

Fever.

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barbarity and disorder, and rested on principles and circumstances which no longer exist. Yet there are, particularly among the Germans, visionary men, who, seduced by the glowing descriptions of old ballads, or the fine structure of a Gothic cathedral, tell us, that the feudal times were the very model of an age of honour and religion. It is well for them that they cannot test their opinions by their own experience.

FEUERBACH, PAUL. See Supplement.

FEUILLANS, in ecclesiastical history; an order of religious clothed in white, and going barefoot, who live under the strict observance of the rule of St Bernard. The name was occasioned by a reform of the order of Bernardines, first made in the abbey of Feuillans, near Toulouse, established in 1580. There are also convents of nuns who follow the same reform, called *Feuillantes*. The first of them was established near Toulouse in 1590.

FEVER; a disease characterized by an increase of heat, an accelerated pulse, a foul tongue, and an impaired state of several functions of the body. The varieties are numerous. The principal divisions are into continued and intermittent fevers. Continued fevers have no intermission, but exacerbations come on usually twice in one day.

Intermittent fevers are known by cold, hot, and sweating stages, in succession, attending each paroxysm, and followed by an intermission or remission. There are three genera of intermitting fevers, and several varieties: 1. *Quotidiana*; a quotidian ague. The paroxysms return in the morning, at an interval of about twenty-four hours. 2. *Tertiana*; a tertian ague. The paroxysms commonly come on at mid-day, at an interval of about forty-eight hours. 3. *Quartana*; a quartan ague. The paroxysms come on in the afternoon, with an interval of about seventy-two hours. The tertian ague is most apt to prevail in the spring, and the quartan in autumn. When these fevers arise in the spring, they are called *vernal*; and when in the autumn, they are known by the name of *autumnal*.

Intermittents often prove obstinate, and are of long duration in warm climates; and they not unfrequently resist every mode of cure, so as to become very distressing to the patient, and, by the extreme debility which they thereby induce, often give rise to other chronic complaints. It seems to be pretty generally acknowledged, that marsh miasmata, or the effluvia arising from stagnant water, or marshy ground, when acted upon by heat, are the most frequent exciting cause of this fever. A watery, poor diet, great fatigue, long watching, grief, much anxiety, exposure to cold, lying in damp rooms or beds, wearing damp linen, the suppression of some long accustomed evacuation, or the recession of eruptions, have been ranked among the exciting causes of intermittents; but it is more reasonable to suppose that these circumstances act only by inducing that state of the body which predisposes to these complaints. One peculiarity of this fever is its great susceptibility of a renewal from very slight causes, as from the prevalence of an easterly wind, even without the repetition of the original exciting cause. In this circumstance, intermittents differ from most other fevers, as it is well known that, after a continued fever has once occurred, and been removed, the person so affected is by no means so liable to a fresh attack of the disorder, as one in whom it had never taken place.

We have not yet attained a certain knowledge of the proximate cause of an intermittent fever, but a deranged state of the stomach and primæ viæ is that which is most generally alleged. Each paroxysm of an intermittent fever is divided into three different stages, which are called the *cold*, the *hot*, and the

sweating stages, or *fits*. The cold stage commences with languor, a sense of debility and sluggishness in motion, frequent yawning and stretching, and an aversion to food. The face and extremities become pale, the features shrink, the bulk of every external part is diminished, and the skin over the whole body appears constricted, as if cold had been applied to it. At length the patient feels very cold, and universal rigors come on, with pains in the head, back, loins, and joints, nausea, and vomiting of bilious matter; the respiration is small, frequent, and anxious; the urine is almost colourless; sensibility is greatly impaired; the thoughts are somewhat confused; and the pulse is small, frequent, and often irregular. In a few instances, drowsiness and stupor have prevailed in so high a degree as to resemble coma or apoplexy; but this is by no means usual. These symptoms abating after a short time, the second stage commences with an increase of heat over the whole body, redness of the face, dryness of the skin, thirst, pain in the head, throbbing in the temples, anxiety, and restlessness; the respiration is fuller and more free, but still frequent; the tongue is furred, and the pulse has become regular, hard, and full. If the attack has been very severe, then perhaps delirium will arise. When these symptoms have continued for some time, a moisture breaks out on the forehead, and by degrees becomes a sweat, and this, at length, extends over the whole body. As this sweat continues to flow, the heat of the body abates, the thirst ceases, and most of the functions are restored to their ordinary state. This constitutes the third stage. When intermittents continue for any length of time, they are apt to induce other complaints, such as a loss of appetite, flatulency, scirrhus of the liver, dropsical swellings, and general debility, which, in the end, now and then prove fatal, particularly in warm climates; and, in some cases, they degenerate into continued fevers. Relapses are very common to this fever at the distance of five or six months, or even a year. Autumnal intermittents are more difficult to remove than vernal ones, and quartans more so than the other types.

It is always desirable to suspend a paroxysm, if possible, not only to prevent mischief, but also that there may be more time for the use of the most effectual remedies. When, therefore, a fit is commencing, or shortly expected, we may try to obviate it by some of those means which excite movements of an opposite description in the system: an emetic will generally answer the purpose, determining the blood powerfully to the surface of the body; or a full dose of opium, assisted by the pediluvium, &c.; ether also, and various stimulant remedies, will often succeed; but these may perhaps aggravate, should they not prevent the fit; the cold bath, violent exercise, strong impressions on the mind, &c., have likewise been occasionally employed with effect. Should the paroxysm have already come on, and the cold stage be very severe, the warm bath, and cordial diaphoretics in repeated moderate doses, may assist in bringing warmth to the surface: when, on the contrary, great heat prevails, the antiphlogistic plan is to be pursued. In the intermissions, in conjunction with a generous diet, moderate exercise, and other means calculated to improve the vigour of the system, tonics are the remedies especially relied upon. At the head of these we must certainly place the cinchona, which, taken largely in substance, will seldom fail to cure the disease, where it is not complicated with visceral affection.

Synocha (from *σύνιχω*, to continue). *Febris synocha*; inflammatory fever; a species of continued fever characterized by increased heat; pulse frequent, strong, hard; urine high-coloured; senses not im-

In the tenth and eleventh centuries, no duty due from subjects was known, except feudal duties; the whole German empire was one vast feudal possession, and the ideas of feudal lords and national sovereigns were wholly confounded. If any one was neither a lord nor a vassal, he was scarcely looked upon as a citizen, and no one took care for his safety. Hence few rich landed proprietors ventured to rely upon their own strength, without a feudal connexion. And even most of these at last yielded to the spirit of the age, and became royal vassals (as the lords of Brunswick and Hesse, and the counts in Thuringia, at that period called *dukes* and *landgraves*). The emperor, likewise, used every means to induce them to adopt such a course. Thus, when the haughty baron of Krenzingen, who was the vassal of no one, refused to do homage to Frederic I., the enraged monarch invested him with the right of coinage, that he might become his lord. On the other hand, it was considered the duty of the German emperor not to extinguish a fief which reverted to the sovereign for want of heirs to inherit it, but to infeoff some other person (though the selection depended entirely on the pleasure of the monarch), and thus to secure the continuance of the feudal system, on which the continuance of the empire seemed to depend; for a reversion of fiefs to the emperor would bring into his hands an excess of power; and a release of the princes from their feudal ties would be followed by a state of anarchy. Besides, the necessary connexion of all the offices with the fiefs rendered the line of separation between them very indistinct; and the service which was paid for a fief was regarded as the fief itself; so that persons were no longer invested with estates as the reward of office, but with the office, as a productive capital, on account of the property attached to it. The dukes, bishops, bailiffs, and burgraves, sometimes from ignorance, and sometimes from interested motives, increased this confusion. They made no difference between their fiefs and the districts and castles for the government of which they were given to them. They exercised in these places, which were filled mostly by their own vassals, the power of feudal landlords, and esteemed any attempt to curtail their rule as an act of flagrant injustice, equivalent to a withdrawal of the fief. In the provinces where the ducal power was early abolished, as in Franconia, Suabia, and Westphalia, the counts and abbots took the same course; while in Bavaria, Misnia, Thuringia, Austria, and Brandenburg, often wholly forgetful of their dignity as imperial governors, they sank into the state of mere vassals to the dukes, landgraves, and margraves, and were hardly able to maintain their under-tenures in a state of dependence.

From the feudal system, the only social organization of the European states in the middle ages, a new system of civil rank arose. The inferior nobility, a rank intermediate between the higher nobility (princes) and freemen, owes its origin, it is said, to this institution; and a regular scale of rank was formed among the vassals, without detriment, however, to the principle of equal birth. The king formed the first class; the spiritual princes, bishops, and immediate abbots constituted the second; the lay princes, dukes, landgraves, margraves, and immediate counts, the third; those barons, or rich landed proprietors, who owed fealty to no one, but yet, on account of their limited rights or possessions, were the vassals of the emperor, the fourth; those freemen who stood in the same relation to the princes, the fifth; the vassals of the former and the servants of the princes, the sixth; and the possessors of small fiefs, the seventh. This arrangement corresponds to the Italian division into *principes*, *capitanei*, *valvasores majores*, *valvasores minores*, *valvasini*, and *soldati*; the English into lords,

esquires, and freeholders; the Spanish *grandees* (*ricos hombres*, rich men), *escuderos*, *hidalgos*; and the French *pairs*, *barons*, *ecuyers*, and *valvasseurs*. The title *ecuyers*, *escuderos*, *esquires*, however, belongs rather to chivalry (q. v.). Besides these ranks, after some centuries, the order of citizens was formed, as being included under no one of them. The spirit of the feudal system, grounded on the prevalence of landed property, was necessarily foreign to cities, which owed their origin to industry and personal property, and founded thereon a new sort of power. Hence we see them almost always involved in open hostilities and contests with the nobility.

The principles of the *feudal laws* (the name given to the system of rights and obligations existing between feudal lords and vassals) were developed and established by the Lombard lawyers of the twelfth century. The collection of feudal laws and customs, which is appended to the Roman code under the title of *libri feudorum* (fiefs are called *feuda*, in opposition to *allodia*, originally, estates gained by lot; *feudum* is from the ancient *fe*, a reward, and *ode*, a possession,) has become the code of feudal law over half of Europe. In the north of Germany, Denmark, Prussia, Poland, &c., the old German feudal code still obtains, which differs from the Lombard code chiefly in not acknowledging the right of collateral relations, as such, to succeed to a fief; and in grounding the right of feudal succession, not on descent from the first possessor of the fief, but only on community of possession; so that divisions destroyed the right of inheritance. In place of this community, similar force has been given, since the twelfth century, in the above-mentioned countries, to a merely formal union, instituted in the first investiture, and preserved and renewed in all cases of division or death (joint investiture).

The feudal government, at a period when a spirit of independence and of opposition to despotism was abroad in the land, was well suited to put into the hands of one governor, as supreme feudal lord, the reins of the national power, to be employed against foreign enemies without endangering domestic freedom. But as every human institution bears in itself the germ of decay, the purity and influence of feudal relations was diminished; and the strength of the national government declined amidst a spirit of disaffection and sedition, which became universal, when nobles began to perceive that the feudal government was not naturally dependent on kings, but kings on it. Indeed, the sovereigns had no other security for their subjection than the feudal oath, and the menaces of punishment, which the king had not the ability to carry into effect, as his power was divided in most of his states, either by investiture or by the usurpations of the princes. Thus the vassals of the crown in Germany, Italy, and the oldest districts of France, succeeded in depriving the king of almost all power, even of the external honour of royalty; and never, in the two first countries, and in France only after the extinction of the great baronial families, could he succeed in establishing a new authority, independent of the feudal power.

As the improvements in the art of war had brought about a total change in modern times, and the feudal militia had been entirely superseded by the standing armies, the feudal government had no means of retaining its authority but by the feudal services of a civil character. The feudal system is a relic of the past, too useless and inconvenient, and too much opposed to the principles of the modern laws of equality to be any longer maintained. Feudal service is no longer demanded, because it has ceased to be useful. It has been, and still is, the great task of the present age in Europe, to overthrow the feudal system—an order of things which grew out of times of

paired. This fever is so named from its being attended with symptoms denoting general inflammation in the system, by which we shall always be able readily to distinguish it from either the nervous or putrid. It makes its attack at all seasons of the year, but is most prevalent in the spring; and it seizes persons of all ages and habits, but more particularly those in the vigour of life, with strong elastic fibres, and of a plethoric constitution. It is a species of fever almost peculiar to cold and temperate climates, being rarely, if ever, met with in very warm ones, except among foreigners lately arrived; and even then, the inflammatory stage is of very short duration, as it very soon assumes either the nervous or putrid type. The exciting causes are sudden transitions from heat to cold, swallowing cold liquors when the body is much heated by exercise, too free a use of vinous and spirituous liquors, great intemperance, violent passions of the mind, the sudden suppression of habitual evacuations, and the sudden repulsion of eruptions. It may be doubted if this fever ever originates from personal infection; but it is possible for it to appear as an epidemic among such as are of a robust habit, from a peculiar state of the atmosphere. It comes on with a sense of lassitude and inactivity, succeeded by vertigo, rigors, and pains over the whole body, but more particularly in the head and back; which symptoms are shortly followed by redness of the face and eyes, great restlessness, intense heat, and unquenchable thirst, oppression of breathing, and nausea. The skin is dry and parched; the tongue is of a scarlet colour at the sides, and furred with white in the centre; the urine is red and scanty; the body is costive; and there is a quickness, with a fulness and hardness in the pulse, not much affected by any pressure made on the artery. If the febrile symptoms run very high, and proper means are not used at an early period, stupor and delirium come on, the imagination becomes much disturbed and hurried, and the patient raves violently. The disease usually goes through its course in about fourteen days, and terminates in a crisis, either by diaphoresis, diarrhoea, hæmorrhage from the nose, or the deposit of a copious sediment in the urine; which crisis is usually preceded by some variation in the pulse. The chief indication in synocha is to lessen the excessive vascular actions by evacuations, and the antiphlogistic regimen. Of the former, by far the most important is blood-letting. Purging is next in efficacy. As the disease advances, however, we must attempt to promote the other discharges, particularly that by the skin. The antiphlogistic regimen consists in obviating stimuli of every kind, so far as this can be done safely; impressions on the senses, particularly the sight and hearing, bodily and mental exertion, &c., must be guarded against as much as possible. The diet should be of the most sparing kind. The stimulus of heat must be especially obviated by light clothing, or even exposing the body to the air, ventilating the apartment, sprinkling the floor with vinegar and water, &c. When the head is much affected, besides the general treatment, it will be proper to take blood locally, have the head shaved and cooled by some evaporating lotion, apply a blister to the neck, and, perhaps, stimulate the lower extremities. In like manner any other organ, being particularly pressed upon, may require additional means to be used for its relief, which will be different in different cases.

Typhus (from τυφος, stupor); a species of continued fever, characterized by great debility, a tendency in the fluids to putrefaction, and the ordinary symptoms of fever. It is to be readily distinguished from the inflammatory by the smallness of the pulse and the

sudden and great debility which ensues on its first attack, and, in its more advanced stage, by the petechiæ, or purple spots, which come out on various parts of the body, and the fetid stools which are discharged; and it may be distinguished from the nervous fever by the great violence of all its symptoms on its first coming on. The most general cause that gives rise to this disease is contagion, applied either immediately from the body of a person labouring under it, or conveyed in clothes or merchandise, &c.; but it may be occasioned by the effluvia arising from either animal or vegetable substances, in a decayed or putrid state; and hence in low and marshy countries, it is apt to be prevalent when intense and sultry heat quickly succeeds any great inundation. A want of proper cleanliness and confined air are likewise causes of this fever; hence it prevails in hospitals, jails, camps, and on board of ships, especially when such places are much crowded, and the strictest attention is not paid to a free ventilation and due cleanliness. A close state of the atmosphere, with damp weather, is likewise apt to give rise to putrid fever. Those of lax fibres, and who have been weakened by any previous debilitating cause, such as poor diet, long fasting, hard labour, continued want of sleep, &c., are most liable to it. On the first coming on of the disease, the person is seized with languor, dejection of spirits, amazing depression, and loss of muscular strength, universal weariness and soreness, pains in the head, back, and extremities, and rigors; the eyes appear full, heavy, yellowish, and often a little inflamed; the temporal arteries throb violently, the tongue is dry and parched, respiration is commonly laborious, and interrupted with deep sighing; the breath is hot and offensive, the urine is crude and pale, the body is costive, and the pulse is usually quick, small and hard, and now and then fluttering and unequal. Sometimes a great heat, load, and pain are felt at the pit of the stomach, and a vomiting of bilious matter ensues. As the disease advances, the pulse increases in frequency (beating often from 100 to 130 in a minute); there is vast debility, a great heat and dryness in the skin, oppression at the breast, with anxiety, sighing, and moaning; the thirst is greatly increased; the tongue, mouth, lips, and teeth are covered over with a brown or black tenacious fur; the speech is inarticulate, and scarcely intelligible; the patient mutters much, and delirium ensues. The fever continuing to increase still more in violence, symptoms of putrefaction show themselves; the breath becomes highly offensive; the urine deposits a black and fetid sediment; the stools are dark, offensive, and pass off insensibly; hæmorrhages issue from the gums, nostrils, mouth, and other parts of the body; livid spots or petechiæ appear on its surface; the pulse intermits and sinks; the extremities grow cold; hiccoughs ensue; and death at last closes the scene. When this fever does not terminate fatally, it generally begins, in cold climates, to diminish about the commencement of the third week, and goes off gradually towards the end of the fourth, without any very evident crisis; but in warm climates, it seldom continues above a week or ten days, if so long. Our opinion, as to the event, is to be formed by the degree of violence in the symptoms, particularly after petechiæ appear, although in some instances recoveries have been effected under the most unpromising appearances. An abatement of febrile heat and thirst, a gentle moisture diffused equally over the whole surface of the body, loose stools, turbid urine, rising of the pulse, and the absence of delirium and stupor, may be regarded in a favourable light. On the contrary, petechiæ, with dark, offensive, and involuntary discharges by urine and stool fetid sweats, hæmor-

rhages, and hiccoughs denote the almost certain dissolution of the patient. The appearances usually perceived on dissection are inflammations of the brain and viscera, but more particularly of the stomach and intestines, which are now and then found in a gangrenous state. In the muscular fibres there seems likewise a strong tendency to gangrene. In the very early period of typhus fever, it is often possible, by active treatment, to cut short the disease at once; but where it has established itself more firmly, we can only employ palliative measures to diminish its violence, that it may run safely through its course. Among the most likely means of accomplishing the first object is an emetic. Attention should next be paid to clear out the bowels by some sufficiently active form of medicine; and as the disease proceeds, we must keep up this function, and attempt to restore that of the skin, and the other secretions, as the best means of moderating the violence of vascular action. The general antiphlogistic regimen is to be observed in the early part of the disease, as explained under *synocha*. In cases where the skin is uniformly very hot and dry, the abstraction of caloric may be more actively made by means of the cold affusion, that is, throwing a quantity of cold water on the naked body of the patient; which measure has sometimes arrested the disease in its first stage; and, when the power of the system is less, sponging the body occasionally with cold water, medicated, perhaps, with a little salt or vinegar, may be substituted as a milder proceeding. But, where the evolution of heat is even deficient, such means would be highly improper; and it may be sometimes advisable to employ the tepid bath, to promote the operation of the diaphoretic medicines. If, under the use of the measures already detailed, calculated to lessen the violence of vascular action, the vital powers should appear materially falling off, recourse must then be had to a more nutritious diet, with a moderate quantity of wine, and cordial or tonic medicines. There is generally an aversion from animal food, whence the mucilaginous vegetable substances, as arrow-root, &c., rendered palatable by spice or a little wine, or sometimes mixed with milk, may be directed as nourishing and easy of digestion. If, however, there be no marked septic tendency, and the patient be cloyed with these articles, the lighter animal preparations, as calves-foot jelly, veal-broth, &c., may be allowed. The extent to which wine may be carried must depend on the urgency of the case, and the previous habits of the individual; but it will commonly not be necessary to exceed half a pint, or a pint at most, in the twenty-four hours; and it should be given in divided portions, properly diluted, made, perhaps, into negus, whey, &c., according to the liking of the patient. The preference should always be given to that which is of the soundest quality, if agreeable; but where wine cannot be afforded, good malt liquor, or mustard whey, may be substituted. Some moderately stimulant medicines, as ammonia, aromatics, serpentaria, &c., may often be used with advantage, to assist in keeping up the circulation; also those of a tonic quality, as columba, cusparia, cinchona, &c., occasionally in their lighter forms; but more especially the acids. These are in several respects useful: by promoting the secretions of the *primæ viæ*, &c., they quench thirst, remove irritation, and manifestly cool the body; and in the worst forms of typhus, where the putrescent tendency appears, they are particularly valuable from their antiseptic power; they are also decidedly tonic, and, indeed, these from the mineral kingdom powerfully so. These may be given freely as medicines, the carbonic acid also in the form of brisk fermenting liquors; and the native vegetable

acids, as they exist in ripe fruits, being generally very grateful, may constitute a considerable part of the diet. In the mean time, to obviate the septic tendency, great attention should be paid to cleanliness and ventilation, and keeping the bowels regular by mild aperients, or clysters of an emollient of antiseptic nature; and where aphthæ appear, acidulated gargles should be directed. If the disease inclines more to the nervous form, with much mental anxiety, tremors, and other irregular affections of the muscles, or organs of sense, the antispasmodic medicines may be employed with more advantage, as ether, camphor, musk, &c., but particularly opium, which should be given in a full dose, sufficient to procure sleep, provided there be no appearances of determination of blood to the head; and it may be useful to call a greater portion of nervous energy to the lower extremities by the pediluvium, or other mode of applying warmth, or occasionally by sinapisms, not allowing these to produce vesication. But if there should be much increased vascular action of the brain, more active means will be required; even the local abstraction of blood, if the strength will permit; and it will be always right to have the head shaved, and kept cool by some evaporating lotion, and a blister applied to the back of the neck. In like manner, other important parts may occasionally require local means of relief. Urgent vomiting may, perhaps, be checked by the effervescing mixture; a troublesome diarrhœa by small doses of opium, assisted by aromatics, chalk, and other astringents, or sometimes by small doses of ipecacuanha; profuse perspirations by the *infusum rosæ*; a cooling regimen, &c.

Nervous Fever; a variety of the *typhus mitior* Cullen, but by many considered as a distinct disease. It mostly begins with loss of appetite, increased heat and vertigo; to which succeed nausea, vomiting, great languor, and pain in the head, which is variously described, by some like cold water poured over the top; by others, a sense of weight. The pulse, before little increased, now becomes quick, febrile, and tremulous; the tongue is covered with white crust, and there is great anxiety about the præcordia. Towards the seventh or eighth day, the vertigo is increased, and tinnitus aurium, copious delirium, and a dry and tremulous tongue take place. The disease mostly terminates about the fourteenth or twentieth day. See *Typhus*.

Dengue Fever. This name has been given to a disease which appeared in the years 1827 and 1828 in the West Indies, and in the Southern States of North America. It has also been called the *dingle*, the *danga*, the *dandy*, the *bouquet*, and the *buck* fever. This disease was remarkable for the suddenness of its attack, the great numbers affected, the severity of the symptoms, and the rareness of death from it. It would seem, from the reports of those who have seen most of this disease, and whose judgment may be relied on, that the *dengue* has some affinities with the yellow fever. The symptoms, as noticed in Havana, were first great languor, chilliness, and pain in the tendons of the smaller joints: following these were burning heat and redness of the skin, pains in the muscles of the limbs, or pain in the forehead, and a loathing of vomiting of whatever was taken into the stomach. The fever continued for one, two, or three days, and then usually terminated with a free sweating, which freed the patient likewise from his pain. But many, after leaving their beds, suffered by a renewal of their pains, which, in some, have become chronic; others have also had a renewed attack of the fever. "The most usual mode of attack, however," says Dr Stedman, of Santa Cruz, "whenever,"

appears not a little singular, was the following: A person in perfect health would suddenly feel a stiffness, amounting almost to pain, in one of his fingers, and most frequently his little finger. The stiffness increased, and was accompanied with an intense degree of pain, which spread rapidly over the whole hand, and up the arm into the shoulder. The fingers on both hands, in a few hours, became swelled, stiff, and painful, preventing all attempts at bending the joints." To this succeeded restlessness, depression of spirits, nausea, vomiting, shivering, great heat, intense headache, most acute pain in every joint. The most distressing symptoms were intense pain in the eye balls and back, the eyes seeming to be patient enlarged, filling the sockets, and as if ready to burst. Quite a remarkable symptom was the feeling of intense cold, while, at the same time, the skin was intensely hot. These symptoms continued from twenty-four to thirty-six hours. The patient now remained languid, irritable, and restless for about three days, when it was not uncommon for a new attack to come on, accompanied by an efflorescence, beginning at the palms of the hands, and extending thence over the whole body. Secondary symptoms, consisting principally in pain and stiffness of the limbs and body, followed, which, in many cases, continued even weeks, and made the patient most uncomfortable. Sometimes there was distressing itching; and, in some cases, there was swelling of the prepuce and scrotum, and, in others, a discharge from the urethra, resembling gonorrhœa. Dr Stedman considers the disease contagious. The treatment was, for the most part, antiphlogistic. Such means were used as would hasten the sweating stage, evacuate the bowels, and render the patient most comfortable. Where these means failed, the more active depleting means were resorted to, and much relief of local suffering was afforded by the use of blisters and stimulating embrocations, mustard cataplasms, and the like. The latter were applied to the temples, to relieve the pain in the eyeballs, to the back, the back of the neck, &c., as indicated, and always with advantage. Dr Stedman found benefit from blood-letting, in some severe cases. See various accounts of this epidemic by Drs Dickson, Daniell, Waring, &c. &c. in the American Journal of Medical Sciences.

Synochus (from *συνίχαι*, to continue); a mixed fever; a species of continued fever, commencing with symptoms of synocha, and terminating in typhus, the former being apt to preponderate at its commencement, and the latter towards its termination. Everything which has a tendency to enervate the body may be looked upon as a remote cause of this fever; and, accordingly, we find it often arising from great bodily fatigue, too great an indulgence in sensual pleasures, violent exertions, intemperance in drinking, and errors in diet, and now and then likewise from the suppression of some long accustomed discharge. Certain passions of the mind (such as grief, fear, anxiety, and joy,) have been enumerated among the causes of fever, and, in a few instances, it is probable they may have given rise to it, but the concurrence of some other powers seems generally necessary to produce this effect. The most usual and universal cause of this fever is the application of cold to the body; as, for instance, when the body is deprived of a part of its accustomed clothing, or a particular part is exposed while the rest is kept at its usual warmth, or a sudden and general exposure to cold takes place when the body is heated much above its usual temperature. Another frequent cause of fever seems to be breathing air contaminated by the vapours arising either directly or originally from the body of a person labouring under the disease. A

peculiar matter is supposed to generate in the body of a person affected with fever, and this, floating in the atmosphere, and being applied to one in health, will, no doubt, often cause fever to take place in him; which has induced many to suppose, that this infectious matter is produced in all fevers whatever, and that they are all more or less contagious. The effluvia arising from the human body, if long confined to one place, without being diffused in the atmosphere, will, it is well known, acquire a singular virulence, and will, if applied to the bodies of men, become the cause of fever. Exhalations, arising from animal or vegetable substances in a state of putrefaction, have been looked upon as another general cause of fever; marshy or moist grounds, acted upon by heat for any length of time, usually send forth exhalations, which prove a never-failing source of fever, particularly in warm climates. An attack of this fever is generally marked by the patient's being seized with a considerable degree of languor or sense of debility, together with a sluggishness in motion, and frequent yawning and stretching; the face and extremities at the same time become pale, and the skin over the whole surface of the body appears constricted; he then perceives a sensation of cold in his back, passing from thence over his whole frame; and, this sense of cold continuing to increase, tremors in the limbs and rigors of the body succeed. With these there is a loss of appetite, want of taste in the mouth, slight pains in the head, back, and loins, small and frequent respirations. The sense of cold and its effects, after a little time, become less violent, and are alternated with flushings; and at last, going off altogether, they are succeeded by great heat diffused generally over the whole body; the face looks flushed, the skin is dry, as likewise the tongue; universal restlessness prevails, with a violent pain in the head, oppression at the chest, sickness at the stomach, and an inclination to vomit. There is likewise a great thirst and costiveness, and the pulse is full and frequent, beating, perhaps, 90 or 100 strokes in a minute. When the symptoms run very high, and there is a considerable determination of blood to the head, a delirium will arise. In this fever, as well as most others, there is generally an increase of symptoms towards evening. As a fever once produced will go on, although its cause be entirely removed, and as the continued or fresh application of a cause of fever will neither increase that which is already produced, nor occasion a new one, there can be no certainty as to the duration of fever; and it is only by attending to certain appearances or changes which usually take place on the approach of a crisis, that we can form any opinion or decision. The symptoms pointing out the approach of a crisis, are, the pulse becoming soft, moderate, and near its natural speed; the tongue losing its fur, and becoming clean, with an abatement of thirst; the skin being covered with a gentle moisture, and feeling soft to the touch; the secretory organs performing their several offices; and the urine depositing flaky crystals of a dirty red colour, and becoming turbid on being allowed to stand any time. A simple continued fever terminates always by a regular crisis in the manner before mentioned, or, from the febrile matter falling on some particular parts, it excites inflammation, abscess, eruption, or destroys the patient. This disease being of a mixed nature, the treatment must be modified accordingly. In the beginning, the same plan is to be pursued as in synocha, except that we must be more sparing in the use of the lancet, in proportion as there is less power in the system to maintain the increased action of the heart and arteries; although, if any important part should be much

affected, we must act more vigorously, to prevent its disorganization, and the consequent destruction of life. When the character of the disease is changed, the means proper will be such as are pointed out under the head of *Typhus*.

Yellow Fever. This fever is one of specific character, and confined to situations in which great moisture is joined with great heat. It prevails in the West Indies, certain parts of Asia, South America, occasionally in the northern parts of North America, and pretty constantly in the southern. It is endemial in many portions of the globe, and especially in the tropical climates, and is occasionally epidemic in certain of the higher northern latitudes, as at Baltimore, Philadelphia, and New York. It is most common in seaports, and on large bodies of water, but is occasionally found in inland situations. It differs materially from the endemial remittent of tropical climates, and is, of course, not merely an exalted form of the bilious remittent of such places. It differs from the endemial remittent of the West Indies, in its attacking strangers to such climates only. The natives, and even such as have been born or lived long in similar situations, are altogether exempt from its attacks; and, should the stranger survive the dangers of an attack, he remains free, for the most part, subsequently, though not exempt from the endemial remittent of the place. This immunity, however, may be forfeited by the stranger living for a year or two in a northern latitude: should the stranger escape for a year or two, he becomes acclimated, and is no longer liable to be attacked by yellow fever. This disease has been looked upon, by some, as contagious; but this notion is now altogether abandoned by the greater part of the profession; and especially such as have had opportunities to observe its phenomena, and ascertain its habits for themselves. That it spreads rapidly sometimes, is admitted; but this is owing to the causes which make it an epidemic, and not to any contagious quality. This disease varies in its mode of attack, as well as in the violence of its symptoms. In almost every other febrile disease, as a general rule, the risk is in proportion to the violence of the symptoms; but the masked or insidious form of yellow fever, is most commonly the most difficult of management, and, consequently, the most dangerous. Hence the "walking cases" are almost sure to prove fatal. There are three modes of attack in yellow fever; and the phenomena of either may vary, as the remote cause may have been more or less active or concentrated. They may also be influenced by individual habits or constitutions, or by the force of the occasional or exciting cause; and hence we find it run its course rapidly sometimes; that is, in from two to five days, a part of the cases terminating in black vomit. In this form of the disorder, the symptoms are generally less ferocious, and less distinctly marked, though more certainly and speedily fatal; or it may run on to the fifth or to the seventh day; and though the sufferings are of a more acute kind, the danger is less, as more time is given for the application of remedies; or it may present, like a regularly formed remittent, regular exacerbations and remissions. If it assume this form, it may run on to the ninth or eleventh day. The first form observes no very regular period of attack, though the evening is the most common. The second generally takes place after noon; and the third, most frequently in the morning. The mode of attack, however, is pretty generally marked by the same train of symptoms, differing more in force than in character, if we except the first, which often has the peculiarity of betraying itself by scarcely any outward signs, except weakness, slight headache, or nausea. This

insidious character lulls the patient and his friends to a fatal security. The patient has been known to walk about until within a few minutes of dissolution. The unmasked or violent attack of yellow fever is, therefore, less to be dreaded than the seemingly mild form, as the derangement of the system is more palpable, though it is always highly dangerous. This disease differs in its attack from almost every other form of fever, as it is seldom ushered in by a well-defined chill, though the sensation of cold, and a reduced temperature of the skin, will remain sometimes a long time before reaction will take place. Much languor is always experienced; for the most part, intense headache, distress about the precordia, and the eyes are of a peculiar red. The heat of the skin is seldom great in the beginning, but soon increases in intensity, conveying to the mind the sensation of pungency. The pulse is rarely open and strong; indeed, it usually appears rather more feeble than natural to the inexperienced practitioner, which sometimes betrays him into dangerous errors. The pulse in this state is termed the *oppressed* or *depressed* pulse by authors; and, instead of requiring the aid of stimuli, as has been too often supposed, calls loudly for the proper use of the lancet. The face assumes a peculiar, or, rather, a specific flush, which is totally distinct from the redness of ordinary fever. This reddening gives a very marked character to the countenance, and can never be mistaken, by any eye experienced in this disease, for a symptom of common fever: on the contrary, it always denotes a high degree of yellow fever. The tongue is usually moist and clammy; but rarely dry, rough, or red, in the commencement, though these conditions of this organ are sure to follow in a short time. The skin is dry and harsh, for the most part; though occasionally it is found wet, with hot perspiration. This sweat is sometimes early in its appearance, and, at times extremely profuse in its quantity; but it neither abates the action of the heart and arteries, nor mitigates the local sufferings—as headache, pains in the limbs, or oppression in the lungs. It is therefore not critical, but, on the contrary, rather betrays malignancy. There is rarely so great an abatement of symptoms, at any period of the day, as to amount to a remission, though there frequently is an exacerbation that is every way alarming, from its intensity and this may happen twice, or even thrice, in the twenty-four hours. When this happens, the disease proceeds, with hasty strides, to its fatal termination, for should not remedies at this time, especially bleeding, abate the severity of the symptoms very soon after their application, more fatal symptoms quickly supervene; the eye becomes more sad, lividity is added to the deep-toned colour of the cheeks, the tenderness is much increased by pressure over the region of the stomach; nausea and vomiting commence or increase; the patient tosses himself into every position; delirium ensues; the urine becomes intense in colour, and small in quantity; the extremities lose their heat; the gums become swollen and livid; the tongue red, or brown, and dry; thirst insupportable; and the drinks rejected, perhaps, as fast as swallowed. After a continuance of these symptoms for a few hours, the system seems to make a compromise with the disease, and passively yields itself up to its ravages; for there is no diminution of the danger at this moment, though the system seems less morbidly excited; for if the suffering be less, danger is increased. Now the stomach gives way; the most tormenting nausea and thirst, with almost incessant vomitings, take place. The fluids discharged are for the most part, nothing but the drinks which the patient has swallowed; for these, even in the beginning, are rarely tinged with bile. But a threatening

change soon follows; the fluids become thicker, and somewhat ropy, and are now found to have mixed with them a flaky substance, of a dark colour. These flaky substances, there is reason to believe, are portions of the villous coat of the stomach, detached, and made to mix with the ejected fluids, by the effort of vomiting. The urine, at this time, is usually very scanty, or may be even suppressed; the bowels are tardy, or yield a blackish, tarry-looking substance, of considerable tenacity. The whole surface of the body, with the exception, perhaps, of the abdomen, is colder than natural; sometimes dry, sometimes moist; the hands and feet deathly cold, mottled with stagnating blood; the pulse feeble, fluttering, or extinct; or it may be slow, composed, and might, by the inexperienced, be even pronounced natural. Sleep forsakes the patient, or he dozes, to suffer more; his respiration is hurried, or preternaturally slow. His mind may wander, but delirium is not a very usual symptom in yellow fever. Indeed, the patients, in this disease, often possess the entire use of their faculties to the very last moment of life. Some die most tranquilly, declaring, with almost their latest breath, that nothing ailed them; while others die in great agony. When this happens, it is generally when delirium is present, and when the brain, from sympathy, seems to sustain the great force of attack. The patient may now become more tranquil, from an evident mitigation of all the severer symptoms; and his short-lived truce gives rise, in the inexperienced, to hopes that are never to be realized; for now the yellowness of the skin, which gives its name to the disease, begins to show itself, and becomes the harbinger of the dreaded and fatal "black vomit." This matter is thrown from the stomach, sometimes in incredible quantities, and of various shades of colour, from dark brown to the colour of coffee-grounds, or blackness. It is ejected with very little effort, and the patient, for the most part, denies the existence of pain. Black vomit, however, does not always precede death; it is occasionally absent. But when this is the case, its place is supplied by the eructation of prodigious quantities of gas, rapidly and constantly secreted by the stomach. The gums, and other portions of the body, at this time, yield considerable quantities of blood, which renders the aspect of the patient truly hideous. The teeth become incrustated with sordes; the tongue black and dry; the pulse preternaturally slow and feeble; or it may be, at the wrist, extinct; the skin and extremities cold; coma, or low, muttering delirium, takes place; sometimes convulsions; then death. The prognosis in this disease must always be regarded, even in its commencement, as unfavourable, though this fever is not inevitably fatal. If the disease have commenced in an open, undisguised form, the chance is increased; but if it attack insidiously, the danger is almost in proportion to the absence of prominent or decided symptoms. If the disease assume, or can be made to put on, a regular form, that is, have its remissions and exacerbations in pretty regular order, though the symptoms run high, there appears a better chance to increase the one and moderate the other. But, on the other hand, if the disease discover no tendency to regular remission, or if reaction be but feeble and transitory, the risk is greatly augmented. If the patient sigh deeply, immediately after waking, and before he have recovered the powers of speech, the presage is bad; or if he complain of much soreness and pain, without the part having any morbid appearance, it is equally unfavourable. Those whose arms become rigid seldom get well; and those who have an entire oppression of urine never recover. Black vomit is

always a very unfavourable symptom, especially when attended by hiccup, but is not necessarily fatal, particularly in young people. The "puking of wind," as it is called, is perhaps as deadly a symptom as black vomit. On the other hand, should there be a general abatement of the symptoms, especially of headache, with a softened skin; a general and equally distributed warmth; less jactitation; diminution of thirst, without nausea or vomiting, and the tongue beginning to clean; less tenderness in the epigastrium; bilious fecal discharges; a free flow of lighter coloured urine (and particularly if it deposit a lateritious sediment); a moderate, and generally diffused perspiration, after the abatement of the exacerbation,—the disease may be considered as less desperate, and as tending to a healthy solution. The pulse, in this disease, betrays, from beginning to end, less concern, if we may so term it, than in almost any other with which we are acquainted. Indeed, but little dependence is to be put upon it, if it alone be taken as a guide; for it has been known to resemble a pulse in health, when dissolution has been near at hand; while, again, it has been known to cease, yet the patient recover.—*Treatment.* The treatment of this disease is very far from being as efficacious or certain as its danger requires; yet it is not so fatal, under favourable circumstances, as might, at first sight, be supposed. In tropical climates, it rages among strangers almost exclusively; and these, for the most part, are of a description unable to procure the best means of mitigating suffering or averting danger. In northerly situations, where the disease is, as it were, accidental, the mortality, under the best circumstances, is considerably less, though still very much too great. We may attribute some portion of the mortality to the discrepancy in the views that have been taken of the habits and nature of the disease. Some suppose it contagious in a high degree; this infallibly increases the mortality, by causing the necessary means to be withheld from the suffering, under the apprehension of personal danger; while others look upon its nature to be the same as that of typhus, and fatally adopt a treatment conformable to such a view; and, consequently, thousands are sacrificed to a hypothesis. The opinion is now, however, daily gaining ground, that yellow fever is essentially an inflammatory disease, and one which requires a vigorous and strictly antiphlogistic plan of treatment. But neither a correct pathology, nor the best concerted means, will avail, if the proper time for their application be lost. To be successful in the treatment of yellow fever, no time must be spent in temporizing. Yellow fever, as has just been stated, must, agreeably to the best authorities, be looked upon as an *exquisite gastritis*; a fact that should never be lost sight of: it is for the relief of this condition of the stomach, almost exclusively, that remedies are to be sought. It has been mentioned, that the pulse, from its simulated weakness, and the feebleness of reaction in its more dangerous forms, has misled the practitioner to the fatal use of stimulants. It is the depressed, or oppressed pulse, so called—a pulse that always acquires vigour by the abstraction of blood. The quantity to be taken at any given time, cannot well be defined; for this state of the arterial system may require the loss of a large quantity of blood to relieve it, or the pulse may become open and free by the abstraction of only a few ounces. The management of the bleeding must, therefore, be left to the discretion of the medical attendant. If the pulse rise, as it is wont to do under this condition of the system, by the loss of blood, its abstraction should be continued until it become soft under the finger. Nor can any rule be laid down for

the repetition of the bleeding, but one—namely, that recourse must be had to it, whenever the system reacts with force, by which every symptom becomes aggravated, even if this occur several times in the twenty-four hours. It is mainly owing to not taking down the excess of action of the heart and arteries when it occurs, that fatal disorganization takes place so frequently; therefore, every paroxysm should be carefully watched, that no one may pass without having the force of the pulse abated, by the loss of blood; for it may be confidently said, that the system never reacts forcibly in this disease, when it will not bear the abstraction of blood, either generally or topically. If topical bleeding be resorted to, it must be from the epigastrium; therefore, either leeching or cupping must be the mode of abstraction. This state of the system is rarely found, however, after the expiration of eight-and-forty hours, unless the disease have been vigorously treated by previous blood-letting. Should this period have been lost, bleeding from the general system can rarely be successful; topical bleeding alone now promises relief; and this may be tried at almost any period of the disease, if the sensibility of the epigastrium remain active. As regards the feebleness of reaction, as just stated, we must not be mistaken in its cause, in the beginning of this disease; as it is almost sure to depend upon the *depressed state of the pulse*. For after blood has been taken in an appropriate quantity, the heat of the skin and activity of the pulse will both increase; but if stimulants be used, both will be diminished. But it is always proper, when reaction is feeble, the skin cooler than natural, and the extremities perhaps cold, but certainly preternaturally cool, to use *external stimuli* with a view of aiding the powers of the system in their efforts to produce a warmth upon the surface. Bottles or jugs of hot water, heated bricks, sinapisms, Cayenne pepper, &c., should be applied to the feet and legs, and used until a proper warmth be restored. The bowels should be freely opened, but not violently purged: for this purpose, eight or ten grains of calomel should be given immediately after bleeding, followed, in three hours, by a dose of castor oil, if it do not operate previously to the expiration of this time. During the whole disease, the bowels should be kept open by the milder purgatives, but especially by oil, or by injections; for purging is uniformly hurtful, unless it be on the decline of the disease, and after the liver has begun to secrete large quantities of bile, which requires to be carried off. The mildest drinks should be given during the whole attempt at cure, and these cold, almost always; that is, unless cold drinks be less acceptable to the stomach than tepid, which is sometimes the case. Ice swallowed frequently, in small portions at a time, is both acceptable and useful, and should never be withheld when it can be procured. All the drinks may be rendered cold by this substance; and these should consist of gum-arabic water, barley water, linseed tea, slippery-elm bark tea, &c. Drinks should always be given in small quantities at a time, lest the stomach reject them. If there be much sickness of stomach, attended by much tenderness upon pressure, the epigastrium should be leeches or cupped; and this may be followed by a blister if the nausea or vomiting continue. Should the headache be great after due depletion from the arm, the temporal artery may be opened, or leeches or cups be applied to the temples, behind the ears, and to the back of the neck. Under these circumstances, if the feet be cool or cold, they should be placed in hot water, with which is mingled a quantity of the flour of mustard, and the feet suffered to remain in it for fifteen or twenty minutes. This may be repeated, *pro re nata*. Fresh air should be admitted freely into the room; the bedclothes and

body linen changed as often as practicable; light excluded, and noise prohibited. If there be much determination to the head, cold applications should be made to it, after reducing the quantity of hair should this be thick. Partial heat may be reduced by sponging. Doctor Jackson, in his treatise on fever, recommends large bleedings, in the first eight hours of attack, even *ad deliquium animi*. This, in robust constitutions, and when the disease commences with high excitement, has been found very beneficial; but it rarely can be proper where the disease is of a highly malignant character, as is almost always the case where much indirect debility suddenly shows itself, and, consequently, where the powers of the system are inadequate to produce a quick and sufficiently powerful reaction. In this case, however, stimulation would be more quickly and certainly fatal than bleeding, even indiscreetly urged; for, by the former, you cannot fail to increase the inflammation of the mucous membrane of the stomach, which will necessarily augment the danger; while the latter only diminishes the power of reaction; therefore, by the first practice, the cause of the disease is increased by the second, the effects of this cause are only augmented. For the first, there may be no adequate remedy; for the second, a remedy may be found; hence, when, in the early stage of yellow fever, recourse is had to internal stimulants, the case is almost uniformly fatal; whereas, bleeding, even when judiciously employed, only depresses the system, which *may recover* by the aid of external stimuli; and the case is not as desperate as when stimuli have been thrown into the stomach during the state of active inflammation. In the case, however, under consideration, it is only an abuse of the proper remedy; for, if the abstraction of blood be judiciously made in this state of the system, the system, instead of becoming prostrate, will react promptly; for the pulse, in the beginning of this disease, is in a state of depression as has already been explained, and not of *absolute weakness*; for there have been instances of recovery as already stated, after spontaneous hæmorrhage from various parts of the body, but where the abstraction of blood from the general system by the lancet would certainly have proved fatal. Does not this flow of blood intimate to us the propriety of imitating it, by the application of a leech or two to various parts of the body? One thing is very certain in the generality of cases of yellow fever, that when bleeding, either general or topical, fails to afford relief, stimulants never succeed: therefore when the time is past for both general and topical bleeding, it is in vain to attempt the relief of the patient by the exhibition of stimulants. By doing little or nothing at this time, the recuperative powers of the system, if left to themselves, may restore the patient; for all that art can do, at this time, is not to thwart or prevent their efforts. We must, therefore, be rather the spectators of the conflict of the system, than active agents against the disease; taking care, however, constantly to remove, as much as it may be in our power, any obstacle that may appear to interfere with the general progress to recovery, as an irregular condition of the bowels, of the stomach, of the state of air, &c. &c. Nausea and vomiting are troublesome conditions of the stomach, and its relief should be attempted by leeching, cupping, and blistering over its region, by Seltzer water, the effervescing draught, lime water and milk, &c., but never or but very rarely in the beginning of the disease, by stimulants: after decided marks of debility, clove tea, mint tea, or strong coffee, with mustard to the epigastrium, may be tried. When black vomit has come on, the spirit of turpentine, with the oil of cinnamon, in thirty drop doses has been certainly of

temporary use, and occasionally of permanent benefit. Thirst may be abated by small quantities of very cold water, or by frequently swallowing small portions of ice, as directed above: sometimes the *feeling* of the stomach is in favour of warm drinks; when this is the case, the craving or instinct should be indulged. Hiccough is sometimes extremely distressing in this complaint. Camphor, in doses of from five to ten grains, will sometimes relieve it. Should it offend the stomach, it may be given very advantageously in a gill of rich flaxseed tea, and thin starch, or mucilage of gum-arabic, as an enema. The utmost attention must be constantly paid to the patient by the nurse: he should have the luxury of fresh air constantly, and the frequent renewal of clean, fresh body linen and bedclothes.

FEVRE, TANNEGUI LE, or TANAQUILLUS FABER; a classical scholar of great eminence in the seventeenth century. He was born at Caen, in Normandy, in 1615, and was educated at the college of La Flèche, at Paris, where he distinguished himself by his literary acquirements. Cardinal Richelieu procured him a pension of 2000 livres, with the office of inspector of works printed at the Louvre. After the death of that minister, being neglected by his successor, cardinal Mazarin, he gave up his employment, and went to Langres, where he embraced the Protestant profession. He subsequently removed to Saumur, and was made professor of classical literature. After residing there some years, he was invited, by the prince palatine, to Heidelberg, and was about to quit Saumur for that place, when he died, in 1672. His works, which are numerous, consist of commentaries on several of the Greek and Latin classics; translations from Xenophon, Plato, Diogenes Laertius, Plutarch, Lucian, &c.; letters; lives of the Greek poets, in French; and Greek and Latin poems. Voltaire, in his *Siècle de Louis XIV.*, expresses doubts of the sincerity of Le Févre in his change of religion, and says that he despised those of his sect, and lived among them more as a philosopher than a Huguenot. He had two daughters, one of whom was the celebrated madame Dacier, and the other was married to Paul Bauldry, professor of ecclesiastical history at Utrecht. His son, after having been a Calvinist minister, returned to the religion of his ancestors.

FEYERABEND; a family of Frankfort on the Maine, celebrated, in the sixteenth century, on account of the number of artists and literary men who derived their origin from it. The eldest that is known, John Feyerabend, was an engraver on wood. He has marked his productions with the initials of his name. A New Testament, in the Latin language, is adorned with his cuts.—Sigismund Feyerabend, a draughtsman, engraver on wood, and printer, published several excellent editions of ancient writers, among which was one of Livy, folio, in 1568, with neat copper-plates by Josse Amman. Papillon mentions a collection of plates for the Bible, quarto, in 1569, several of which are marked with the initials of Sigismund Feyerabend. He also speaks of *Icones Novi Testamenti Arte et Industria singulari expressæ* (1571, 4to) in which copper-plate engravings, by this artist, occur. Sigismund Feyerabend published the following collections: 1. *Annales seu Historia Rerum Belgicarum a diversis Auctoribus ad hæc usque nostra Tempora conscriptæ et deductæ* (Frankf., 1560, 2 vols., folio); 2. *Monumenta illustrium Conditione et Doctrina Virorum, Figuris artificiosissimis expressa* (Frankf., 1585, folio). He also published, at his own expense, the *Gynæceum*, a collection of female costumes.—Charles Sigismund Feyerabend succeeded his father in the same business in 1580. He published some collections of copper-plate engravings.

FEYJOO Y MONTENEGRO, BENEDICT JEROME; a Spanish Benedictine monk and writer of the last century. He published his speculations on a vast variety of topics, in the form of essays designed for popular use, whence he has been sometimes styled the *Spanish Addison*. His *Teatro Critico Universal* (14 vols, 4to, Madrid, 1733), and his *Cartas eruditas y curiosas*, are both works of merit, and are devoted to a common object—the refutation of vulgar errors, and the abolition of prejudices. Divinity, law, medicine, and philosophy, successively occupy his attention; and some of the superstitions of his church and nation are animadverted on with freedom and good sense. He died in 1765. A new edition of his works was published in 1778, 15 vols, 4to; and a selection from his essays and discourses appeared in an English translation, 1780, 4 vols., 8vo.

FEZ (part of ancient Mauritania); a country in Africa, formerly a kingdom of great extent, now a province of Morocco; bounded north by the straits of Gibraltar and the Mediterranean, east by Algiers, south by Morocco, and west by the Atlantic. It is divided into nine provinces or districts—Shavoya, Temsena, Fez, Beni-hassen, Garb, Shaus, Rif, Tedla and Garet; the whole united to the empire of Morocco. The principal towns are, Fez, the capital, Mequinez, Melilla, Ceuta, Tangier, Larache, Mamora and Sallee. Square miles, about 89,000. The soil is fertile, producing, in the greatest abundance, corn, fruit, flax, salt, gum, wax, &c. Oranges, lemons, figs and olives everywhere abound. The Moors, however, are but bad farmers, and cultivate only in proportion to their wants, so that two-thirds of the country lie waste.

FEZ, or FAS; a city of Morocco, capital of the country of Fez; 130 miles south Gibraltar, 245 N. N. E. Morocco; lon. 5° 20' W.; lat. 33° 50' N.; population, according to Ali Bey, about 100,000; Jews, 2000; population, according to the improbable statement of Jackson, 380,000. It was founded in 808, by Edris II., and soon became a large city, and the capital of the western Mohammedan states. According to Leo Africanus, it contained, in the twelfth century, 700 temples and mosques, of which fifty were magnificent, and adorned with marble pillars. It was esteemed a sacred city, and when the road to Mecca was shut up, in the fourth century of the Hegira, the western Mohammedans made pilgrimages to Fez, and the eastern to Jerusalem. It was also famous as a school of learning, at a time when knowledge was almost exclusively possessed by the Saracens. Its numerous schools of philosophy, physic and astronomy were not only resorted to from all the Mohammedan kingdoms of Spain and Africa, but were attended by Christians. The situation of Fez is singular. It lies in a valley, which is formed, by surrounding hills, into a sort of funnel, the higher parts of which are covered with trees, orange groves and orchards. A river winds through the valley, refreshing the fields, supplying the city with water, and turning numerous mills. The gardens around it form a delightful amphitheatre. On a height, above the rest of the city, stands New Fez, founded in the thirteenth century, a well-built town, inhabited chiefly by Jews. The principal edifice is the mosque of Carubin, described by Leo as one mile and a half in circumference; but Europeans are not permitted to see it. Fez contains 200 caravansaries or inns, two or three stories high. The hospitals, once numerous, are, in a great measure, fallen to decay. The shops make a handsome appearance, and the markets are immensely crowded. Here are still some remains of those learned institutions for which the city was once distinguished. Fez is said now to exhibit a singular mixture of splendour and ruin. In 1799,

65,000 of the inhabitants are said to have been carried off by the plague.

FEZA. See Pasa.

FEZZAN (anciently, *Phazania*); a country in Africa, situated to the S. of Tripoli, E. of the Great Desert, and sixty days' journey W. of Cairo. Hornemann, the German traveller, informs us, that the greatest length of the cultivated part of this country is about 300 English miles, from N. to S., and the greatest width, 200 miles, from E. to W.; but the mountainous region of Harutsch to the E., and other deserts to the S. and W., are reckoned within this territory. The borderers on the N. are Arabs, nominally dependent on Tripoli. Fezzan is bounded E. by the Harutsch and line of deserts, S. and S. E. by the country of the Tibboos, S. W. by that of the nomadic Tuaricks; W. are Arabs. The kingdom contains 101 towns and villages, of which Mourzouk is the capital. The climate is at no season temperate or agreeable. During the summer, the heat is intense, and, when the wind blows from the south, is scarcely supportable, even by the natives. The soil is light and sandy, and produces maize, barley, pumpions, carrots, cucumbers, onions, garlic, and some wheat. The most common trees are the date, white thorn, and the talhh. Here is little or no rain, but the vegetation is luxuriant, from the number of subterranean springs. The population of Fezzan is loosely estimated, from 75 to 150,000, all of whom, without exception, profess the Mohammedan religion.

FIBRIN; a peculiar organic compound, found both in vegetables and animals. It is a soft solid, of a greasy appearance, insoluble in water, which softens in the air, becoming viscid, brown, and semi-transparent. On hot coals it melts, throws out greasy drops, crackles, and evolves the smoke and odour of roasting meat. It is procured, in its most characteristic state, from animal matter. It exists in chyle; it enters into the composition of blood; and it forms the chief part of muscular flesh; and hence it must be regarded as the most abundant constituent of the soft solids of animals. According to the analysis of MM. Gay-Lussac and Thenard, it is composed of carbon 53.36, nitrogen 19.934, oxygen 19.685, and hydrogen 7.021.

FIBROLITE; a mineral first found in the Carnatic, where it occurred in fibres, traversed obliquely by cracks, as a component of the granite, which contains the corundum. It has since been found in the U. States of America, in prisms of considerable size, with rhombic balls, whose angles are about 100° and 80°. It is harder than quartz, of a grayish-white colour, and a specific gravity of 3.214. It is infusible before the blow-pipe; Chenevix found the specimens from the Carnatic to consist of silica 38, alumine 58.25, and oxide of iron 0.75.

FICHTE, JOHN GOTTLIEB, was born at Rammenau, near Bischofswerda, in Upper Lusatia, in 1762, and owed his early instruction to the assistance of a Mr Von Miltitz. At a later period, he received a classical education at the famous *Schulpforte*, one of the Saxon royal schools. He then studied at Jena, Leipsic, and Wittenberg, passed several years in Switzerland and in Prussia Proper, and in Königsberg enjoyed the society of the great Kant. His *Versuch einer Kritik aller Offenbarung* (Essay towards a Criticism of all Revelation), Königsberg, 1792, attracted general attention, and procured him the professorship of philosophy in Jena, in 1793. In 1800, he was one of the most prominent professors of that university during its most brilliant period. Here he published, under the name of *Wissenschaftslehre* (Theory of Science), a philosophical system, which he founded at first on the system of Kant, from whom, however, he gradually

deviated. On account of an article *Ueber den Grund unseres Glaubens an eine Göttliche Weltregierung* (On the Reasons of our Belief in the divine Government of the Universe), which appeared in his periodical *Philosophisches Journal* (vol. 8, No. 1), he fell under the suspicion of sceptical views. This gave rise to an inquiry, and Fichte resigned his professorship. He accordingly received his dismissal, and went to Prussia, where he lived for some time in private at Berlin. In 1805, he was appointed professor of philosophy at Erlangen, with permission to spend the winter at Berlin. During the war between Prussia and France, he went to Königsberg, where he delivered lectures for a short time, returned to Berlin after the peace of Tilsit, and, in 1809, on the establishment of the university in that city, was appointed professor of philosophy. Fichte's philosophy, though there are two distinct periods to be distinguished in it, is a consistent idealism, representing all that the individual perceives without himself, or, rather, all that is distinguished from the individual, the *ego*, as a creation of this *I* or *ego*. It would be impossible to give our readers, in so short a space as this work will allow, an intelligible view of his bold system. We must refer the student to his *Ueber den Begriff der Wissenschaftslehre* (Jena, 1794); *Die Wissenschaftslehre in ihrem allgemeinen Umrisse* (Berlin, 1810); and the *Anweisung zum seligen Leben* (Berlin, 1806). His practical is purer than his theoretical system. His idealism led him to represent the life of the mind as the only real life, and everything else as a mere delusion, and to believe in an almost absolute omnipotence of the will. To excite his pupils to the highest virtue and self-denial, was his constant aim as a teacher, and his influence was great, not merely through his power of expression, and the originality of his ideas, but through the conviction with which he inspired his hearers of his full belief in, and entire devotion to, his principles. His heart was open to every noble and good feeling. Unshaken integrity, constant friendship, devoted love of what he conceived to be true and good, were his characteristic traits. His own excellence of life sometimes made him not very indulgent towards others; and some of his doctrines, which every one would acknowledge to be good in the main, he carried too far; as, for instance, his views on national education: he wishes every child to be taken from its mother immediately after its birth, and educated at the public expense. When Germany was bleeding under the wounds of war, he, like his countrymen in general, considered Napoleon as the source of the whole distress of his country. Circumstances, in fact, hardly allowed a German to take a different view of the subject, and his ardour against the French was in proportion to the powers of his mind. In 1808, he delivered *Reden an die Deutsche Nation* (Addresses to the German Nation), published at Berlin in 1808, with genuine courage; and of which we may mention that, though they were directed against the French, the Prussian government prohibited their republication in 1819. Fichte's wife was a Swiss. At the time of the battles near Berlin, in 1813, when the city was full of Prussian and French wounded soldiers, females of all classes served in the hospitals, the male inhabitants being all engaged in the war. Fichte's wife, who was among the ladies thus employed, was attacked by the jail fever, then raging in the city. She recovered, but her husband, who had paid unwearied attention to her, was, in his turn, attacked by the disease, and died, in consequence, in January, 1814. He left a son, who has also devoted himself to philosophy.

FICHTELBERG. There are two mountains of