. Notwithstanding the emperor has the right of life and death over his subjects, the government is very mild, and conformably to the disposition of the Chinese. The emperor rarely shews himself, and is never addressed but on the knees. His subjects look upon him as their father.

Q. What are the manners?—A. Mild, and founded on the love and respect of children towards their parents. They are industrious, polished, sensible, and magnificent; but punctilious, litigious, and much prejudiced in favour of their own nation; cheats, dissemblers, and vindictive. They are said to have had the use of artillery, printing, and the compass, before Europe.

Q. Of what religion are they?—A. They are idolatrous, but of two sects: the first is that of the literati, or wise men; it acknowledges one God, worships the sky, and regards kings and antient philosophers as species of divinities. The second professes the same religion as the Indians.

Q. How is China divided?—A. Into fifteen great provinces, seven of which are north, and eight south of the Kiang. The northern provinces are Chensi, Chansi, Pet-che-li, which contains Pekin the capital, Changtong, Setchuen, Honan, and Kiang-Narg. The southern provinces are, Yer-nan, Queicheon, Hou-quang, Krang-si, Chekiang, Fokien, Quangton, and Quang-si.

Q. Are the cities considerable?—A. They reckon 155 of the first order, two of which are larger than London; 1312 of the second, 2357 fortified places, and towns and villages without number.

Q. Which are its most remarkable cities?—A. Pekin, the capital, and residence of the emperor, is composed of two cities, one inhabited by Tartars, the other by Chinese. It is said to be 21 miles round, not including the suburbs, and to contain 3,000,000 inhabitants: Nankin, formerly the capital, the largest city in the world, 26 miles round, exclusive of the sub-

urbs ; it has the advantage of Pekin in trade and science. Singan-Tsinan, Yunnan, Foulcheou, Hangtcheon, situated in a country termed the Chinese Paradise, on account of its beauty ; Canton, the greatest harbour of China ; four or 5000 vessels are sometimes at anchor there together, and Macao.

Q. What is the peninsula of Corea ?—A. It is a kingdom situate to the north-east of China, to which it is tributary ; is about 300 miles long and 120 wide, and produces every thing necessary for its own subsistence.

Q. Which are the islands belonging to China ?—A. Hainau, Formosa, and those of Liecn-Kieon.

ISLANDS OF ASIA.

The most considerable are in the Indian Seas. In treating of Turkey, those in the Mediterranean have already been described.

Q. Which are to the north of Asia ?—A. They are the Kuriles, small islands 20 in number, almost the whole of them inhabited. Those of the north belong to Russia, and south to Japan, Saghalien, and Jesso. The latter belongs to a prince who is tributary to Japan. They contain volcanos, mineral waters, extensive forests, and many wild beasts. Some produce sugar and wine, and abundance of fish upon the coasts. The wealth of the inhabitants, who are quiet, humane, and hospitable, consists in furs and whale oil.

Q. What is Japan ?—A. An empire eastward of China, composed of a great number of islands, difficult of access. The three largest are Nippon, Kiusiu or Bongo, and Sicokf or Tonsa. All the islands together are not so large as Italy.

Q. What is the government ?—A. They have two emperors ; one is the Dairo, who is sovereign pontiff and oracle of religion ; Kubo, the secular emperor, has absolute power over his subjects.

Q. What is the character of the Japanese ?—A. They are small and tawny, sober, strong, clever, warlike, and haughty, but deceitful, cunning, and vindictive.

Q. What religion have they ?—A. They are idolaters, nearly like the Chinese.

Q. What does Japan produce?—A. The air is rather cold than hot, and the soil not very fertile; but the industry of the inhabitants supplies the deficiency of nature. It has mines of gold, silver, copper, and tin, which are in high repute. They also have fine china, agate, and red pearls, ivory, varnish, and camphor. At Japan is the palm tree, the urusi, the juice of which is a fixed varnish for furniture: the kur, or camphor-tree.

Q. Which are the Ladrones or Marianne isles?—A. They are twelve in number, but not of much consideration, lie south of Japan, and belong to the Spaniards, who discovered them in 1520. The principal is Guan, 120 miles in circumference, and Saypan, or St. Joseph, 75 miles round.

Q. Which are the Philippines or Manillas?—A. Their number is about 1100 in the sea of China. The Spaniards, by whom they were discovered in 1521, have made considerable establishments there. The most material are Lucon, or Manilla, which is 450 miles long and 120 wide. There are not reckoned to be less than 1,350,000 Indians, subject to the Spaniards; all the other inhabitants live independently, and are almost savages. The new Philippines, or Palaos, situate to the east of the others, are not much known.

Q. What are comprehended in the Moluccas?—A. The principal are Ternate, Ceram, Banda, Gilolo, Amboyna, Timor, Tidor, Machian, Motir, and Bachian. They lay between those of Sundry, the Philippines, and New Holland; were discovered in 1520, and belong almost wholly to the Dutch.

Q. What is the Isle of Celebes?—A. It is between the Moluccas and Borneo, 498 miles long and 198 wide, produces rice, opium, and pepper, is in a hot climate, and belongs to Holland.

Q. Why were the isles of Sundry so called?—A. From the strait of that name, which is between Sumatra and Java, westward of the Moluccas. Borneo has a much frequented harbour. The length of the island is 798 miles and width 699. Sumatra lying to eastward of Borneo, is divided between several kings. The Dutch have built many fortresses there. It is 999 miles long and 225 broad. Its produce of gold and silver is so great, that it has been

by many considered the Ophir spoken of in the Scriptures. Java, which is most distinguished for its commerce, is divided between the Dutch and the emperor of Mataram, and is 900 miles in circumference. The Dutch keep up 20,000 soldiers there.

Q. Where is Ceylon?—A. To the south-east of the western peninsula of India. It produces the best cinnamon in the world, and the finest elephants of India come from this island. It now belongs to England jointly with the king of Candy, is 270 miles long and 150 wide. To the north-west is the island of Manar, celebrated for its pearl fisheries.

Q. Which are the Maldives?—A. They are to the south-east of Cape Comorin, and about 12,000 in number; but as the air is unwholesome, and they produce neither rice nor corn, but only cocoas and a few other fruits, the Europeans have formed no establishments there. They are governed by a Mahometan king. Malo, the principal, is but three miles in circumference.

AFRICA

Is one of the greatest quarters of the world, bounded on all sides by the sea, except in a space of about 90 miles, which is called the Isthmus of Suez, and separates the Mediterranean from the Red Sea, which communicates with the Indian Sea.

Q. What is its extent?—A. From Cape Good to the Cape of Good Hope is about 5100 miles from north to south; 4950 from east to west; and a population of 80,000,000 souls.

Q. Which are its principal mountains?—A. Atlas, which gives the name of Atlantic to the Western Ocean: Lupata, Mooni; Sierra Leone, or Lions Mountains; and the Pike of Teneriffe.

Q. Which are the principal capes?—Cape Good, Spartel, Badajoz, Blanc, Verd, des Palmes, Good Hope, Aiguilles, Courans, De Gado, Guardafui.

Q. Which are the most remarkable gulphs?—A. Sidre, Guinea, and Sofala.

Q. Which are the rivers and lakes?—A. The most material rivers are the Nile, Niger, Senegal, Zara, Gambia, Coanza, Sierra Leone, Manica, Zambeza, and Zebea. The principal lakes are Masavi, Bournou, Dambea, and Mœris or Keroun.

Q. What are its productions?—A. Gold, fruit, gum, ebony, and sandal, barb or Barbary horses, camels, elephants, buffaloes, camelopards, zebras, antelopes, monkeys, lions, ostriches, monstrous serpents, and all sorts of wild beasts.

Q. What are the prevailing religions of Africa?—A. Mahometanism, Judaism, and the grossest idolatry.

Q. What are the manners of the Africans?—A. They are very various. The Africans in general are coarse and ferocious, ignorant, cowardly, idle, and thievish. Some travellers say, that many of the nations are quiet, simple, and hospitable.

Q. What is the government of the African states?—A. Many of them are subject to despotic kings or emperors, some are governed as republics, and others lead wandering lives in the deserts.

CONTINENTS OF AFRICA.

Q. How is Africa divided?—A. Into nine great regions, of which seven are to the north, and two to the south, of the equator.

Q. Which are those northward of the equator?—A. Egypt, Barbary, Guinea, Negroland, Nubia, Abyssinia, and the Coast of Ajan.

Q. Those to the south?—A. Congou, or Lower Guinea, and Caffraria.

EGYPT,

Formerly of such celebrity, and where the most ancient monuments of the arts in existence are yet seen, is bounded on the north by the Mediterranean, south by Nubia and Abyssinia, west by Barbary, and East by the Red Sea and Isthmus of Suez, the only point of junction between Africa and Asia.

Q. What is its extent?—A. Its length is 600 and breadth 252 miles, 46,902 square miles, and a population of 2,000,000. It is divided into Upper and Lower, both watered by the Nile, which flows from south to north. The principal cities are Girga, or Thebaid, in Upper Asia; Cairo, the capital of Egypt, Alexandria, Rosetta, and Damietta, in Lower Egypt.

Q. What are its productions?—A. It is very fertile in corn, small grain, greens, and cucumbers. Its fruitfulness is occasioned by the overflowing of the Nile, which occurs from June to September, and the harvest is in March and April. The country furnishes, in addition, abundance of melons, citrons, lemons, figs, sugar, rice, indigo, salt-wort, sal ammoniac, grapes and dates. It feeds buffaloes, camels, dromedaries, fine asses and sheep, which bear twice a year, ducks, and poultry. The Nile is full of fish, some

that are very formidable, particularly the crocodile, which is amphibious, and from three to thirty feet long.

Q. What are their manners, religion, and government?—A. The Cophts, or antient Egyptians, profess the Greek religion, and are interested and spiteful. The Arabs are Mahometans, and make three branches: the shepherds, who live in tents; Bedouins, more independent, but given to thieving; the cultivators, or fellahhs, which are the lowest; and the Mamelukes and Turks, who are Mahometans. Egypt is a province of Turkey, and governed by a pacha, resident at Grand Cairo.

Q. What are the most remarkable antiquities of Egypt?—A. The pyramids, immense monuments of stone, apparently raised in honour of the sun; the largest is 448 feet high, on a base of 728 long. The ruins of Hermopolis, and Dendera, or Tintyris, and the ruins of Thebes, which are six miles in length; all these are astonishing from their magnificence and antiquity.

BARBARY

Comprehends not only the coast of Africa, from Egypt to Gibraltar, but also the country to the south dependent upon it, as well as Zaara, or the Desart.

Q. What are its divisions and extent?—A. It is divided into Barbary proper, Biledulgerid, and Zaara, or the Desart, above 3,300 miles long, and from 12 to 1500 wide, inhabited by Moors, Arabs, and Turks, which merely tolerate a christian amongst them on account of their trade.

Q. What does Barbary proper contain?—A. Pursuing the coast from east to west, is the kingdom of Barca, belonging to the Turks. It is the Lybia of the antients. The vast plains of sand along its coasts have obtained it the appellation of the Desart of Barca; the interior is, notwithstanding, fertile and populous; the kingdom of Tripoli, a trading nation; tunis, the finest and most populous kingdom of Barbary; Carthage, that famous rival of Rome, was some leagues to the north of the city of Tunis; and the kingdom of Algiers.

Q. How do the people of Tripoli, Tunis, and Algiers, live?—

A. Those kingdoms, or rather republics, are vassals to the grand seignior. The people on the coast live by piracy, and if we except those of Tunis, are strangers to the arts. The interior inhabitants are milder in their manners, and subsist by their flocks and agriculture.

Q. Is not the empire of Morocco included in Barbary?—A. Yes; but those of Sus and Tafi let, which are dependent upon them, are in Biledulgerid. Morocco, the antient Mauritania, is 501 miles long, and 420 broad. To the north, are Fez, a considerable city; Sallee, Tetuan, and Tangiers, famous for their piracies; and Ceuta, Melille, and Pignon de Velez, which belong to the Spaniards. South, is Morocco, Sus, and Tafi let, the capitals of those kingdoms. The commerce of these countries consists in indigo, rice, corn, cochineal, dates, ostrich feathers, leather, and carpets. The population of Morocco is 25, and Fez 80,000. The provinces of Fez are extremely fertile, and the government hereditary and despotic.

Q. What does Biledulgerid contain?—A. It is 2499 miles long and 351 wide, and comprehends, besides Sus and Tafi let, the republic of Lugulmesse, Biledulgerid proper, or the country of Dates, the kingdoms of Tocorta, Guardala, and Gaduma, the republic of Siouah, &c.

Q. Which is Zaara, or the Desart?—A. That part of Barbary extending from the ocean to Egypt, between Biledulgerid, Negroland, and Guinea. It is divided into five desarts, Zanhaja, Zuen-siga, Targa, Lemta, and Berdoa, which contain scarcely any thing but sand, wild beasts, and dangerous reptiles. The heats are so excessive, that the inhabitants live in huts. The caravans are exposed to great dangers, as well from the climate as from the Moors and Arabs. It has some mines of salt, an article very rare and valuable in the interior of Africa.

G U I N E A

Is situated between Zaara, Negroland, Congou, and the Atlantic-Ocean.

Q. What is its extent and division?—**A.** It is about 1800 miles long, and 360 broad, and is divided into three distinct portions. The Pepper, or Malaguetto coast, takes its name from a kind of long pepper, much esteemed, which grows plentifully there. The Tooth-Coast, so named, from the quantity of elephants' teeth obtained from it; and the Gold-Coast so called, from the gold it furnishes. These countries include, amongst others, the kingdoms of Akra, Juida, Onis, Dahomy, Mahis, Ayaux, Ardres, Bemis, and Oeze.

Q. What are the productions of Guinea?—**A.** Rice, millet, pepper, sugar-canes, and fruit trees of an enormous bulk; also gums, gold-dust, ambergris, ivory, skins, and especially, Negro slaves. There are great numbers of wild beasts and baboons, including the orang-outang. The inhabitants are idolatrous, some laborious and mild, others cheats and robbers, and some warlike. The climate, though very hot, is generally wholesome.

NEGROLAND.

Q. Where is Negroland?—**A.** It is a large country in the interior of Africa. Its boundaries are Zaara, on the north; Nubia and Abyssinia, on the east; Guinea, on the south; and Senegal, on the west. It is about 2400 miles long, and 900 wide.

Q. How is it divided?—**A.** It is but very imperfectly known; the principal of the kingdoms in it are Tombut, Houssa, Agades, Bournou, Wangara, Ghana, Cayor, and Bur-Salum. The principal nations which inhabit it are the Mandings, Foules, Jolofs, Bambaras, Wangaras, and Moors, but the latter have the ascendancy over the rest.

Q. What are its productions and the manners?—**A.** It produces gum, ivory, ostrich feathers, skins, flax, cotton, and slaves, and has mines of gold and copper. The climate is hot and fruitful. The Negroes are mild and hospitable, but the Moors cheats, cruel, and resolute thieves, the tyrants of the country. The government, throughout, is despotic and capricious, and religion, a mixture of Mahometanism and idolatry.

N U B I A.

Q. What is the description of Nubia?—A. Its boundaries are, on the north, Egypt; east, the Red-Sea; South, Abyssinia; and west, Negroland. Its length is about 900, and its breadth 600 miles. Darfour, a kingdom to the north-west of Egypt, may be added to it. It is divided into the kingdom of Nubia, and that of Dungola.

Q. What are its productions and manners?—A. It produces musk, tamarinds, tobacco, gold-dust, ivory, and slaves. Darfour produces, in addition, camels, ostrich feathers, gum, and skins. These countries keep up constant communication with Europe. The government is despotic, and natives rough, superstitious, and cruel, and profess Mahometanism and Judaism.

ABYSSINIA, OR, ETHIOPIA.

Q. What is known of Abyssinia?—A. That it is a very mountainous country, subject to such heavy rains as occasion the overflow of the Nile, Bahr-el-Abiad, or White-river, Siret, &c. The sources of the Nile are in a marsh, at the foot of the mountain of Geesh. Abyssinia, situated between the tropic of Cancer and the equator, 900 miles long, and 780 wide, is bounded on the east by the Red-Sea; north, by Nubia; west, by Negroland; and south, by the Gallas, or Caffrarian nations.

Q. What are its productions and manners?—A. Wherever it is cultivated it is amply fruitful. The woods, meadows, and flocks, are very numerous, and cattle of an extraordinary size. It produces cotton, flax, wax, myrrh, sena, and many highly esteemed medicinal plants; and has gold and silver mines. The antelope, hyena, lion, leopard, elephant, rhinoceros, crocodile, and hippopotamus, are very common, as are birds of prey. The natives are of an olive brown, well made, tall, lively, laborious, robust, and sober. Their manners are harsh and uncoth; they live in tents; their religion is a mixture of christianity and judaism. The emperor is styled Grand-Negus: his government is hereditary and despotic. The climate is oppressively hot, but the temperature is various, owing to the mountains.

Q. Have not the Turks some possessions in it?—A. They possess three places on the coast of Abex, Suaquem is the principal.

A J A N.

Q. Which is the coast of Ajan?—A. That name is given to the eastern coast of Africa, from the strait of Babel-Mandel to the coast of Abex. It contains the kingdoms of Adel, Majadoxo, and Jubo, and the republic of Brava, of which very little is known.

CONGOU.

Q. Where is Congou?—A. Between Negroland, Guinea, Caffraria, and the ocean, and is likewise called Lower Guinea. The coast of this large country is known as the coast of Angola, for a length of 396 miles. Though the inhabitants speak the same language, and all go by the name of Congou, it is divided into four principal kingdoms: Leango, Congou, Angola, and Benguela. The Portuguese are very powerful there.

Q. What are the national productions and manners?—A. Nature has been very bountiful to this desirable country. The climate is delightful. The land is intersected by rivers and lakes well stored with fish. The mountains, covered with wood, are full of game, and the plains of flocks. The woods, the trees of which are of an enormous size, supply citrons, Seville oranges, ananahs, pimento, and other choice fruits. The palm and cocoa are also indigenous here. Wheat grows there, and the sugar-cane attains a prodigious size. It has many kinds of animals known in Africa. The natives are idolaters, but there are many christians. They live in thatched huts, are mild, but rather indolent. Many slaves are derived from them.

CAFFRARIA, AND THE HOTTENTOT COUNTRY.

Q. What is Caffraria?—A. It is a name given to a great extent of country which occupies the southern part of Africa, and is situated between Abyssinia, Negroland, Jumna, Congou, and the ocean: it includes Monomotapa, Monoemugi, and the coast of Zanguebar. Three very distinct races live in this part of Africa: the Hottentots, Caffres, and Europeans.

Q. Which is Monomotapa?—A. This empire is to the east: its length is about 900, and its breadth 600 miles. It makes five kingdoms, Monomotapa proper, Manifa, Sofala, Sabia, and Inhambana. The emperor is worshiped as a divinity by his subjects, who are idolaters. The interior, which is very little known, abounds in gold.

Q. What have you to say on Monoemugi?—A. It is a kingdom about 900 miles long, and 600 wide, which contains gold and silver mines, and two kinds of sandal wood, much sought after. The inhabitants are idolaters, very black, and almost unknown.

Q. What does the coast of Zanguebar include?—A. It is also called the Mozambic coast, and is better known. Its extent is 1380 miles long, and 330 wide. It contains several kingdoms, the principal of which are Mozambic proper, Montboya, and Mulnidor; the others Moruca, Mongalo, and Quilo. The productions are nearly the same as in other parts of Africa. The Caffres are tall, well made, and of a fine black, very active, strong and courageous.

Q. What is meant by the Hottentot country?—A. That part of Caffraria, at the most southern extremity of Africa, towards the Cape of Good Hope. The natives are of a moderate shape, red copper colour, robust, hardy, and clever; they live by their herds, or by hunting, and are divided into several cantons, each of which has its chief, and their villages, or krals.

Q. What are the British possessions?—A. Their extent is 540 miles long, and 240 wide, with a population of 25,000 whites, 40,000 slaves, and 8000 Hottentots, not including the garrison of the Cape. The greater part of the land is uncultivated, on account of its aridity, but it feeds numerous herds. The whole territory of the Cape of Good Hope is divided into four districts; Stellenbosh, Graaff Reynet, Cape District, or Drakensteen, and Twelledam. At the extremity of the Cape District, are the three mountains, Table, Devil, and Lion. The first forms a peninsula, which has two bays, Table Bay and False Bay.

Q. What is known of Cape Town?—A. Its situation is pleasant, and its streets handsome and large. Some of them have a canal of

running water, planted on each side with trees. The garden of the India Company is partly in and partly out of the town. No country can furnish a greater variety to the vegetable kingdom than the Cape of Good Hope. The climate is hot, but the air wholesome. It was discovered originally by the Portuguese in 1493, but settled by the Dutch in 1650, and taken a second time by the British, in 1805.

THE AFRICAN ISLANDS

Are in the Atlantic ocean, to the west, and in the Indian sea to the east.

Q. Which are those in the Atlantic?—A. Madeira, Canaries, Azores, Cape Verd, gulph of Guinea, Ascension, and St. Helena.

Q. What is to be observed of Madeira?—A. It was discovered by the Portuguese, who gave it the name, signifying wood, because it was then covered. A fire, which lasted seven years, cleared it, but covered it with the cinders, which augmented its fertility. It is particularly celebrated for its excellent wine; it also produces sugar, corn, fruit, cattle, and game. Its situation is between the gut of Gibraltar and the Canaries; its length is forty-five, and circuit 180 miles, and it belongs to Portugal.

Q. Had the Canaries no other name?—A. The antients called them the Fortunate Islands, seven in number, and laying south of Madeira. That most to the north is Lancerote; Fortaventure is to the south-west, only separated from the first by a channel of six miles; Canary is to the south-west of the preceding, a very high mountain, the top of which is always covered with snow. It has many Canary-birds, whence its name. Teneriffe, to the west of Canary, is the largest and most populous, containing about 70,000 souls. The Pike is at the northern part, and is discerned fifty leagues at sea, its height being 11,424 feet.

Gomere is a small island, formed by a high mountain to the south-west.

Palme, also very high to the north-west.

Fer, to the south of Palme, is the most barren. There are several others of inferior note: Graciosa, Rocã, Alegranza, Santa-Claia, Inferno, Lobos, &c. all belonging to the Spaniards.

Q. Which are the Azores?—A. They are a groupe of nine small islands, about two hundred leagues to the west of Spain and Africa, belonging to Portugal; Tercere is the largest, and St. Michael the next.

Q. What do the Cape de Verd islands consist of?—A. They lie more to the south, along the western coast of Africa, off Cape de Verd. They are reckoned to be ten, viz. Sal, Bonavista, Mayo, St. Jago, Fuego, Brara, St. Nicholas, St. Vincent, St. Lucia, St. Antoine, and several others which are mere rocks. They belong to the Portuguese.

Q. Which are the islands in the Gulph of Guinea?—A. They are near the coast of Benin, five in number, St. Thomas, Prince, Ferinand-Po, and Anobon. The two former belong to Portugal; the latter two to Spain.

Q. What is known of Ascension island, and St. Helena?—A. Ascension island is to the south-east of Cape de Verd island, and is but a rock, inhabited for the sake of water. Navigators, however, think it worth putting into, because it is always a safe harbour, and has plenty of very large turtles, excellently flavoured. They likewise land there to take letters which it is customary to leave corked up in bottles at the mouth of a cavern. It is usual for the letters to state the name of the ship and captain, destination, &c. St. Helena, is a short distance from, but of greater consequence than the Cape of Good Hope. It is 21 miles round, and consists only of a town and harbour; is very high, and surrounded by steep rocks. The mountains which can be seen 25 leagues at sea, are covered with great trees: the valleys are fertile in all sorts of greens; forests full of orange, lemon and citron trees, abounding in poultry, cattle, and game. The air is so wholesome that invalids soon recover their health in it. It belongs to the English, and is a place which ships put into on their voyage to India.

THE AFRICAN ISLANDS IN THE INDIAN SEA.

Q. Which are they?—A. Madagascar, Reunion, Isle of France, Comora, Sechelles, and Socotora.

Q. What is the outline of Madagascar?—A. It is 780 miles long, and between 2 and 300 broad, situated in the Indian sea, to the East, and very near the southern part of Africa, from which it is separated by the Mozambic Strait or Channel. It is very productive in corn, rice, sugar, honey, and capital fruit, and has mines of iron and precious stones. Large cattle are in plenty, and almost all the animals of Europe are met with there. The forests are filled with a prodigious variety of fine trees, every species of the palm, ebony, and others adapted for building and dyeing; orange and lemon trees. Different sorts of gum, are also collected there, particularly that denominated India rubber, or elastic gum.

Q. What are the inhabitants?—A. Those of the interior are called Madecusses, whose shape is commanding, colour of their skin varied by colonizing, some of a deep black, or olive. or copper. The blacks, alone, have curly hair. They are warmly attached to liberty; are not mischievous, and generally are inclined to ease and pleasure. The island is divided into several petty kings, or heads of colonies. Their religion is Mahometanism mixed with idolatry and Judaism. The climate is very warm, but the air of the northern part healthy. The French have several times attempted to settle there without success.

Q. What is the Isle of Reunion?—A. It is generally known as that of Bourbon, which was most probably changed, as always conveying an unpleasant retrospect to the revolutionary tyrants of France. It lies to the east, and not far from Madagascar; is very mountainous, and has no harbour. A volcano, subject to frequent eruptions, is in the island and burns the soil for six miles round. The air, though warm, is far from unwholesome, and it is a very productive island.

Q. To whom does it belong?—A. To France, which settled it in 1664. The population is about 8,000 whites, and 30,000 blacks. On account of the difficulty of landing at St. Denis, the capital, a port has been invented, the mole of which projects over the sea, and is so high, that it can only be touched by the highest waves; and to this mole is suspended a rope ladder, by which you

get up on leaving the boat. The island is about 135 miles round.

Q. Where is the Isle of France situated?—A. Eastward of the foregoing, 35 leagues; its circuit is about 150 miles. Its mountains are clothed with forests full of valuable trees, game, and rare birds. The valleys and plain, though not so productive as the former island, are however far from being despicable; and like the former too, it has an active volcano in the S. W.

Q. On whom does the Isle of France depend?—A. On France, which took possession of it in 1721. The population is about 9,000 whites, and 40,000 blacks, nearly 3,000 of which are free, and very useful inhabitants. It has two ports which shelter privateers that greatly annoy the British trade in India during war.

Q. Where are the Comora Islands?—A. They are situated to the N. W. near Africa, and inhabited by Arabs and pirates. Anjouan is the principal: the others are Comora, Meliota, Mayotte, and Angazei. They are fertile, but ill cultivated. The inhabitants are affable, but the air is unhealthy.

Q. Which are the Admiralty, or Sechelles, islands?—A. They lie N. E. of the preceding, between the Isle of France and the mouth of the Red Sea. They form a considerable group, the greater part of which have French names. The principal is Mahé, about 18 miles round, inhabited by French, and dependent on the Isle of France.

Q. What is known of Socotora?—A. It is situated to the N. E. and near Cape Guardafui, between Arabia Felix and Africa. The island is fertile and well peopled, and is subject to a king who depends on the cherif of Arabia. The natives are Christians, and called handsome and well made. Ships bound to the Red Sea take in refreshments here.

AMERICA.

Q. What is America?—**A.** A great continent surrounded on all sides by the sea. It is also known by the name of the New World and the West Indies, but the latter term is generally, in England, understood only to refer to the American islands. It was discovered by Columbus, a Genoese, in 1493, for the Spaniards. Americus Vesputius, a Florentine, making a voyage to it in 1497, published a narrative, and took from the real discoverer the glory of giving it his name.

Q. How is America divided?—**A.** Into North and South. They are two continents separated by the Isthmus of Panama, which is 1,500 miles long, and in some places not more than 60 wide.

Q. What is its extent?—**A.** About 9,000 miles long, and 3690 in its greatest breadth. Its population is very uncertain, and is said to be from 30 to 50,000.

Q. What are its principal mountains?—**A.** In South America the Cordeliers or Andes, which are always covered with snow. The highest, Cimposacao, is 9660 feet. In the North, the Apalaches, which separate the United States from Canada.

Q. Has it a peninsula?—**A.** Two in the northern part, Florida and California: and Yucatan in the southern.

Q. Which are the principal Capes?—**A.** Breton, Florida, St. Augustin, Frowart, Horn, and Corrientes.

Q. Which are its principal straits?—**A.** Those of Davis, Hudson, Magellan, and Lemaire.

Q. Which are the principal gulphs?—**A.** Those of St. Laurence, Mexico, the Vermilion Sea and Panama.

Q. Which are the principal rivers?—**A.** St. Laurence, Mississippi, Oronooko, Amazons, the greatest in the world: its course

is above 1200 leagues, and Rio de la Plata, which is 700 long and 30 wide at its mouth.

Q. Which are the principal lakes?—A. Lake Superior, 1500 miles round; Huron, Michigan, Erie, Ontario; all those lakes have a communication with each other by means of the river St. Laurence, which crosses them, and between Erie and Ontario falls 150 feet perpendicularly. It is called the fall of Niagara, and its noise is heard 15 miles distant.

Q. What are the productions of America?—A. Excellent fruits, mostly unknown in Europe; maize, or Indian corn, sugar, tobacco, cocoa, cotton, indigo, cochineal, leather, and skins. But the great attraction to Europeans is the gold, silver, and diamond mines, pearls, &c.

Q. What are the manners, &c. of the Americans?—A. The natives are of a red copper-colour. Those which have had intercourse with Europeans have become less savage, but most of the others are serious, melancholy, cruel, and even cannibals.

Q. What is the government and religion?—A. One part of the Americans follow the religion of those who subdued them. The others are idolaters, and adore the sun and moon, and an evil spirit that they are taught to fear. Those that have not yet been reduced, are ruled by caciques, or chiefs, chosen from the bravest amongst them.

NORTH AMERICA.

Q. What are the terræ firmæ of North America?—A. Old Mexico, or New Spain, New Mexico, California, the United States, Florida, Canada, Nova Scotia, and New Britain.

OLD MEXICO

Is bounded on the north by New Mexico; east by the Gulph of Mexico and north Sea; south by South America, and the South Sea; and west by the South Sea.

Q. What is its extent?—A. Its length is 1500, and breadth 750 miles, and it is a fine rich country, valuable for its immense revenue. It belongs to Spain, and was taken by Cortez in 1521.

Q. How is it divided?—A. Into three governments or audiences. The royal audience of Mexico, royal audience of Guadalajara, and royal audience of Guatemala.

NEW MEXICO,

Which is little known, is inhabited by the natives. It is a dependency of Spain, and bounded by Old Mexico, Louisiana and California.

Q. What is its extent, &c. ?—A. In length about 1260 miles, and breadth 840 ; it produces corn, fine fruit, and cattle. The air is somewhat cold but very pure.

CALIFORNIA.

Q. What is its extent ?—A. About 750 miles, and 180 wide. Its banks are a famous pearl fishery. The productions of its interior are quite unknown. The vessels which touch there get fruit and skins. It belongs to Spain which has built a fort on the coast, and established several missions, which are not unsuccessful.

THE UNITED STATES

Is a name given to those provinces of America which shook off the British yoke, and were acknowledged by all the powers of Europe in 1783.

Q. What is their extent?—A. Without Louisiana 1650 miles long, and 1251 wide, and 5,000,000 of inhabitants. They are traversed by a chain of mountains from which flow an infinity of rivers ; their boundaries are Canada, the Floridas, New Mexico, and the sea.

Q. What are the productions?—A. Fish, fruit, tobacco, leather, skins, salt meat, cattle, horses, rice, grain, timber, hemp, greens, and all kinds of metals.

Q. What are the manners of the people?—A. They are naturally simple and pure ; but in trade deceitful, and not strictly adhering to truth.

Q. What is their religion?—A. Entirely uncontrouled, except by subordination to law.

Q. What is the government?—A. Federative. Every province is a republic, and sends deputies to a congress, at the head of which is a president, elective every four years.

Q. How are they divided?—A. Into eighteen states, or provinces: Vermont, New Hampshire, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, Kentucky, South Carolina, North Carolina, Georgia, Tennessee, which contains the federal city Washington, the seat of government. Two new states has been more recently added, the district of Phio and Louisiana. The latter was ceded to Spain by France in 1763, but being restored to them has been given up to America.

FLORIDA,

One of the finest countries of America, has belonged entirely to Spain since 1783. It is bounded by Georgia on the north, Mississippi on the west, Gulph of Mexico on the south, and Bahama Strait on the east; and is divided into east and west.

Q. What is its extent?—A. In length 600, and breadth 410 miles, watered by the Mississippi. Its productions are indigo, cochineal, leather, ambergris, precious stones, pearls, and sassafras, a drug regarded by the Indians as a panacea; copper, quicksilver, coal and iron mines. The climate is hot, but the air sharp and genial.

CANADA

Is bounded on the north by New Britain and Hudson's Bay; east by the North Sea; south by Nova Scotia and New England; and west by New Mexico and unknown lands.

Q. What is its extent?—A. Long 600, and wide 195 miles, and 130,000 inhabitants. It is divided into Upper and Lower Canada, and is very productive; but its great source of wealth is the skins of the wild animals which abound there. The lakes and forests render the air colder than it would otherwise be. The natives are haughty and warlike. Its capital is Quebec, a bishoprick, and it belongs to England.

NOVA SCOTIA,

Also termed Acadia, is situated between the river and gulph of St. Laurence, Canada, and New England.

Q. What is its extent?—A. Its length is 351 miles, and breadth 249, and it has a population of about 80,000 in the English establishment. Its situation is good for commerce, but the soil is in general dry.

NEW BRITAIN,

Formerly Labradore, lies round Hudson's Bay, and belongs to England.

Q. What is its extent?—A. Long 1350, and wide 900 miles. A dry cold country, with a population of 200,000 souls in the English establishments, exclusive of the Indian tribes, which are very numerous. There are yet great discoveries to be made north and west of vast countries inhabited by savages, all round Hudson's Bay, the Western Ocean, and as far as the Strait between America and Asia.

SOUTH AMERICA.

Q. Which are its Terræ Firmæ?—A. The kingdom of Terra Firma, Peru, Paraguay, Chili, Brasil, Amazons, Guiana, and the Magellan Lands.

TERRA FIRMA,

So named by Columbus on his third voyage to America, because that in his first and second he had discovered only islands; is situated to the northward of South America, and it is bounded on the north and east by the Gulph of Mexico; south by the Amazons country and Peru, and west by the Gulph and Isthmus of Panama.

Q. To whom does it belong?—A. It belongs to Spain, and extends 1,500 miles in length, and 699 in breadth, and is watered by the rivers Madelina and St. Martha, which unite and are lost in the

gulph of Mexico. It produces maize, sugar, cocoa, indigo, tobacco, valuable wood, and leather; also, gold, silver and copper.

Q. How is it divided?—A. Into several governments; Terra Firma proper, Verago, Panama, Carthagena, St. Martha, Rio de la Hacha, Venezuela, New Andalusia, Granada, and Papayan.

PERU,

The antient empire of the Incas, is bounded on the north by Terra Firma, east by the Amazons, south by Chili and the Magellans, and west by the Pacific ocean. It belongs to Spain, and is governed by a viceroy.

Q. What is its extent?—A. 1500 miles long, and 600 broad. It never rains here, but a gentle dew falls every evening. It is celebrated for the fineness of its wool, gold, silver, and quicksilver mines, and it is otherwise very productive. The lamas, a kind of sheep, are so large as to be used for beasts of burthen. It is subject to frequent earthquakes, owing to its proximity to the Cordilleras, which are very volcanic.

Q. How is it divided?—A. Into the audiences of Lima, or Los-Reyes; Quito and Las-Charcas or Plata.

PARAGUAY

Is a Spanish viceroyalty, bounded on the north by the Amazons, east by Brasil and the sea, south by the same sea and the Magellans, and west by Chili and Peru.

Q. How far does it extend?—A. To the length of 1500, and breadth of 999 miles, watered by the rivers Parana, Rio de la Plata, and Paraguay. Its productions of every description are very great, and includes the valuable herb Paraguay.

Q. What are its divisions?—A. Into six provinces; Parana, Tucuman, Santa Cruz, Sierra, Paraguay proper, and Rio de la Plata.

CHILI,

A Spanish kingdom, is bounded on the north by Peru, east and south by the Magellans, and east by the South Sea, and contains

many mountains and volcanoes. It is watered by the Salado, or Salee, Guarce, Baldivia, Coquimbo, Boheo, and Chiapa, rivers.

Q. What is its extent?—A. It is about 1200 miles long, and 501 broad, rich in mines, grain, fruit, and cattle, &c.

Q. How are the Spanish possessions here divided?—A. Into the bishoprick and royal audience of St. Jago, the imperial bishoprick, and Cuyo. At Valdivia, one of its towns, are the purest gold mines of America.

BRASIL

Is bounded on the north, east, and south, by the sea, and west by the Amazons country and Paraguay. It belongs to the king of Portugal, whose eldest son is styled prince of Brasil.

Q. What is its extent?—A. In length 2520 miles, and width 1500. It is bathed by the Amazons, Rio Janeiro, and other rivers, is generally very productive, and more particularly in mines of precious metals and jewels, and said to produce a revenue of 2,000,000 sterling. The useful medicinal root ipecacuanha grows here.

Q. What are its divisions?—A. Into fifteen provinces, or governments, the principal of which is San Salvador, the capital and residence of the viceroy; but Rio Janeiro is the finest and richest city.

AMAZONS COUNTRY,

So called from the river of that name, is inhabited by savages. It belongs to Spain and Portugal, and is bounded on the north by Terra Firma, east by Brasil, south by Paraguay, and west by Peru.

Q. What is its extent?—A. About 1,200 miles long, and as many broad, and is entirely unexplored except on the borders of the river.

GUIANA

Lies between the rivers Oronooko and Amazons, is bounded on the east by Peru, and west by the sea, and is unknown except for about 240 miles inland.

Q. What is its extent?—A. In length 750, and breadth 960 miles: it is a productive country of great value. The rattle-snake, and all kinds of reptiles, birds, beasts, fishes, insects, &c. are found there.

Q. What are its divisions?—A. Into Spanish, Dutch, French, and Portuguese Guiana. The climate is hot and unhealthy, owing to the great number of rivers which overflow and make infectious marshes.

MAGELLAN LANDS,

So called from Magellan, a Spaniard, who discovered the strait to the south, and made the first voyage round the world. They are bounded on one side by Chili and Paraguay, and on the rest are surrounded by the South Sea. The Spaniards consider them dependent on Chili.

Q. What are their extent?—A. In length 1380, and width 480 miles. The coasts only are known. The inhabitants are Patagians, very tall and miserable. The horses, bulls, and cows, introduced there, have multiplied to a surprising degree.

THE AMERICAN ISLANDS.

NEWFOUNDLAND

Is one of the largest islands of America, in the gulph of St. Laurence, and belongs to England.

Q. What is its extent?—A. It is 351 miles long, and 198 broad. The soil is dry, and the winter cold, long, and rigorous; but the air is clear. It is covered with forests of timber. The great bank of Newfoundland is not far from it, and here is the great cod-fishery which employs 3,000 ships, and above 100,000 men for England and the United States alone.

Q. Which are the remaining islands of America?

ROYAL ISLAND, OR CAPE BRETON, ANTICOSTI AND ST. JOHN.

These islands are very numerous, and are, for the most part, in North America, a few only being to the south. They lie at the entrance of the gulph of St. Laurence, and belong to England. They are very productive, and have extensive cod-fisheries.

LONG ISLAND

Produces grain and fruits, and is a dependency on New York, to which it is very near.

BERMUDAS, OR THE SUMMER ISLANDS,

Situated to the east of Carolina, are numerous, small, and difficult of access. The English, to whom they belong, derive from them timber, tobacco, and fruit, particularly lemons and oranges of a prodigious size.

THE LUCAYOS, OR BAHAMAS,

A group of numerous islands to the north of Cuba. They are almost all deserted except Providence, occupied by the English, and a few others by the Spaniards. These, and the following islands which constitute the Antilles, at the mouth of the gulph of Mexico, were the first which Columbus discovered.

CUBA

Is a productive island, 699 miles long, and 72 wide, belonging to Spain: it is famous, amongst other things, for the blood-hounds kept up there.

JAMAICA

Has been rendered, by the industry and activity of the English, one of the finest colonies in the world: it is only 138 miles long, and 60 broad. Kingston is the capital: it is productive of the usual West Indian commodities, and the verdure is perpetual.

ST. DOMINGO,

A fine island, 480 miles long, and 120 wide, was the joint property of the French and Spaniards, and was ceded wholly to France in 1795 ; but is now a black colony. It might be made the most productive of all the islands. There is an immense quantity of cattle.

PORTO RICO

Is a Spanish island, of an unwholesome air, but the usual produce.

SANTA CRUZ

Is, with the subsequent islands, frequently termed the lesser Antilles. It belongs to Denmark, is very productive, and has good ports.

GUADALOUPE,

A French island, is divided into two parts by a narrow arm of the sea, and is very fertile.

MARTINICO, ST. LUCIA, GRENADA, LA DESIRADE,
MARIE GALANTE, ST. PETER, AND MIQUELON,

The two latter near the bank of Newfoundland, are all good and productive colonies of France.

TRINIDAD, BARBADOES, DOMINICA, AND ST.
KITTS,

Are all appendages to the English crown, which derives great revenues from its productive colonies.

ST. EUSTATIUS

Is properly but a high mountain in the shape of a sugar-loaf, but is the strongest of the Antilles, belongs to the Dutch, and has great trade.

ST. BARTHOLOMEW

Is an ungrateful and mountainous island belonging to Sweden, which also has that of St. Martin's jointly with the Dutch.

ISLANDS OF SOUTH AMERICA.

CHILO

Is a Spanish island 150 miles long, and 45 broad, and produces wood, leather, wool, and ambergris: its situation is at the extremity of Chili.

The Magellan Islands, or Land of Fire, have been before mentioned.

The Falkland Islands, in the South Sea, were ceded to England by Spain.

THE ARCTIC AND AUSTRAL, OR ANTARCTIC LANDS

Are the different territories of the Frozen and Southern Sea, which do not come within the great divisions of which we have given a slight sketch.

Q. Which do you call the Arctic Lands?—A. Those situated towards the North Pole.

SPITZBERGEN

Was discovered in 1596, in the Frozen Ocean, 135 leagues to the north of Norway. It is not known whether it is an island or peninsula; but it is the northernmost country of the arctic continent. Its sovereignty is claimed by Denmark; but the Russians hunt, and British and Dutch pursue the whale fishery there. Those fish are from sixty to eighty feet long, and produce a barrel of oil per foot.

GREENLAND,

So called from the moss which covers its banks, lies between Davis's and Fourbisher's Straits, and Iceland; is 1200 miles long, and 1140 broad. There is abundant pasture notwithstanding the cold, which is incessant. The natives greatly resemble the Esquimaux Indians. Denmark settled twelve colonies in the country; but the Dutch and British assume the privilege of fishing there for whales.

NOVA ZEMBLA

Was discovered in 1594, and is a large island in the Northern Ocean to the north of Russia, from which it is only separated by Weygatz's Strait. Nothing but a little grass grows there. During the three winter months it is perpetual night, and the northern part is always frozen. In the southern part are large quantities of white bears, wolves, and foxes, which live on fish. The Russians hunt and fish there in the summer.

In the last century were discovered, between the Kamtschatkan coast and America, the Alentian Islands, or Northern Archipelago, including Beerens, Copper, and Fox Islands, and above fifty others. They produce rich furs, and are of great value to Russia in its trade with China.

Q. Which are the Austral Lands?—A. New Guinea, New Holland, New Zealand, and others but little known to the south-east of Asia.

NEW GUINEA, OR PAPUA,

Is a large island in the Eastern Ocean, to the east of the Moluccas, from which it is not far distant, and was discovered in 1527. It is a fertile country inhabited by a valiant race of savages.

NEW HOLLAND

Is so immense an island, that it may almost be called the fifth quarter of the globe, and the austral continent. It was discovered in 1642, is 3,300 miles long, and 2,250 wide; is situated to the south east of the Moluccas, separated from New Guinea by the strait of Endeavour, which Cook first passed in 1770. That celebrated navigator named the eastern part of its coasts New South Wales, where the English have formed a very considerable and promising settlement, the chief place of which is Botany Bay, or Sidney Cove.

NEW ZEALAND

Is composed of two large islands discovered in 1642, in the Eastern Ocean; but we are indebted to captain Cook's exertions

for all that is known of them. They are very productive, and the natives are cannibals.

Q. Which are the other Austral Lands?—A. New Britain, northward of New Guinea, is separated, by a strait, from another island called New Ireland. Solomon's islands, so much boasted for their riches by the Spaniards, are to the east of New Guinea, eighteen in number, and very little known. The largest is Isabella, 600 miles in circumference.

Q. What are the new discoveries in the South Sea?—A. They have been very numerous of late years. The principal are New Caledonia, New Hebrides, Friendly Islands, Society Islands, the principal of which is Otaheite; the Marquesas, Callapagos, and Sandwich Islands: at one of the latter captain Cook was killed in 1779. The soil is uniformly good, and greatly productive of grain, fruit, poultry, and pigs. They are well peopled, for Otaheite is supposed to contain 200,000 souls. The natives are humane and mild, like the climate: their language, manners, and costume, prove them all to have been of the same origin.

Q. Having in this work met with a slight sketch of general and important knowledge, let me ask which is the best English work of a somewhat similar kind that I can resort to for more detail?—A. The best work finished is the *Encyclopedia Britannica*, the information in which is arranged alphabetically.

Q. Is there any other in agitation likely to be better, as you lay a stress on the word finished?—A. The *CYCLOPEDIA*, published under the name of REES, promises to be the most extensive, complete, and elegantly illustrated work of this kind ever attempted in Great Britain. Many of the volumes are already finished, and the publication proceeds at stated and short periods. There is likewise another *Encyclopedia*, which is on a very convenient and moderate scale, and at a price much more within general attainment: it is called GREGORY'S *CYCLOPEDIA*; is well printed in two very large and handsome volumes, 4to.; and notwithstanding its numerous beautiful plates, only costs 6l. 6s. so that it may with great propriety be recommended for its cheapness as well as for its convenient size and accuracy.

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THE UNIVERSITY OF CHICAGO

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