

ON THE REDUCTION OF FRACTURES AND LUXATIONS.

MOCHLICUS, SEU VECTIARIUS, . . .	FÆSIUS, Treat. iv. p. 841.
MOCHLICUS,	HALLER, i. p. 408.
LE MOCHLIQUE,	GARDEIL, ii. p. 5.

HALLER calls this a brief, yet not inelegant compound of the two preceding books; or, as Gardeil states it, a recapitulation of those treatises, of a summary character, for such as would not charge their memory with all that they contain. Such being the case, a few outlines will suffice.

Μοχλικα, is defined to be “ossis aut ossium a loco qui præter-natūram sit, ad naturalem reductio.” It is derived from *μοχλος*, vectis ; or the apparatus, &c., by which the reduction was effected.

It begins with a brief description of most of the bones. This is followed by the statement of the fractures and luxations of the different bones, nearly in the order as we find them in the preceding books; terminating with some general remarks on reduction, on some of the machinery employed, and on some incidental particulars, in a greater or less degree connected with the subject.

ON ULCERS.

LIBER DE ULCERIBUS,	FÆSIUS, Treat. iv. p. 869.
DE ULCERIBUS LIBER,	HALLER, iv. p. 101.
TRAITÉ DES PLAIES,	GARDEIL, iv. p. 332.

FROM the number and variety of remedies herein mentioned, this would appear not to be one of the genuine productions of Hippocrates. It does not add the doses, as in the books *De Muliebribus*. Sundry admonitions are given against the abuse of oleaginous and relaxing applications about the ulcerated parts. The remedies themselves are sufficiently adapted to the nature of things. Arsenic, black hellebore, and cantharides are amongst them. Some plants are briefly described.—This book, according to Gardeil, is often quoted in surgical books.

Some general remarks commence this book, which are of much importance as to certain applications, rest, &c. A principal intention is to prevent inflammation, and promote suppuration; to permit fresh wounds to bleed freely, and avoid greasy applications, except in certain particular cases. Purging; bandaging, when proper; seasons, which are best for ulcers; of measures for promoting cicatrization; treatment of round and deep ulcers, and of ulcers accompanied by erysipelas. Signs of suppuration, and of difficult cicatrization. Some recommendations to accelerate it.

A variety of formulæ, simple and compound, follows, for remedial applications, as cataplasms, &c. In one of these, we find the juice of the stramonium, or solanum, where erysipelas is apprehended. Ærugo, mixed with various ingredients, as sweet wine, honey, resin, myrrh, and nitre (*νιτρον*), made into a kind of ointment, for dressing ulcers when they do not discharge adequately,—and spoken of as especially useful in those of the prepuce, head, and ears;—if correctly made, I think it must be an excellent ointment,

and well adapted for cleansing or deterging wounds and ulcers: it is stated as equally good in recent and in inveterate ulcers. Many other active ointments are mentioned, in some of which are to be found lead, tutty, alum, copper, arsenic, cantharides, &c.; some used in form of a lotion. Some observations are made on swellings of the feet, on varicose veins, &c.; their treatment, and a few remarks on the use of cups.

ON FISTULÆ.

DE FISTULIS,	FŒSIUS, Treat. vi. p. 883.
DE FISTULIS,	HALLER, iv. p. 115.
TRAITÉ DES FISTULES,	GARDEIL, iv. p. 350.

Fœsius regards this as a genuine work of Hippocrates,—to which Haller does not subscribe.—Description of fistula in ano, and its cure;—one mode consists of a twisted ligature, composed of fine flax entwined around *horse hair*^a (*certainly an animal ligature*), and employed as at present. Another mode is that of incision. Astringents are praised in cases of prolapsus ani. It is remarked, that in going to stool, the *prolapsus is infinitely less, if the legs are extended.*^b Its cause is referred to pituita and bile, as stated also in the book “De Mulierum Morbis.” An abundant display of remedies follows. The book on Hemorrhoids seems closely connected with this.—HALLER.

How fistula in ano is produced; of its treatment by various pharmaceutic preparations according to the nature of the case; ligature of flax, twisted around horse hair! incising the fistula; injections; attentions requisite; prolapsus, how to be treated; precautions in going to stool; various remedies noticed.—GARDEIL.

^a Pilum equinum.

^b “Dum autem ventrem exonerat, crura extendat; sic enim minime sedes exciderit.—HAL. iv. 120.

ON THE HEMORRHOIDS OR PILES.

DE HEMORRHOIDIBUS, ^a	FŒSIUS, Treat. vii. p. 891.
DE HEMORRHOIDIBUS,	HALLER, iv. p. 122.
TRAITÉ DES HÉMORROÏDES,	GARDEIL, iv. p. 358.

ALTHOUGH, says Haller, this is a spurious book, it is by no means a bad one. It cannot be a writing from the author of the Aphorisms, since there, one of the tumours is directed to be kept open; whilst here, the whole are cured. Pituita and bile are the foundation of the author's theory. Various means of cure recommended; acrid applications, and even the cautery.

Of the formation of hemorrhoids,^b and of their treatment by incision, ligature, cautery; how to distinguish hemorrhoidal tumours. A styptic composed of urine, mixed with calcined copper filings in a copper vessel, and exposed to the sun, frequently stirring it, until dry, then powder it finely, and sprinkle slightly on each incision. Mulberry tubercles, external and internal; treatment; speculum ani (*κατωπτηρός*);—here, reference is made (in order to explain why so little discharge of blood follows the falling off of the tumours) to amputation of the legs or arms at the joints, when compared with the operation either above or below; the particular analogy would be difficult to apprehend, even with the accompanying explanation! Cauterization seems to have been employed *internally*, through the medium of a canula of some kind introduced. The tumours, when burning or cutting were deemed improper, were sometimes made to extrude, and were then sprinkled with a mixture of myrrh, galls, and alum, calcined. Some other analogous preparations are given.

^a "Hoc est, de Venis in ano sanguinem fundere solitis."—Fœsius.

^b See different meanings among the ancients, of this term; it was used often to imply hemorrhages of different kinds.

ON WOUNDS OF THE HEAD.

DE CAPITIS VULNERIBUS,	FESIUS, Treat. viii. p. 895.
DE CAPITIS VULNERIBUS,	HALLER, i. p. 430.
TRAITÉ DES PLAIES DE LA TÊTE, . . .	GARDEIL, ii. p. 38.

THIS, says Haller, is one of the genuine writings of Hippocrates, and, with his other surgical works, amongst his best. His treatises on practice and on semeiotics, have many parts that require explanation and restriction. Here, all are clear and true; you perceive at once that the author is conscious of this being the case. Some anatomical observations precede, and also somewhat paradoxical in relation to the sutures. In one part we find him noticing his having been deceived by them, and taking them for fissures; thus having a manifest connexion with the case of Autonomus in the fifth Epidemics.—Affections of the head induce bad symptoms on the opposite side. The trepan noticed, and directions for.

This treatise commences with general remarks on the sutures and on the bones of the cranium. The danger of wounds of the head depends very greatly on the bones concerned therein. Of the various ways in which the bones of the head are affected by wounds. Contusion with fissure. Simple contusion. Depression, &c. Contre-coup. Cases in which perforation is required. Regard to be had in the treatment to the mode in which the blow has been given, as also to the nature of the body inflicting it. Difficulties arising from the sutures, in the diagnostics of the real state of the wound, and of its treatment. Lotions and bandages prohibited in wounds of the head. Advantages of incising the scalp, especially when the bone is denuded. Certain reservations as to this, and remarks. Of the time for perforating the bone, and cautions thereon. Indications to be derived from the state of the surrounding flesh. Requisites for a good exfoliation in certain cases. Cautions as to the diagnosis and prognosis. Prognosis in desperate cases. Necessity of hastening the operation in certain cases. Mode of trepanning; hazard of wounding the meninges; precautions in and during the operation.

ON THE EXTRACTION OF THE DEAD FŒTUS.

DE FŒTUS IN UTERO MORTUI EXSECTIONE, . . .	FŒSIUS, Treat. ix. p. 914.
LIBER DE EXSECTIONE FŒTUS,	HALLER, iv. p. 245.
TRAITÉ DE L'EXTRACTION DU FŒTUS MORT,	GARDEIL, iv. p. 363.

THIS short treatise, says Haller, instructs us how to bring away the fœtus by piecemeal, and how to crush the head. It details moreover, a most extraordinary concussion of the parturient female, in order that the fœtus may obtain more room for its exit. Some directions are given in relation to the replacing of the prolapsed uterus.

Gardeil properly warns us against attributing to Hippocrates all of the doctrine in this short tract; which will, says he, shock the accoucheurs of our time in more parts than one,—and which we cannot accredit to him, after having perused the treatises already given.

I am about to notice the case, (says the author, whoever he may be,) in which the woman cannot be delivered naturally, and which requires the fœtus to be extracted by piecemeal;—beginning by veiling from her the sight of such a frightful operation, &c. The operation is then pretty amply detailed; and other cases of difficult delivery are mentioned. Then succeeds the plan adverted to, of shaking the female, at least ten times,—and if not successful, she is to be turned *head downwards*, her feet in the air, and to be well shaken by the shoulders, so as to afford the chance of the fœtus obtaining a more favourable position for his exit!—Of side pre-

* As this is a singular obstetrical operation of the olden times, we give it in detail from Gardcil, vol. iv. p. 365. It will be a *bonne bouche* for the accoucheurs of the present age.

“ Voici comment on donne les secousses. On met un drap de lit sous la femme, qui s'y étend dessus. On met un autre sur les cuisses, pour couvrir ses parties. On roule ces draps autour des cuisses et des bras. Puis deux femmes vigoureuses prendront celle qui est en travail, une de chaque côté par les bras, et deux autres par les cuisses. Elles la saccadent ainsi, (to jerk or shake,) dix fois au moins, en la tenant fortement.

sentation; of the cord around the neck; the head locked, and hand projecting, are adverted to; and the subject of prolapsed uterus is then noticed. If the subject is old, it is best to do nothing; if young, the skin of the orifice and neck of the uterus is to be slightly incised, and that in both directions, rubbing it with a soft towel to excite inflammation and empty the vessels. Some unctious are next applied, or astringent lotions; after its reduction, tents of sponge with wine are introduced into the vagina, and a recumbent position, with the legs crossed, is maintained.

Ensuite, si cela n'a pas suffi, elles la mettent *la tête en bas et les jambes en haut*, la tenant par les cuisses, et la secouant vers les épaules, cherchant à faire passer ainsi le fœtus dans une place vide, pour qu'il prenne une situation plus favorable à sa sortie. Quand on ne voudra point avoir recours à ce moyen, on donnera du castor cuit dans du vin de Chio."

ON DISSECTIONS.

LIBER DE CORPORUM RESECTIONE,	FŒSIUS, Treat. x. p. 915.
LIBER DE CORPORUM RESECTIONE,	HALLER, ii. p. 1.
TRAITÉ DE LA DISSECTION DES CORPS, .	GARDEIL, iv. p. 366.

A CONCISE treatise, says Haller, giving some account of the lungs, heart, liver, and other abdominal viscera; correct, and derived from human dissection; [which I much doubt.—ED.] It can be looked upon, says Gardeil, merely as a slight sketch of the anatomical knowledge of the period; and it speaks only of the most essential organs of the trunk of the body. Somewhat is said as to the names and etymology of the œsophagus, &c. This terminates the sixth section.

SECTION VII.^a

THE EPIDEMICS OF HIPPOCRATES.

DE MORBIS VULGARIBUS,	FŒSIUS, p. 938.
DE MORBIS POPULARIBUS,	HALLER, i. p. 110.
DES ÉPIDÉMIES,	GARDEIL, ii. p. 57.

THE prefatory remarks of Fœsius to the seven books of Epidemics are deserving of attention, as explanatory of the genuine and other books under this general title.

"There are," says he, "seven books of Epidemics, in the collection we possess under the name of the Works of Hippocrates; but they are not generally believed to be all derived from the same source. The *first* and *third* books are alone regarded as incontestably his. The remainder are greatly inferior to them, even the *fifth* and the *seventh*, though all are valuable. The order that characterizes the *first* and *third*, (which last is manifestly a continuation of the *first*,) is not apparent in any of the other five, yet each contains much excellent matter. In the *fifth* and *seventh* are numerous surgical observations."

I had prepared an outline of the whole of these books, but as they are considered among the principal of the writings of Hippocrates, I judged that the medical public would be better pleased to see them *in extenso*; and as Clifton has given a translation of the whole, I have concluded to make use of it. That gentleman published the first edition of the work in 1734. A second edition appeared in 1752, which is the one here chosen; whether improved, or modified from the former, I know not. I cannot say his translation conforms in every part to the ideas I formed, from perusing the Latin translations of Fœsius and Haller, although it affords generally a sufficient-

^a This Section consists of the seven books of Epidemics, and the Book of Aphorisms, and is entitled by Fœsius τα επιμικτα—hoc est, permixtam omnium medicinae partium tractationem.

ly accurate view of the work. He has not divided his translation into regular books, but gives it as one continuous text, under the general head of "Hippocrates on Epidemical Diseases." In order to enable the reader to refer to each respective book, either in Fæsius or Haller, I have therefore kept up that division, though otherwise of no importance; and have also to each book given the short *prefatory* remarks of Haller, and sometimes of Gardeil, as they generally afford a concise view of the purport of the treatise. I may add that I have omitted a number of notes that are added by Clifton, which would too much swell these pages, although many are instructive, and aid in understanding the text itself.—ED.

THE FIRST BOOK OF EPIDEMICS.

THIS book, says Haller, is one of the principal works of Hippocrates, and is by all, attributed to him. It is a production worthy of him, although consisting chiefly of a history of diseases, unmixed with medicine. Its value consists in his description of them, and his notice of crises. It contains, under three sections, the statement of the seasons for three years, as occurring at Thasus, followed by the rise of an epidemic state of disease of two years' continuance; in one of these recurrent fevers predominated, and ardent fevers in the other. To these last belong a large proportion of fourteen patients here recorded, and with mostly a fatal termination. One case is particularly interesting, of a parturient female who recovered after a very prolonged disease.—HALLER.

SECTION I. YEAR I.

In Thasus in the autumn, about the equinox, and under the Pleiades, the rains were great, continual, and soft, as when the wind is southerly. The winter mild, with southerly winds, and very little northerly. With these were greater droughts than ordinary, so that the whole winter was, in effect, like the spring. The spring was also affected with southerly winds, but yet was cold, and a little wet. The summer was for the most part cloudy and dry. The Etesiae blew but little, faintly, and irregularly.

The whole year being thus affected with southerly winds, and greater droughts than ordinary, early in the spring (from the former year's being different, and affected with northerly winds) some few were attacked with burning fevers of a kind good sort, and a few others with hemorrhages, neither of which proved mortal. Swellings appeared behind the ears, in many on one side, in most on both, without a fever or any confinement, but in some with a little fever. In all they disappeared without either inconvenience or suppuration, contrary to the custom of such tumours from other causes. At this particular time they were naturally soft, large, diffused, without inflammation or pain, and went off universally without any visible signs. Children, young persons, adults, especially those who frequented the public places of exercise, were most subject to them. A few women were also affected. The greatest part had dry coughs, which were soon succeeded by hoarsenesses. Some again after a while had painful phlegmons upon the testicles, sometimes upon one, sometimes upon both. Some had fevers, others none; most of them trouble and fatigue enough: but with respect to the chirurgical part they did very well.

Early in the summer, and from that time till the winter, many of those who had been for a long while somewhat consumptive, were laid up with consumptions; and others, who were doubtful, were then fatally convinced. Others again, where nature tended that way, dated the beginning of it from that time. A great number of such patients dropped off; and I do not remember that any of those who were laid up held out even a moderate time, but died much sooner than is usual in such cases, after having suffered other complaints, and those for a long time, in their fevers, without either fatigue or dying. Of these we shall now treat: for the only, and the greatest of the diseases then reigning, and that proved fatal to many, was the consumption.

The manner in which most of them were affected is as follows. They were seized with continual, acute fevers, attended with a chilliness, but no intermission; of the semitertian kind; the fit being one day moderate, the next vehement, and so increasing to great vehemence. They sweated continually, but not all over. The extremities were very cold, and grew warm again with difficulty. The belly was disturbed with bilious, small, simple, thin, griping stools, and that frequently. The urine thin, without colour, crude, and little in quantity; or else thick, with a small sediment, that did

not subside well, but appeared crude and unseasonable. They coughed a little and often, and the matter expectorated was indeed digested, but brought away by little and little, and with difficulty. Where the case was very violent, no digestion happened, but what they spit was continually crude. The throats of most of them were from the beginning and all along painful, red, and inflamed. The rheum that came from them little, thin, and sharp. A consumption and general disorder soon followed. An aversion to all kind of food was continually upon them, but without thirst; and many, before they died, became delirious. Thus the case stood among the consumptive.

In the summer and the autumn many fevers came on, of the continual kind, though not violent; and that to such as had been long ill, but in other respects not worn out. Disorders of the belly likewise happened to many, but such as were very tolerable, and without any remarkable injury. The urine was generally well coloured and clear, but thin, and after a while, about the crisis, digested. Coughs were moderate, and expectoration easy; nor were they so averse to food, but very willing to take what was given them. In a word, these consumptive patients were affected in a manner different from such a state, sweating a little in their chilly fevers; while others were seized with paroxysms in a vague and uncertain manner, never leaving them entirely, but returning as a semitertian. The crisis happened upon the twentieth day at the shortest, in most upon the fortieth, and in many upon the eightieth. In some again it never happened, but the fever went off in an erratic or wandering manner. Here indeed it returned again for the most part, after a short intermission; and after the return came to its crisis in the same periods as before. Many of them held out so long, as to be ill in the winter; but of all here described none but the consumptive died. The rest bore their fevers and other complaints very well and escaped.

SECTION II. YEAR II.

In Thasus, early in the autumn, the weather was unseasonable, and on a sudden grew wet with much northerly and southerly wind, that lasted the whole time of the Pleiades, and even to their setting. The winter was affected with northerly winds; the rains

were great and heavy, attended with snow, and for the most part a mixture of fair weather. Thus the whole affair stood ; and, with respect to the cold, what happened was not very unseasonable. But after the winter solstice, and when the west wind begins to blow, there was very severe winter weather, with much northerly wind and snow, and abundance of rain without ceasing. Over head it looked stormy and cloudy. This state lasted without remission to the equinox. The spring was cold, northerly, watery, and cloudy ; the summer not very scorching. The Etesiae blew continually ; and, about the rising of Arcturus, a great deal of rain fell again on a sudden, with northerly winds. The whole year being thus damp and cold, affected with northerly winds, they passed the winter well for the most part, but in the beginning of the spring many persons (not to say a great many) were taken ill.

First of all appeared humid ophthalmies (or inflammations of the eyes), with weepings, pain, and indigestion. Little concreted matter broke out with difficulty on the eyes of many persons, returned again in most, and went away at last about autumn. In the summer and the autumn, dysenteries, tenesmuses, and lienteries, were complained of ; so were bilious purgings, of a thin, crude, griping nature, and much in quantity. Others again were watery ; and many complained of painful fluxes that were also bilious, watery, ragged, purulent, and strangurious ; not from any fault in the kidneys, but from one humour or complaint coming upon another. They likewise vomited bile, and phlegm, and indigested food. They sweated too in general, the humidity being great every where. To many these things happened without a fever or confinement, to others with a fever, as we shall see hereafter. Where all that is here mentioned happened, they became consumptive, not without pain.

In the autumn and the winter, continual fevers turned out, besides a few that were ardent, diurnal, nocturnal, semitertians, perfect tertians, quartans, and erratics ; every one of which happened to many, but ardent fevers to very few, and were the least troublesome : for they were neither taken with bleedings, unless in a very small quantity, and that but seldom, nor with deliriums. In all other respects they bore it well. The crisis happened to most in a very regular manner (intermissions included) in seventeen days generally, without any body's dying or becoming phrenitic. Ter-

tians were more frequent than ardents, and more troublesome. In all the progress was very regular from the first paroxysm to the fourth, and the seventh proved a perfect crisis, without any relapse. Quartans attacked many at first as a quartan should, and many were seized with it as the crisis of other fevers and diseases. These were of long standing, and indeed longer than usual. Quotidians, nocturnals, and erratics were likewise frequent, and lasted long, both among those who were confined at home, and those who walked about. The major part could not get rid of their fevers during the Pleiades, nor even till winter. Convulsions were also frequent, especially among children, from the beginning, but not without a fever. They came upon fevers likewise, and lasted a long time in general, but without any harm, except where other circumstances had made the case desperate. The other fevers were altogether of the continual kind, without any intermission, and the paroxysms in all like the semitertians, one day better, another day worse; and, of all the fevers that then reigned, these were the most vehement, the most tedious, and the most painful; beginning very mildly, but increasing always, and growing worse and worse upon the critical days. After a little abatement they soon grew bad again, had stronger fits upon the critical days, and were for the most part worse. Shiverings were universally irregular and uncertain, seldom and very little in these, but in other fevers more. Sweats were common, but here least of all, and so far from easing the patient, that on the contrary they did him harm. The extremities were very cold, and could scarce grow warm again. Nor were they altogether watchful, especially in this case, but fell again into comas. The belly in all was disturbed, and in a bad manner, but worst of all by much in these. The urine was for the most part thin, crude, without colour, and after a while appeared a little digested as though critical; or had some consistence in it, but yet was turbid without any sediment or concoction; at least the sediment was but little, and that bad and crude. In fine all these things were bad. The fevers were likewise attended with coughs, but I cannot say that I perceived either good or harm from them. Most of these complaints were tedious and difficult, very irregular and inconstant, and that without coming to a crisis, either in those whose case was desperate, or in those whose case was not so. For, if it intermitted a little at any time, it soon returned again; and in the few that had the benefit of a crisis, it happened

not at the soonest before the eightieth day, and to some of these it returned, so that many of them were ill in the winter. In the greatest part it went off without a crisis; and these things happened alike to those who did well, and to those who did not.

As there was a great want of the critical variety that is usual in diseases, the greatest and worst symptom attended many of them to the last, viz.: a general dislike to food, especially where other fatal circumstances appeared. They were not indeed very thirsty out of season, but after a long time, a great deal of pain, and a bad decay, abscesses formed themselves, sometimes too great for the patient's strength to bear, at other times too little to be of any service; so that a relapse presently followed, and the patient grew worse and worse. Dysenteries, tenesmuses, lienteries, and fluxes were likewise added; and some fell into dropsies. Nauseas and great uneasiness happened with and without these. Whatever was very vehement, either despatched the patient soon, or was of no benefit to him at all. Little eruptions appeared, not equal to the vehemence of the disease, and soon after disappeared again; or swellings behind the ears, that were by no means critical, and so signified nothing. Others were affected in their joints, especially the hip, where it proved critical to a few, but it soon after got the better and returned to its former state.

It proved fatal to persons of every age, but chiefly to children just weaned, and to those of eight or ten years old, and those under the age of puberty. These were thus affected, not without the first circumstances here mentioned, but the first happened to many without these. The only beneficial thing, and the greatest of the signs then existing, and what saved many in the greatest extremity, was the *strangury*. For this way the disease spent itself; and it was a frequent complaint, especially among those tender patients, as well as among those who were not obliged to lie by their illness, and those who were. This proved a speedy and great change throughout. For, if the belly was affected with ill-conditioned fluxes, they stopped; food in general became agreeable to them; and the fever grew mild after this crisis. But the strangury complaints were lasting and painful; and the urine copious, thick, various, red, and partly purulent, not without pain. All these recovered to a man, as far as I know.

Where no danger is suspected, we are to consider the digestions of what passes off, whether they are all every where considerable

or seasonable, good and critical. Digestions imply a quick crisis, and a sure recovery; but crudities, indigestions, and bad abscesses, imply no crisis at all, or else pains, or duration, or death, or returns of the same complaints. But which of these is most likely to happen, must be considered from other things; the duty of a physician being to relate what is past, to understand what is present, and to foretell what is to come. He is also to take special care of two things, viz., to do good in his office, or at least no harm.

The art consists in three particulars, viz., the disease, the patient, and the physician, who is the servant or assistant of the art, and the patient is to concur with the physician in opposing the power of the disease.

Pains and heavinesses about the head and neck, with or without a fever, in phrenitic cases denote convulsions; and æruginous vomitings succeed. Some of these die presently. But in burning fevers and others, a pain of the neck, a heaviness of the temples, a dimness of the sight, or a painful distension of the hypochondre, denote a hemorrhage from the nose. Where the whole head is heavy, attended with heartburns and nausea, bilious and phlegmatic vomitings succeed. Children are generally attacked thus, and mostly affected with convulsions in these cases. Women are also attacked, and with pains in their private parts. But old persons, and those whose heat is got the better of, are attacked with palsies, madnesses, or blindness.

SECTION III. YEAR III.

In Thasus, a little before the rising of Arcturus, and during its continuance, there fell many great showers with northerly winds; but about the equinox, and to the rising of the Pleiades, little southerly showers. The winter was northerly, and drier than ordinary. The winds cold, and the snows deep. About the equinox the cold was sharpest. The spring was northerly and drier than ordinary; but yet the weather was a little wet and cold. About the summer solstice a little rain with a great deal of cold, to the rising of the Dog-star; from which time to the rising of Arcturus the summer was hot, and the heats were great and scorching, not gradually or at intervals, but continually. The droughts were also great, and the Etesiae blew. About the rising of Arcturus southerly gentle showers fell to the equinox.

During this state of the weather, in the winter, paraplegias began and attacked many, some of whom died in a short time: for the disease was very epidemical. In other respects they were well. But in the very beginning of the spring burning fevers came on, and continued to the equinox, and even to the summer. Most of those escaped who were seized presently after the beginning of the spring and summer, and some few died: but when the autumn and wet weather set in, they proved mortal to many. These fevers were of such a nature, that where any one bled freely and plentifully at the nose, he was saved by it more than by any thing else; and not one of those who were taken thus died this season, so far as I know. For Philiscus, and Epaminon, and Silenus, bled but a few drops at the nose the fourth and fifth day, and died. Most of them were seized with shiverings about the crisis, especially where there had been no hemorrhage, and with the shivering came on a sweat about the head and shoulders. Others again were attacked with a jaundice the sixth day, and these were relieved either by a discharge by urine or stool, or a plentiful hemorrhage, as Heraclides was, who lived with Aristocydes. Not but he bled at the nose, and had the benefit of the other evacuations too; and so was freed the twentieth. It fared otherwise with the servant of Phanagoras; for, as none of these things happened to him, he died. Hemorrhages were very frequent, especially among young persons and adults; and, where nothing of this kind happened, it very often proved fatal. Those who were more advanced in years had the jaundice, or a disorder in their belly, or a dysentery, as Bion, who lived with Silenus. In the summer, dysenteries were epidemical; and, even where hemorrhages had happened, some were at last seized with dysenteries, as Eraton's boy, for instance, and Myllus; for they, after a great hemorrhage, fell into a dysentery, and recovered. This humour was particularly redundant in many. For, where there was no hemorrhage at the crisis, the tumours behind the ears disappeared, and upon this a weight was felt in the left side of the belly, and at the extremity of the hip. Pain coming on after the crisis, and thin urine passing off, they began to bleed a little. Thus Antiphon, the son of Critobulus, had the twenty-fourth day a separation of humours by bleeding; his disorder ceased, and about the fortieth he got quite rid of it. Many women were taken ill, but less than the men, and died less. Many of them had hard labours, and after the birth were taken ill again, and for the most part died, as

Telebolus's daughter, who died the sixth day after her delivery. A great many had their menses come down in their fevers; others bled at the nose, and many young girls had the first appearance of their menses then. Others again bled at the nose, and had their menses too, as Dætharsis's daughter, for instance, a maid, who had them then for the first time, and also bled plentifully at the nose. Nor do I remember any died, where any one of these happened well. All of my acquaintance miscarried that chanced to be with child. The urine was in general well coloured but thin, and with a small sediment. The stools were thin and bilious. And in many, where there was a crisis in other respects, it terminated in a dysentery, as in Xenophanes and Critias. The urine was watery, much, clear, and thin; and even after the crisis, where there was a good sediment, and in other respects a laudable crisis, a dysentery came upon some, as particularly upon Bion who lived with Silenus, Critias with Xenophanes, Areton's boy, and Mnesistratus's wife, who were all afterwards seized with a dysentery. Query? Whether it was owing to the watery urine?

About the rising of Arcturus a crisis happened to many the eleventh day, nor did the fever return again in the natural and usual way of returns; but they were comatose at this time, especially children, of whom fewer died than any. But about the equinox, to the rising of the Pleiades, and even in the winter, burning fevers continued. About the same time too a great many became phrenitic, and went off; and a few in the summer. These burning fevers pointed out the prognostics from the beginning, where the case was desperate. For immediately an acute fever came on from the first, with gentle shiverings, watchings, ramblings, thirst, nausea, and anxiety. They sweated a little about the forehead and collar-bone, but nobody all over. Great deliriums attended, with fears and dejectedness; the extremities were coldish, the toes and fingers especially. The paroxysms were upon equal days, and in many the greatest pains upon the fourth. The sweats were generally somewhat cold. The extremities did not recover their warmth, but were livid and cold; nor did they then complain of thirst. The urine was black, little, and thin; the body bound. No hemorrhage from the nose, where this was the case, but only a few drops; nor did any of these relapse, but died the sixth day in a sweat. As to the phrenitics, all the circumstances here mentioned did not happen to them, but the crisis came on generally the eleventh

day, and in some the twentieth. Where the frenzy did not immediately appear from the beginning about the third or fourth day, but things went on moderately at first, there the fever raged most upon the seventh.

The number of diseases was now very great, and those who died of them were chiefly children, young persons, adults, and such as had smooth bodies, white skins, straight hair, black hair, and black eyes. The lazy and indolent died likewise, and so did those whose voice was either high, small, or rough, and where there was any impediment in the speech, or a choleric temper. Many women of this kind died too. But, during this situation, some were preserved by the four following particulars, viz., by bleeding plentifully at the nose; by making a great deal of water with a large and good sediment; by considerable bilious stools; or by falling into a dysentery. These proved critical to a great many, not singly indeed, but jointly, though not without much trouble. However all such escaped whose case was thus. Women, too, and maids were subject to every one of these symptoms; and where any of them happened well, or where the menses came down plentifully, it proved a salutary crisis, and none of them died. For, as to Philon's daughter, who bled freely at the nose, she died the seventh day, after having eat a very improper and unseasonable supper.

In acute fevers, and especially burning fevers, involuntary tears are a sign of a hemorrhage from the nose, if other circumstances denote not death. In this case, they are a sign of death and not a hemorrhage.

In a fever painful swellings behind the ears sometimes neither fall nor suppurate, though the fever goes off entirely. In this case a bilious looseness, or a dysentery, or thick urine with a sediment, is salutary, as in the case of Hermippus of Clazomenæ.

Critical circumstances, by which we distinguish, are either alike or unlike, as in the case of the two brothers, who lived by Epigenes's Theatre, and were taken ill the same hour. The eldest had his crisis the sixth day; the youngest, the seventh; both of them relapsed the same hour. It intermitted five days, and after the return both were entirely freed the seventeenth. Many had a crisis the fifth, an intermission seven days, and another crisis the fifth. Others again had their crisis upon the seventh, an intermission seven days, and the last crisis the third day after the return. Some

had a crisis the seventh, an intermission three days, and another crisis the seventh. Others again had a crisis the sixth, and an intermission six days: after this an attack for three days; then, an intermission one day, and the next a return and crisis the same day; as Euagon the son of Daitharsus. To some it came to a crisis the sixth, intermitted seven, and was determined the fourth day after the return, as in Aglaidas's daughter. The greatest number of those who were taken ill this season were thus affected; and I know of none that escaped without a relapse, according to the natural course of relapses. Neither do I know of any that miscarried, where the relapses happened in this manner; nor of any, thus affected, who had returns again. But many died the sixth day, among whom were Epaminondas, Silenus, and Philiscus, the son of Antagoras.

Where any tumours happened behind the ears, the crisis came on the twentieth; the tumours subsided universally where no suppuration followed, and were turned upon the bladder. But in Cratistonax's case, who lived by Hercules' Temple, and in that of Scymnus, the fuller's maid-servant, where a suppuration happened, they died. In some the crisis happened the seventh, the intermission nine days, and another crisis the fourth day after the return. In others the crisis happened the seventh, the intermission six days, and the other crisis seven days after the return; as it did to Phaeocritus, who lived by Gnathon, the painter. But in the winter, about the winter solstice, and even to the equinox, the burning fevers and phrenses remained, and were very mortal. The crisis happened to many the fifth day from the beginning, and after an intermission of four days the fever returned again, and five days after this the other crisis came on, in all fourteen days. Thus it happened to most children, and to those of a more advanced age. Sometimes the crisis came on the eleventh, the return the fourteenth, and the perfect crisis the twentieth. But, if any were seized with shiverings upon the twentieth, it was then protracted to the fortieth. The greatest part shivered upon the first crisis; and those who shivered at the beginning shivered again at the crisis, and the relapses after the crisis. But shiverings happen least in the spring, more in the summer, more still in the autumn, and most of all in the winter. The hemorrhages also ceased.

The knowledge of diseases is to be learnt from the common nature of all things, and from the nature of every individual; from

the disease, the patient, the things that are administered, and the person that administers them ; for the case becomes easier or more difficult accordingly. We are to consider likewise the whole season in general, and the particular state of the weather, and of every country ; the customs, the diet, the employments, the ages of every one, the conversations, the manners, the taciturnity, the imaginations, the sleeps, the watchings, and the dreams ; and how far vellications, itchings, and tears are concerned ; and what the paroxysms are ; and what the evacuations by stool, or urine, or spitting, or vomiting may be ; and what changes may happen from one disease to another, and the separations that end in death or life. Sweat, cold, shiverings, coughs, sneezings, sighings, breathings, belchings, flatuses (secret and audible), hemorrhages, and hemorrhoids, are also to be considered, together with their respective consequences.

Of fevers, some are continual, others affect us in the day, and intermit at night; or continue in the night, and leave us in the day. There are likewise semiterrians, tertians, quartans, quintans, septans, and nonans ; but the acutest, the strongest, the most dangerous, and the most fatal, are the continual. The safest, the easiest, and the longest of any is the quartan ; for it is thus not only in its own nature, but also frees us from other great diseases. The semiterrian is attended with acute disorders, and is more fatal than any of the rest. Add to this, that consumptive persons, and those who have been long ill of other distempers, are most subject to it. The nocturnal is not very dangerous, but tedious. The diurnal longer, and sometimes tends to a consumption. The septan is long, but not dangerous ; the nonan longer, but not dangerous. A true tertian comes to its crisis soon without danger ; but a quintan is the worst of all ; for coming before or upon a consumption, it is death. In every one of these fevers, as well continual as intermitting, there are forms, conditions, and paroxysms to be considered. For instance, a *continual*, sometimes flowers as it were, at the beginning, becomes very vehement, and grows worse and worse ; but about the crisis, and at the time of the crisis, becomes weaker. Sometimes again it begins mildly and secretly, increases and grows worse every day, but about the crisis, and during that time, breaks out vehemently. At another time it begins mildly, increases more and more, and, coming to its full strength by a certain time, remits again at the crisis, and during

all that time. These things happen in every fever and every disease.

The diet should likewise be regulated by these considerations. And there are many other considerable signs of the like nature with these, some of which we have treated of already, and the rest shall be considered hereafter. But whoever undertakes this province in good earnest should try and inquire which of them is acute and mortal, and which recoverable; where food is proper, and where it is not; without omitting the time, the quantity, and the quality.

Where the paroxysms are upon equal days, there the erisis is upon equal days; and where they are upon unequal, there the crisis is so too.

The first critical day of the periods that terminate upon equal days is the fourth, then the sixth, the eighth, the tenth, the fourteenth, the twenty-eighth, the thirtieth, the forty-eighth, the sixtieth, the eightieth, and the hundredth. The first of those that terminate upon unequal days is the third, then the fifth, the seventh, the ninth, the eleventh, the seventeenth, the twenty-first, the twenty-seventh, and the thirty-first. And if a erisis happens otherwise, or out of these mentioned days, a relapse is to be feared, and even death. It is also to be considered, that the crises that shall happen at these times will be salutary or fatal, or there will be a turn for the better or the worse. As to erratic fevers, quartans, quintans, septans, and nonans, their critical periods are also to be considered.

Philiscus, who dwelt by the wall, took to his bed the first day. An acute fever, a sweat, and an uneasy night followed. The next day he was worse in all respects; but in the evening had a good discharge from a glyster, and afterwards a quiet night. The third day betimes, and till noon, his fever seemed to have left him, but in the evening it returned with vehemence, attended with a sweat, a thirst, a dry tongue, black urine, an uneasy night, no sleep, and much delirium. The fourth day, worse in all respects. Black urine; but an easier night, and the urine well-coloured. The fifth, about noon, a few drops of pure blood from the nose. The urine very various, with round seed-like particles floating up and down, without any sediment. A suppository brought away a little wind. A restless night. Little sleeps, with rambling discourse. The extremities cold all over, without any return of warmth. Black urine. A little sleep. In the day loss of speech, a cold sweat, and the extremities livid. Died about the middle of the sixth day.

His breath was all along drawn back, as it were, deep, and seldom. Upon the spleen was a round swelling. Cold sweats continually. The paroxysms upon equal days.

Silenus, who lived upon the sea-shore, near to Eualcides's, was seized with a violent fever after labour, and drinking, and unseasonable exercise. It began with pain in the loins, a heaviness in the head, and a stiffness in the neck. His stools the first day were bilious, simple, frothy, deep-coloured, and many. His urine black, with a black sediment. A thirst came on, with a dry tongue, and no sleep in the night. The second day, an acute fever. More stools, thinner, and frothy. Black urine. An uneasy night. Rambled a little. The third, worse in all respects. A distension of both the flanks, reaching to the navel, but softish withal. His stools thin and blackish. The urine turbid and blackish. No sleep in the night. He talked much, laughed, sung, and could not contain himself. The fourth, no alteration. The fifth, his stools were simple, bilious, smooth, and greasy. His urine thin and transparent. His understanding recovered itself a little. The sixth, a little sweat about the head, the extreme parts cold and livid. Much tumbling and tossing. No evacuation by stool or urine. The fever acute. The seventh, loss of speech. No warmth in the extremities. No urine. The eighth, a cold sweat all over, with little, red, round eruptions, like pimples in the face, that remained without coming to suppuration. From a gentle stimulus of the belly a great discharge of thin, and as it were undigested faeces, with pain; and what came away by urine was acrid and painful. The extremities a little warmer. Light sleeps, with a comatose disorder. Loss of speech. Thin transparent urine. The ninth, no alteration. The tenth, drank nothing. A coma, with light sleeps. From the belly, the same discharge as before. A great deal of thick urine, that came away gushing, and afterwards let fall a white sediment, like ground barley; the extremities cold again. The eleventh, he died.

His breath was all along, from the beginning, deep and seldom; his flanks continually palpitating; and his age about twenty.

Herophon was seized with an acute fever, and had a small discharge downwards, with a tenesmus at the beginning, but afterwards his stools were thin, bilious, and frequent. No sleep. Black, thin urine. The fifth, betimes in the morning, he grew deaf, and was worse in all respects. His spleen swelled, and his flanks were

distended. His stools were small and black; and his head rambled. The sixth, he was delirious, sweated at night, was cold, and delirious still. The seventh, was cold outwardly, thirsty, and delirious; at night came to himself, and slept. The eighth, was feverish, but not so swelled in his spleen; and came perfectly to himself. A swelling appeared in the groin for the first time, on the same side with the spleen; after which a pain seized him in both his legs. He rested pretty well; his urine was well-coloured, and had a small sediment. The ninth, he sweated, and was cured. The fifth, it returned again, and immediately his spleen swelled. The fever was acute, and his deafness returned. Three days after this, the spleen and deafness grew better; his legs were uneasy, and a sweat came on in the night. The crisis happened the seventeenth, without his being delirious after the return.

In Thasus, Philinus's wife was seized with a fever and shivering, the fourteenth day after her delivery of a daughter, her affairs going on very well, without any reason for complaint in other respects. The upper part of the stomach, the right hypochondre, and her private parts grew painful from the first. Her cleansings stopped. However, by help of a pessary she grew easier; but the pain in her head, neck, and loins remained. She could get no sleep; was cold in her extremes; and a thirst succeeded. Her belly was in a manner burnt up, and discharged very little. Her urine was thin, and without colour at first. The sixth, she was very delirious at night, and then came to herself again. The seventh, was thirsty; and her stools were bilious and deep-coloured. The eighth, a shivering came on, with an acute fever, and many convulsions followed, with pain. She also talked much out of the way; got up to receive a suppository; had a great discharge downwards of bilious matter; but no sleep. The ninth, was convulsed. The tenth, came a little to herself. The eleventh, slept, remembered every thing, but in a little time grew lightheaded. After the convulsions made a great deal of water in a little while (the servants, or those about her, seldom reminding her), of a thick and white kind, like what appears upon shaking water that has subsided after standing a long time, but had no sediment; in colour and consistence like that which is made by a beast of burden, so far as I saw. About the fourteenth she trembled all over, talked much, and came a little to herself; but soon became lightheaded again. About the seventeenth, lost her speech; and the twentieth, died.

Epicrates's wife, who lived by Archigetes's, just before her labour, was taken with a violent shivering, and could not grow warm again, as I was informed. The next day, she was much the same. The third, she was delivered of a daughter, and every thing went on well. The second day after the birth an acute fever seized her, with pains in the pit of her stomach and private parts, which were mitigated by a pessary; but a pain in the head, neck, and loins continued, without any sleep. Her stools were small, bilious, thin, and simple. Her urine thin and blackish. The sixth day after she had been taken, at night she grew delirious. The seventh, was worse in all respects; watchful, delirious, thirsty; and had bilious, deep-coloured stools. The eighth, shivered, and slept much. The ninth, no alteration. The tenth, a pain in her legs and the pit of her stomach again, with a heaviness in her head, but without a delirium. She slept more, but had no stool. The eleventh, the urine was better coloured, and the sediment large. She felt herself lighter. The fourteenth shivered again, and was very feverish. The fifteenth, vomited bilious yellow matter, pretty often; sweated, and missed her fever; but at night it returned violently. Her water was thick, and with a white sediment. The sixteenth, worse again, rested badly, got no sleep, and was lightheaded. The eighteenth, was thirsty, and the tongue burnt up. No-sleep; much lightheadedness; pain in the legs. About the twentieth, betimes in the morning, shivered a little, and was comatose or stupified; slept quietly; vomited a little bilious black matter; and grew deaf in the night. About the twenty-first, a pleuritic pain came on quite through the left side, with a gentle cough. The urine was thick, turbid, reddish, and did not subside after standing. In other respects she was easier, but not without her fever. Her throat was inflamed and painful immediately from the first; the uvula was contracted; and the rheum remained sharp, biting, and salt continually. About the twenty-seventh, the fever left her; the urine broke, but the side was painful. About the thirty-first, the fever came on again; her stools were bilious and stimulating. The fortieth, she vomited a little bile, and was entirely freed from her fever the eightieth.

Cleonactis, who lived above the Temple of Hercules, was taken ill with a violent fever of the erratic kind. He had a pain of the head and the left side from the beginning, and in the other parts of his body pains like those that proceed from weariness. The paroxysms of the fever were very irregular, sometimes with, some-

times without, a sweat; but for the most part they appeared upon the critical days more than upon others. About the twenty-fourth, he was cold at his fingers' ends; vomited bilious yellow stuff pretty often, and soon after æruginous; and was better in every respect. About the thirtieth, he bled from both nostrils, irregularly, a little at a time, to the crisis. He had neither an aversion to food, nor a thirst all the time, nor want of sleep; and his urine was thin, though not without colour. About the fortieth, it appeared reddish, and had a large sediment, very red, that relieved him. After this it changed several ways, and sometimes had a sediment, at other times none. The sixtieth, there was a great, white, smooth sediment; all the complaints abated; his fever intermitted; and his urine was thin again, but well-coloured. The seventieth, he had no fever, and it intermitted ten days. The eightieth, a shivering came on, and an acute fever. A great sweat followed; the sediment in his urine was red and smooth; and he obtained a perfect crisis.

Meton was taken ill of a very acute fever, with a heaviness and pain in his loins. The second day, he had a good discharge downwards, from drinking a pretty large quantity of water. The third, a heaviness in his head, with thin, bilious, reddish stools. The fourth, worse in all respects. A little blood from the left nostril twice. A restless night. Stools, as before. Blackish urine, with a blackish cloud floating up and down, without any sediment. The fifth, a great deal of pure blood from the left nostril; a sweat, and a crisis; but after the crisis, want of sleep, lightheadedness, and thin blackish urine. After bathing the head he slept, and came to himself; had no relapse afterwards, but frequent hemorrhages, even after the crisis.

Erasinus, who lived by the Torrent of Bootes, grew very feverish after supper, and had a very bad night. The first day he was easy, but in pain in the night. The second, worse in all respects, and at night lightheaded. The third, uneasy, and very delirious. The fourth, exceeding ill, and had no sleep at night, but dreamed and talked, and was afterwards remarkably worse, frightened, and impatient. The fifth, betimes in the morning, was composed and came perfectly to himself, but before noon was so raving mad, that he could not contain himself. His extreme parts were cold, and somewhat livid; his urine stopped; and about sunset he died.

This patient's fever was continually upon him, with sweats; his flanks were tumesfied, distended, and painful; his urine black, with

round clouds that subsided not; his belly not bound; his thirst perpetual, but not great; and before he died, he was convulsed much and sweated.

Criton, in Thasus, was seized, as he was walking, with a violent pain of his foot from the great toe, and obliged to go to bed the same day. A chilliness ensued, with nausea, a gentle heat, and at night a delirium. The second day, the whole foot was swelled, and a redness appeared about the ankle with the skin stretched. Little black spots (or pimples) appeared likewise. An acute fever came on, with violent ravings. His stools were unmixed, bilious, and very frequent. The second day of his illness he died.

The Clazomenian, who lived by Phrynicides's well, was seized with a violent fever, attended from the beginning with a pain of the head, neck, and loins; and immediately after with a deafness. No sleep; the fever acute; the flanks tumefied, but without any great distension; and the tongue dry. The fourth day, he was delirious at night. The fifth, was uneasy, and worse in every respect. About the eleventh, a little remission. His stools from the beginning to the fourteenth, were thin, large, and watery, without fatiguing him. After this they stopped. The urine all along was thin indeed, but of a good colour, and had many clouds here and there, without subsiding. But about the sixteenth day, his urine was a little thicker, with a small sediment. He was somewhat relieved, and came more to himself. The seventeenth it was thin again. Swellings arise behind both the ears, attended with pain. He got no sleep, but was delirious, and had a pain in his legs. The twentieth, the fever left him. The crisis came on without a sweat, and he recovered himself perfectly. About the twenty-seventh, a violent, but short, pain of his right hip seized him. The swellings behind the ears neither subsided nor suppurated, but were painful. The thirty-first, many watery stools, with pain and difficulty, as in a dysentery. The urine thick; the swellings went away. But, about the fortieth, a pain of the right eye came on with a dulness of sight, that went off again.

Dromeadas's wife, the second day after she had been brought to bed of a daughter, and had no reason to complain of her other affairs, was seized with a shivering and an acute fever. The hypochondres began to be painful the first day. A nausea came on, with horrors and tossings, nor could she afterwards sleep. She fetched her breath deep and seldom, and immediately drew it back

again. The second day after the shivering she had a very good stool; her urine was thick, white, and turbid, as when it is shook after standing a long time, but had no sediment. No sleep in the night. The third day about noon she shivered again, and was very feverish. The urine, as before; the flanks painful, with nausea; an uneasy night, and no sleep. She was also in a coldish sweat all over, but presently grew warm again. The fourth, the hypochondres were a little easier, but the head heavy and painful, with somewhat of a stupidness. A few drops from the nose; a dry tongue, and thirsty; the urine thin and oily; and with these a little sleep. The fifth, she was thirsty and qualmish. The urine as before, and the body bound. About noon was very lightheaded, and presently after came to herself again. Upon getting up was somewhat stupid, and a little cold; slept in the night, and was light-headed. The sixth day betimes in the morning she shivered again, and presently grew warm; sweated all over, but the extremities were cold; grew lightheaded, and breathed deep and seldom. Soon after convulsions came on from the head, and she went off presently.

A man who was a little feverish got his supper and drank plentifully, but in the night brought up all again. An acute fever followed, with a pain of the right hypochondre, and a gentle softish inflammation tending outwards. He rested badly; his urine at first was thick, red, and had no sediment after standing; his tongue dry, but not very thirsty. The fourth, an acute fever, with pain all over. The fifth, smooth, oily urine in great quantity. A raging fever. The sixth, in the evening, he was very lightheaded, and had no sleep in the night. The seventh, was worse in all respects. The urine, as before. He talked much, and could not contain himself. The belly, being stimulated, discharged watery turbid stuff with worms. An uneasy night. Betimes in the morning a shivering, and acute fever; a hot sweat followed, and the fever seemed to go off. He slept but little, and upon waking was cold, spit much, and in the evening was very delirious. Soon after he vomited black stuff, a little bilious. The ninth, was cold again, very delirious, and got no sleep. The tenth, had a pain in his legs, and was in all respects worse and delirious. The eleventh, died.

A woman that lived upon the shore, three months gone with child, was taken with a violent fever, and immediately complained of pain in her loins. The third day she had a pain in her neck,

head, collar-bone, and right hand; and in a short time lost her speech. Her right hand was convulsed, and became paralytic. She grew very delirious, had an uneasy night, and got no sleep, but discharged a little bilious unmixed matter downwards. The fourth, she recovered her speech, but the convulsions remained as before, with pains all over. About the hypochondre a painful swelling appeared. She could get no sleep; grew lightheaded; discharged downwards; and her urine was thin, but not well-coloured. The fifth, a violent fever; a pain in the hypochondre; great light-headedness; bilious stools; a sweat at night, and no fever. The sixth, she came to herself, and was better every way; but about the left collar-bone the pain remained. A thirst came on; the urine was thin, and she got no sleep. The seventh, tremblings followed, with something of stupidness. She was also a little delirious, and the pain about the collar-bone and left arm remained. In other respects she was better, and came to herself perfectly. The intermission lasted three days without any fever. The eleventh, it returned, with shivering and great vehemence. About the fourteenth, she vomited bilious yellow matter pretty often; fell into a sweat, and was cured.

Melidia, who lived by the Temple of Juno, complained of a violent pain in her head, neck, and breast; and presently after an acute fever came on. Her menses came down a little, with a continual pain in all those parts. The sixth she was comatose, qualmish, chilly, and red about the cheek, with something of a delirium. The seventh, sweated; the fever intermitted; the pains remained; the fever returned again; and she slept a little. Her urine was constantly thin, but well-coloured; her stools thin, bilious, acrid, very small, black and fetid; the sediment in the urine white and smooth. She fell into a sweat, and had a perfect crisis the eleventh.

THE THIRD BOOK OF EPIDEMICS.

Fœsius, p. 1059. HALLER, i. p. 138. GARDEIL, ii. p. 92.

THIS book, says Haller, is alike in value and in manner with the preceding, of which it appears to be a continuation;^a the first twelve cases manifestly belong to it. The latter portion has reference to a pestilential constitution: not that a true plague accompanied with carbuncles and buboes is here described; but because all diseases then occurring were of the highest malignity. Not one of the sixteen cases mentioned in this part had symptoms of the true plague, although gangrene was not unfrequent in conjunction with the fever, so that entire limbs fell off.

Gardeil, in a short note, says, "that the lovers of ancient lore will find at the end of each case (the first twelve), certain hieroglyphics constituted of five or six letters each, that may be regarded as algebraic signs, to designate briefly the practical result of each observation, and relating more particularly to prognostic."

These characters, Fœsius informs us, are found in several manuscripts, but are wanting in others; and that we are ignorant whether they are from Hippocrates, or from his school; or if they are not of a later origin. They are anterior to Galen, for he mentions them. Fœsius introduces them. As a mere matter of curiosity, I thought of giving them a place here; but their want of utility led me to forego my first intention.—ED.

^a This leads Clifton in his preface, to complain of the miserable arrangement of the writings of Hippocrates, by which many books that should precede others, are made to follow them, whilst a knowledge of these last is essential to the comprehension of the others. Such he asserts is the case in the editions of Mereurialis and of Fœsius. Again, he affirms, "other parts have been divided to the ruin of the main design," &c., and mentions the first and third books of Epidemics to have been thus "very injudiciously split into two," &c., in all which remarks I think him correct; but having to select an arrangement from among the various editions, I fixed upon that of Fœsius, and that principally from his coming first into my possession.—ED.

Pythion, who lived by the Temple of the Earth, was taken with a trembling in his hands, which was succeeded the same day by an acute fever and delirium. The second, worse in all respects. The third, no alteration. The fourth, a little, simple, bilious discharge downwards. The fifth, worse in all respects. Little sleeps; no stool. The sixth, a variety of spitting, with something upon the red. The seventh, his mouth was drawn aside. The eighth, worse in all respects. The tremblings remained. The urine from the beginning to the eighth day thin and without colour, with a little suspended cloud in it. The tenth, he sweated, spit matter a little digested, and had a crisis. The urine was whitish about this time, and, forty days after, an abscess appeared by the anus, which was succeeded by the strangury.

Hermocrates, who lived by the new wall, was seized with a very acute fever, and began to have a pain in his head and loins, with a moderate distension of the hypochondre. The tongue was burnt up from the beginning. Presently after, he grew deaf; and could get no sleep. His thirst was moderate, and his urine thick and red, without a sediment after standing. His stools were large and burnt. The fifth, thin urine, with a cloud that did not fall. At night he was lightheaded. The sixth, a jaundice; worse in all respects, and lightheaded still. The seventh, great restlessness. The urine thin, and like the former. The succeeding days, very little alteration. About the eleventh every thing seemed to abate. A coma began. The urine was thick, reddish, thin towards the bottom, and subsided not. He came to himself by little and little. The fourteenth, he was neither feverish, nor sweated, but slept, and came perfectly to himself. The urine much the same. About the seventeenth, he relapsed, grew hot, and the days following had an acute fever, with thin urine. About the twentieth another crisis. The fever went off, but without sweating. An aversion to food lasted all the time. He came to himself, but could not speak. His tongue was dry, but without thirst. He laid comatose. About the twenty-fourth grew hot again, and discharged much thin matter downwards. The days following an acute fever, with a burnt tongue. The twenty-seventh, he died.

This patient was deaf all along; his urine thick and red without a sediment, or thin and colourless, with a little cloud; and he could taste nothing.

He that lived in Dealces's Garden, felt a heaviness in his head,

and a pain of the right temple a long time ; and, upon an occasion given, was seized with a violent fever, and carried to bed. The second day a little pure blood from the left nostril, and a good stool. The urine thin and various, with a cloud suspended, almost like ground barley and seed. The third, an acute fever. Black, thin, frothy stools, with a livid sediment in them. He was also a little soporose, and bore rising up with difficulty. The sediment of the urine turned livid, and somewhat glutinous. The fourth, bilious yellow vomitings in a small quantity, and after a little resting æruginous or violet. A little pure blood from the left nostril. The stools and urine as before. A sweat about the head and collarbone. The spleen tumefied. A pain of the same thigh. A softish distension of the right hypochondre. No sleep in the night. A little rambling. The fifth, more stools, black and frothy, with a black sediment. No sleep in the night ; ramblings. The sixth, black, fat, glutinous, fetid stools. Slept, and came more to himself. The seventh, a dry tongue, and thirsty. No sleep, but ramblings. The urine thin, and not well-coloured. The eighth, black, small, compacted stools ; slept, and came to himself ; and was not very thirsty. The ninth, shivered, burned, sweated, was cold, delirious, and convulsed (or distorted) in his right eye ; with a dry tongue, thirst, and watching. The tenth, very little alteration. The eleventh, came to himself perfectly, lost his fever, and slept. The urine was thin about the crisis. The fever intermitted two days, and returned again the fourteenth. No sleep that night, but strong deliriums. The fifteenth, turbid urine, as when it is shook after standing. A raging fever, with strong deliriums, and no sleep. A pain in the knees and legs. Black stools, by means of a suppository. The sixteenth, thin urine, with a suspended cloud. Was lightheaded. The seventeenth, early in the morning, was cold in the extreme parts, and covered up. The fever raged ; a sweat came on all over, that relieved him ; he came more to himself upon it, but was not free from his fever or his thirst. He also vomited bilious yellow stuff in a small quantity, and had a stool ; soon after which, black thin stuff came away in a small quantity. The urine was thin and not well-coloured. The eighteenth, he did not come to himself, but was comatose. The nineteenth, no alteration. The urine thin. The twentieth, slept, came to himself perfectly, sweated, lost his fever and thirst ; but the urine was thin. The twenty-first, rambled a little, and was a little dry. A pain attacked him in the

flanks, and a continual palpitation about the navel. The twenty-fourth, a sediment in the urine; and he came perfectly to himself. The twenty-seventh, a pain in the right hip. Thin urine, with a sediment; and in other respects very easy. About the twenty-ninth, a pain in the right eye. The urine thin. The fortieth, stools of a phlegmy white nature, and pretty often. A great sweat all over, and a perfect crisis.

Philistes, in Thasus, had a pain of his head a long time, and at last, being somewhat stupid, was forced to lie down; but continual fevers coming on from drinking-bouts, the pain grew worse, and in the night his last fever first seized him. The next day he vomited bilious yellow matter, at first in a small quantity, and afterwards æruginous in a larger. His body was open, but he could get no rest in the night. The second, he grew deaf, his fever raged; his right flank was distended and turned inwards. The urine thin and transparent, with a seed-like cloud suspended. About noon he was a little mad. The third very uneasy. The fourth convulsed, and in all respects worse. The fifth betimes in the morning he died.

Chærion, who lived near Demænetus, was seized with a violent fever from a drinking-bout, and immediately complained of a heaviness and pain in his head. No sleep. Thin stools, somewhat bilious. The third day, a violent fever. The head trembled, especially the lower lip, and soon after he shivered, was convulsed, and very lightheaded. An uneasy night. The fourth, was easy, and slept a little, but rambled. The fifth, was in pain, worse in all respects, and delirious. A bad night again, and no sleep. The sixth, no alteration. The seventh, shivered, burned, sweated all over, and had a crisis.

This patient had all along bilious, small, unmixed stools; and thin well-coloured urine, with a cloud suspended. About the eighth, the colour was better, and it had a white but little sediment. He came to himself. The fever intermitted, and returned the ninth. About the fourteenth, he was very feverish again, and sweated. The sixteenth, vomited a pretty deal of bilious yellow matter. The seventeenth, shivered again, was very hot, sweated, lost his fever, and had another crisis. The urine was better-coloured after the relapse and the crisis, and had a sediment; nor was he delirious in his relapse. The eighteenth, he was a little hot, and a little dry. His urine thin, with a suspended cloud; and he rambled a little. The nineteenth, was free from the fever, but

had a pain in his neck. A sediment in the urine, and a perfect crisis the twentieth.

Euryanax's daughter, a maid, was seized with a violent fever. She had no thirst all along, nor eat any thing; but had a little discharge downwards. The urine was thin, small, and not well-coloured. At the beginning of the fever a pain came about the anus. The sixth day, neither fever, nor sweat, and yet a crisis; the complaint about the anus suppurating a little, and breaking at this time. The seventh, after the crisis she shivered, was a little hot, and sweated. The eighth day after the crisis she shivered again, but not much; and afterwards her extremities were always cold. About the tenth, after the sweat that then was upon her, she grew lightheaded, but recovered herself again presently; occasioned, as they said, by her tasting a bunch of grapes. It intermitted the twelfth day, and again she was very delirious. Her stools were bilious, small, unmixed, thin, and acrid. She got up often. The seventh day after the last delirium she died.

This patient complained at the beginning of a pain in her throat, which was inflamed all along, with the uvula drawn up; and of a great rheum, that was withal a little sharp. She coughed too, but brought nothing away digested. She had an aversion to every thing, and not the least desire to any thing, all along; had no thirst, and drank nothing worth speaking of; was silent, and said nothing. Her mind was much dejected, and in a despairing way, and her constitution seemed inclinable to a consumption.

The woman with the quinsy, that was by Aristion's, who first complained of her tongue, lost her speech, and her tongue was both red and dry. The first day a chilliness came on, with heat afterwards. The third, a shivering, a burning, and a reddish hard swelling upon the neck and breast on both sides. Her extremities cold and livid. Her breathing difficult, with great elevation of the breast. The drink came through her nose, and she could not swallow. Her evacuations by stool and urine were stopped. The fourth, was worse in every respect. The fifth, she died of her quinsy.

The young man, who lived upon the Lyars Market, was taken with a violent fever, after weariness, labour, and running more than usual. The first day he had many thin, bilious stools. His urine was thin and blackish. No sleep, and considerable thirst. The second, worse in all respects. More stools, unseasonably. No sleep. Rambled a little, and sweated a little. The third, was un-

easy, dry, qualmish, with great anxiety, tossings, and ramblings. The extremities livid and cold. The soft part of his belly gently distended on both sides. The fourth, no sleep; was worse. The seventh, he died, in about the twentieth year of his age.

The woman by Tisamenus, who was seized with the iliac passion, was extremely uneasy, vomited much, could not contain what she drank, was in pain about the flanks, and the lower parts of her belly, and in continual torment. She had no thirst, but yet grew hot. Her extremities were continually cold. A loathing, and watchfulness came on; her urine was thin and little; and her stools crude, thin, and small. Nothing being able to relieve her, she died.

A woman, who miscarried of a child, among those that were about Pantimis, was seized the same day with a violent fever. Her tongue was dry and thirsty, nor could she get any sleep. Her stools were thin, many, and crude. The second, she shivered, was very feverish, had many stools, and no sleep. The third, her pains increased. The fourth, she was lightheaded. The seventh, she died.

Her belly was all along lax; her stools many, thin, and crude; and her urine but little and thin.

Another, that miscarried about the fifth month, had a violent fever too, which at the beginning was attended with a coma, and again a watchfulness; together with a pain of the loins, and a heaviness of the head. The second day, a few, thin, and at first unmixed, stools. The third, more and worse. No sleep in the night. The fourth, was lightheaded, frightened, dejected, had the right eye drawn on one side, and a little cold sweat about the head. The extremities were also cold; the fever exasperated, and a violent delirium succeeded, but went off again presently. She had no thirst, but was watchful, and had many unseasonable stools all along. Her urine was little, thin, and blackish; her extremities cold, and somewhat livid. The sixth, no alteration. The seventh, she died in a frenzy.

The woman that lived upon the Lyars Market, after she had been delivered, with a great deal of pain, of her first child (a son), was seized with a violent fever, and immediately from the beginning was thirsty, qualmish, and in great pain about the pit of her stomach. Her tongue was dry; her stools thin and few; and no

sleep. The second day she shivered a little, burned, and had a little cold sweat about the head. The third, was uneasy. Her stools crude, thin, and many. The fourth, shivered again; was worse in all respects; and could get no sleep. The fifth, uneasy. The sixth, no alteration, but many liquid stools. The seventh, shivered again, burned, was very thirsty, and extremely restless. About the evening sweated all over, but it was cold. The extremities were cold too, and could not get warm again. Shivered once more at night. The extremities remained cold. No sleep. A little delirious, but came to herself again presently. The eighth about noon, grew hot, dry, comatose, qualmish, and vomited bilious matter with a little yellow in it. A restless night, and no sleep. A great deal of urine in a gushing manner, and without her knowledge. The ninth, every thing remitted, but the coma did not go off. In the evening she shivered a little again, and vomited a little bilious matter. The tenth, another shivering, an acute fever, and no sleep. In the morning early made a deal of water, that subsided. The extremities were warm again. The eleventh, vomited æruginous bilious matter, and not long after shivered again. The extremities grew cold again. In the evening sweated, shivered, vomited much, and had an uneasy night. The twelfth, vomited much black, fetid matter; hiccuped often; was dry, and uneasy. The thirteenth, vomited much black, fetid matter again; shivered, and about noon lost her speech. The fourteenth, bled at the nose, and died.

This patient was all along loose in her body, and chilly. Her age, about seventeen.

At this part, Fæsius begins with the account of the "Status Pestilens," the *χατασασις λοιμωδης*, of Hippocrates. Haller calls it "Constitutio Temporis Pestilens," and Clifton, "The Malignant State." As this pestilential constitution has by many been considered as a description of the plague at Athens, as given by Thucydides, Clifton has shown, I think conclusively, that Hippocrates has no reference to it, in this detail. It may be interesting to many to read Thucydides' account, with the objections of Clifton, in connexion with this part of the Third Epidemics.—ED.

The year was southerly, showery, and perpetually calm: but, greater droughts than ordinary happening some time before, much rain fell about the rising of Arcturus with the southerly winds. The autumn was gloomy, cloudy, and very wet. The winter southerly, wet, and mild; but a considerable while after the solstice, near the equinox, the weather was very severe; and, even about the equinox, northerly winds set in, and snow that lasted not long. The spring was again southerly and calm. A great deal of rain fell continually to the rising of the Dog-star. The summer was serene and hot, attended with great suffocating heats. The Etesiæ blew faintly and by intervals. About the rising of Arcturus much rain fell again, with the wind northerly. The year being thus southerly, damp, and mild, the winter proved healthy to all but consumptive people, as we shall see by and by.

Early in the spring, with the cold weather that then set in, came a great many erysipelases, some from evident causes, others unaccountably; of a bad sort, and fatal to many. Many complained of pain in their throats, and impediments in their speech; of burning fevers, with frenzies, aphthas in the mouth, tubercles upon the private parts, inflammations of the eyes, carbuncles, disorders of the belly, aversions to food, with thirst in some, in others not; turbid urine, in abundance, and of a bad sort; comas for the most part, and again watchings; crises not at all in many, or with difficulty; dropsies, and consumptions not a few. These were the epidemical diseases, of which there were some ill of every kind, and many never recovered it. The manner of their illness was as follows.

Many had erysipelases (that came from evident causes), upon very slight and trifling wounds, all over the body, especially about the head in those who were near sixty, if they were but a little neglected. Many again, while under cure, had great phlegmons formed, round which the erysipelas spread considerably, and in a short time. In most of them the matter that was separated turned to suppuration, and great fallings off of flesh, tendons, and bones ensued. The humour that was collected there was not like pus, but a certain kind of putrefaction, with a copious running of great variety. Now, wherever any of these happened about the head, the hair of the whole head and chin came off, and the bones were laid bare, and fell off, attended with great discharges. These things happened sometimes with, sometimes without, a fever, and were more terrible than dangerous. For, wherever any of these disorders were digested and turned to suppuration, there most of

them did well; but where the phlegmon and erysipelas went off without any such abscess, there many of them died. The like circumstances happened, whatever part of the body it fell upon in its way. In many a flux happened upon the arm and whole elbow. Where it fell upon the ribs, it affected them either before or behind. Some had the whole thigh, or the leg, or the foot, laid bare: but the most dangerous of these was, when they fell upon the pubes or private parts. This was the nature of their attack, when either ulcers, or any other cause, occasioned the erysipelas. Many of them had it in fevers, before fevers, and upon fevers. To these, where any of them went off by suppuration, or by a considerable purging, or a discharge of laudable urine, it proved critical; but where none of these happened, and they disappeared without any signs, it proved fatal. Thus the case stood among many with respect to the erysipelas in the spring, which continued also through the summer, and during the autumn. The tubercles in the throat were very troublesome too to some persons, and so were the inflammations of the tongue, and the abscesses of the teeth. The voice, when it was vitiated and obstructed, was likewise another sign to many, especially to those who began to be consumptive, and to those who had burning fevers and phrenses.

These fevers and phrenses began early in the spring after the cold weather that then happened, and a great number were laid up with them at that time. They also proved very acute and mortal. The state of the fevers was thus. At the beginning they were troubled with comas, nauseas, horrors, acute fevers, but little thirst, and no delirium. They also bled a little at the nose, and the paroxysms for the most part were upon equal days. About the time of the paroxysms came on loss of memory, great languidness, and loss of speech. The fingers and toes were always cold, but much more so about the paroxysms, and the warmth returned again slowly and imperfectly. They came to themselves again, and spoke; but either a continual coma, without sleep, was upon them, or painful watchings. A great many were troubled with crude thin stools in abundance. The urine was plentiful and thin, without any thing critical or beneficial in it; nor did any thing else of a critical kind happen to those who were thus affected; for they had neither a good hemorrhage, nor any critical separation of what is usual to pass off; but every one died, (as fate would have it,) in a vague and uncertain manner, about the time of the crisis for the most

part; some held out a longer time, but died at last, without speaking, and many sweating. Thus the case was among those who were mortally ill; and there was but little difference in the phrenses. For they were entirely without thirst or madness, as in other phrenses, but were taken with a kind of stupid delirium, and died with the heaviness upon them. There were also other fevers, of which we shall take notice. Aphthas, and ulcers in the mouth, were frequent; and great fluxes upon the private parts, with ulcerations, tubercles, outwardly and inwardly; swellings in the groin; inflammations of the eyes that were humid, of long duration, and painful; besides little tumours upon the eyelids, outwardly and inwardly, called $\Sigma\upsilon\alpha$, that destroyed the sight in many persons. The like happened upon other ulcers, and upon the private parts. There were also many carbuncles in the summer, and other large pustules of the putrid kind, called $\Sigma\eta\psi$; many large herpes's or tetteres, and many complaints in the belly too, that did a great deal of harm. In the first place many were seized with painful tenesmus's, especially children, and those who were under the age of puberty, most of whom died. Many also had lienteries, and dysenteries, but these without much pain. The discharges were of the bilious, fat, thin, and watery kind; and in many the distemper took this turn, sometimes with, sometimes without, a fever. There were likewise cruel gripings and twistings of the guts, with intolerable pain. Many things that were in the body and suppressed were let out, but these discharges did not carry off the pains. What was administered met with great difficulty; for purges were very injurious to most. Of these that were thus affected many died in a short time, and many again held out longer. In a word, all that were ill, whether of acute or chronical complaints, died chiefly of disorders of the belly; for the belly was the general receiver of all. There was, as far as I could observe, an aversion to food in every body, in all the forementioned diseases. In many, especially of this sort, and the like; and among others of those who were mortally ill, some were thirsty, others not. Of those who had fevers and other disorders no one drank intemperately, but with respect to this regulated themselves as the physician would have them. The urine was much, and that not in proportion to the drink taken in, but vastly more; and that which came away was very bad in its quality; having neither thickness, nor digestion, nor was the body well cleansed by it. Whereas in many cases cleansing by the urine

that are good are very beneficial. To the greatest part they now implied corruption or colliquation, disorder, pains, and the want of a crisis. Comas likewise happened, particularly in the phrenses and the burning fevers; not but they happened too in all the other capital diseases, where a fever attended; but in many, a heavy coma followed, or little and gentle sleeps, all the time.

Many other kind of fevers were also epidemical, such as tertians, quartans, nocturnals, continuals, chronicals, erratics, inconstants, and such as were attended with nauseas and inquietude. All these brought with them great uneasiness: for the belly was in most cases much disturbed, horrors came on, and sweats that were not critical. As to the urinc, that was as we have already described it. A great many of them were likewise tedious; the abscesses, that happened here, not proving critical as at other times. Add to this, the crises were universally very difficult, and sometimes not at all; or proved very tedious, especially to these. A few of them were determined in about eighty days; but to the greatest part they went off at random. A few of these died of a dropsy, without being confined to their beds. Many were afflicted with tumours that came upon other diseases, and above all those who were consumptive. For the greatest, most difficult, and most fatal was the consumption. Many of these, beginning in the winter, obliged a great number to keep their beds, while some of them bore it standing. Early in the spring most of those who were laid up died, and none of the rest got rid of their coughs. They abated indeed in the summer, but in the autumn they were all laid up, many died, and most of them were ill a long time. The greatest number of these began to be extremely ill presently after these complaints, and had frequent horrors, continual acute fevers very often, and unseasonable sweats. Many were cold continually: the cold was great too, and they could hardly get warm again. The belly was bound many ways, and presently again became humid; all that oppressed the lungs passing downwards. A great deal of urine was made, but not good; bad colliquations appeared; coughis were frequent all along, and much came away digested and moist, and with tolerable ease. But if they were a little in pain, the discharge from the lungs was then very gentle in all. The throat was not much affected with acrid, nor did salt humours do any harm. What came from the head was viscid, white, moist, and frothy. But the greatest evil of all, in these and other cases, was, what we

have taken notice of before, a dislike to food : for they had no pleasure in eating and drinking, but passed the time very free from thirst. There was also a heaviness in the body, and a coma. A great many swelled, and fell into dropsies, were troubled with horrors, and before they died grew delirious.

Those who fell into consumptions were the smooth, the whitish, the lentil-coloured, the reddish, the gray-eyed, the leucophlegmatic, and those whose shoulders stuck up behind. Nor did women of these kinds escape. The melancholic, and the sanguine suffered too. These were affected with burning fevers, phrenesies, and dysenteries ; the young men, with tenesmuses ; the phlegmatic, with long diarrhoeas ; and the biliary, with sharp and fat purgings. To all the above-mentioned the most troublesome time was the spring, which proved fatal to great numbers ; the summer was the easiest, and fewest died ; but in the autumn, and during the Pleiades, a great many died of quartans.

The summer happening as it ought, is, in my opinion, of great service : for summer diseases cease upon the coming in of winter, and winter diseases upon the coming in of summer. Though the summer that then was, was not well-conditioned, but on a sudden hot and southerly and calm ; yet changing to another constitution or season was of service. And indeed I look upon it to be a great part of the art to be able to consider properly what has been already wrote. For he who knows, and makes use of, these things, does not seem to me capable of any great mistakes in his profession. But then he ought to be well acquainted with the condition of every season, and also with the disease ; the good that is common to the season or the disease, and which disease will be long and fatal, long and safe, acute and fatal, acute and safe ; and likewise the order of the critical days. These things he ought to consider and predict from ; because they are able to supply him. And he who is acquainted with these things will know whom, when, and how to diet, or manage the rest.

THUCYDIDES UPON THE PLAGUE AT ATHENS.

In the very beginning of summer, the Peloponnesians, with two-thirds of their allies, invaded Attica, as they had done the first year

of the war, under the conduct of Archidamus the son of Zeuxidas-mus king of Sparta; and, after encamping, wasted the country about them. They had not been many days in Attica, before the plague first broke out among the Athenians, after having before that visited, as the report went, Lemnos and many other places: but so great a plague and mortality was never yet known, in the memory of man. The physicians were so far from being able to cure it at first, for want of knowing the nature of it, that they themselves died faster than others, as being most familiar with the sick: nor could any other art of man make head against it. All supplications to the gods, and inquiries of oracles, and the like, signified nothing; so that, at last, overcome with the distemper, they left them all off. It began, by report, first in that part of Ethiopia that lies above Egypt, and so came down into Egypt and Lybia, and a great part of the King of Persia's dominions. Athens was seized with it on a sudden, but first in Piræus; which occasioned a report that the Peloponnesians had thrown poison into the wells; for at that time they had no springs or fountains there. Afterwards it came up into the high city, and proved much more mortal than before. Now let every man, physician or private person, say, according to his knowledge, what the origin of this distemper might be, or what causes might be sufficient to produce so great an alteration. For my own part, having been ill of it myself, and seen others that were so too, I shall now declare what the manner of it was, that, if ever it should happen again, nobody who reflects upon it, may be at a loss through ignorance.

The year was universally allowed to be the healthiest and freest from other diseases of any; and, if any one was sick before, all his illness was converted to this. Others, who were in perfect health, were taken suddenly, without any apparent cause, with violent heats in their heads, and with redness and inflammations in their eyes. Their tongues and throats within became immediately bloody; their breath in great disorder and offensive. A sneezing and a hoarseness ensued; and, in a short time, the pain descended into the breast, attended with a violent cough. When it was once settled about the mouth of the stomach, a retching, and vomiting of bilious stuff, in as great a variety as ever was known among physicians, succeeded, but not without the greatest anxiety imaginable. Many were seized with a hiccup, that brought up nothing, but occasioned a violent convulsion, which in some went off presently,

but in others continued much longer. The body outwardly was neither very hot to the touch, nor pale, but reddish, livid, and flowered (as it were) all over with little pimply eruptions, and ulcers; but inwardly the heat was so exceedingly great, that they could not endure the slightest covering, or the finest linen, or any thing short of absolute nakedness. It was also an infinite pleasure to them to plunge into cold water; and many of those who were not well attended did so, running to the wells, to quench their insatiable thirst: not that it signified whether they drank much or little; a great uneasiness and restlessness attending them, together with a continual watching. While the distemper was advancing to the height, the body did not fall away, but resisted the vehemence of it beyond expectation; so that many of them died the ninth and the seventh day of the inward burning, some strength yet remaining; or, if they held out longer, many of them afterwards died of weakness; the distemper descending into the belly, and there producing violent ulcerations, and fluxes of the simple or unmixed kind. For the disease went through the whole body, beginning first in the head; and, if any escaped, where the case was very desperate, this was denoted by the extremities being affected: for it broke out upon the private parts, the fingers and toes; and many came off with the loss of those parts. Some, again, lost their eyes; others were seized, immediately upon their getting up, with an absolute forgetfulness of every thing, not knowing themselves, or those that were most familiar; the appearance, or the nature, of the distemper being greater than words can possibly express, and harder to be borne than human nature is accustomed to. Nor indeed was it any of those diseases that are bred among us, as appeared very plain from this circumstance. For the birds and beasts that feed on human flesh, though many carcasses laid abroad unburied, either came not to them, or tasting died. The manifest defect or scarcity of such fowl was a proof of this; for they were neither seen anywhere else, nor about any of the carcasses: but the dogs, being brought up among us, made the case yet more evident. The disease therefore (to pass over many strange particulars that happened differently in different persons) was in general such as I have described it; and as to other usual distempers, none of them were then troublesome; or, if any appeared, they all centered in this. Some of them died for want of attendance, and some again with all the care imaginable. Nor was there any (to say) certain

remedy, which, upon application, must have helped them: for, if it did good to one, it did harm to another. Nor was there any difference in bodies, as to strength or weakness, to enable them to resist it; but it swept all away, what care or method soever was taken. The terriblest circumstance of all was the dejection of mind in those that found themselves beginning to be ill (for, growing immediately desperate, they gave themselves over much more, without making any resistance); and their dying like sheep, infected by their care and concern for others, increased their despair; the greatest mortality proceeding this way. For, if they were unwilling to visit others through fear, they died by themselves without assistance (by which means many families became desolate, for want of somebody to take care of them); or, if they visited, they likewise died, especially those who had virtue or humanity enough to do any friendly offices: for such out of shame would not spare themselves, but went in to their friends, especially after it came to that pass that even the domestics, wearied with the lamentations of those that died, fell ill themselves, overcome with the greatness of the calamity. But those that were recovered had much compassion on those that were dying, and on those that lay sick, as having known the misery themselves, and now were *in a secure and safe situation: for it never seized the same person twice, so as to be mortal.* Others, therefore, esteemed them happy, and they themselves, through excess of present joy, conceived a kind of small hope never to die of any future sickness.

The bringing provisions from the country to the city was an additional grievance, and equally affected those who came with them into the city. For, having no houses, but dwelling, at that time of the year, in stifling booths or huts, the mortality was now without any form or order; dead men, and those that were just expiring, lying upon one another in the streets, while men half dead lay about every well, desiring a little water. The temples, also, where they dwelt in tents, were also full of the dead that died there: for, oppressed to the last degree by the violence of the distemper, and not knowing what course to take, men grew equally careless both of holy and profane things. All the laws relating to funerals, that had been observed before, were now violated and confounded; every one burying where he could find room. Many, for want of necessaries, after so many deaths before, were become even impudent in the article of funerals. For, when one had made a funeral-

pile, another, getting 'before him, would throw on his dead, and set fire to it: and, while one was burning, another would come, and throwing him upon it that he had brought along with him, would go away again.

The great licentiousness, which was also used here in other respects, began at first from this disease. For what a man would before dissemble, and not acknowledge to be done for the sake of pleasure, he now durst freely own, seeing before his eyes such quick revolutions of things, rich men dying suddenly, and succeeded by others not worth a groat; so that they thought it better to have a speedy enjoyment of their estates and pleasures, as men that held their lives and fortunes alike by the day. As to laborious works, no man was forward to undertake any thing noble or laudable; not knowing whether he should live to finish it; but what any man knew to be delightful, and every way conducing to pleasure, that was made both profitable and honourable; neither the fear of the Gods, nor the laws of men, restraining any. For, with respect to the one, they concluded, from what they saw, that it was all the same whether they worshipped, or not worshipped; all men dying without distinction; and, with respect to the other, no man expected his life would last until the law could punish him for his misbehaviour. But they thought there was now, over their heads, some greater judgment decreed against them, before which fell, it was but fit they should enjoy some little part of life. Such was the calamity that came upon the Athenians, and oppressed them greatly; their men dying of the disease within, and the enemy wasting the country without.

CONCLUSION OF THE HISTORY OF THE PLAGUE AT ATHENS.

Clifton having in his preface attempted to overthrow the opinion of this Plague, being the same as Hippocrates has described under his Pestilential Constitution, his reasons are placed here, for the consideration of the reader.—ED.

“ To correct a mistake that several learned men have run into, I have added (by way of comparison), at the end of the malignant or pestilential year, the account of the plague of Athens by Thucy-

dides, by which the reader will plainly see, that Hippocrates never intended a description of that plague, or of any other properly so called, but only of the raging ill-conditioned fevers, and other severe complaints, that then went about. There are indeed some circumstances concurring with Thucydides, such as the inflammations of the eyes, with sometimes a total loss of the sight; the disorders of the belly, and the private parts, &c.; but then no notice is taken of the violent heats in the head, the bloodiness of the throat, the sneezings and the hoarseness, the vomitings and the hiccups, the plungings into cold water and despondencies, (to pass by many other particulars,) mentioned by Thucydides; circumstances, that it was not possible for so curious an observer as Hippocrates to forget or overlook. Add to this, that the description here given contains nothing uncommon for such a country, or inconsistent with such a sultry wet season, and is supported by cases not at all from Athens, but from places far remote, and more upon the Thracian coast than any where else, such as Thasus and Abdera; places that Hippocrates chiefly resided at. Whereas, if the plague of Athens had been here intended, the cases would have been all related from the very place itself, and in a manner quite different from the present. I therefore conclude, that our learned countryman, Prideaux,^a and all others of his opinion, are very much mistaken, when they look upon this section in Hippocrates, as a description of that terrible plague. But to consider the point a little farther. Thucydides observes, that the distemper broke out first in Lemnos, and many other places, before it came to Athens, beginning (by report) in that part of Ethiopia that lies above Egypt, and so came down into Egypt and Libya, and a great part of the King of Persia's dominions. Nor did it leave the Greek islands till some considerable time after. Accordingly we find a letter from Artaxerxes to Hystanes, the Persian governor of the Hellespont, complaining of the plague being got among his army, and desiring at any rate the assistance of Hippocrates. Now this seems to be the same plague described by Thucydides; and yet,

^a See his *Connexion*, vol. ii. p. 569, the ninth edition, in 1725, where are these express words, viz.: "Lucretius has also given us a poetical description of it (meaning the plague), and Hippocrates has written of it as a physician. For that great master of the art of physic lived in those times, and was at Athens all the while this distemper raged there."

in the life of Hippocrates wrote by Soranus, we find another account very different: for the plague there mentioned, that gained him so much honour, is said to have begun among the Illyrians and Pœonians, and so came down into several parts of Greece. Now the Illyrians were a people that inhabited that part of the country which we call Servia, and Albania, bordering upon Dalmatia, Dardania (or Bosnia), Macedonia, and Pœonia; and the Pœonians bordered upon Macedonia to the south, Illyris to the north, Dardania to the west, and Thracia to the east; so that this plague (if any such there was) seems to have travelled from the north to the south; whereas the other travelled directly contrary, or at least from the southeast to the northwest. I conclude, therefore, that, if the Illyrian story is true, the description here given answers better to the state of diseases then; but that the whole story is false I am more inclined to believe, because the plague of Athens was the only one in those days recorded by men of credit. It is true, the Illyrians might have reason enough to complain of a very sickly season, and other countries might be attacked with the same, or even worse, disorders; all which might proceed from the plague originally, for any thing I can say to the contrary. For, as Thucydides observes, Lemnos and many other places were infected as well as Athens, the skill of the physicians availing nothing; and, if his account be true, the same winds that brought it there (supposing the wind to have had a share in the affair) might easily have carried it farther, Lemnos being but a little step from the Thracian shore one way, and the south parts of Macedonia another; though, in travelling there, the force and virulence of it might be so far broke as to produce no more than a very sickly season. But whether the malignant time here mentioned was actually at the time of the plague, or very near it, this at least is certain, that wet seasons, sultry heats, and calm weather, are always attended with bad diseases; and such was the year now in question; but, for want of a date (a great omission in Hippocrates) the precise time cannot certainly be known, though there is a great deal of room to believe, both from the title itself, *χαταστασις λοιμωδης*, (which, however, Galen suspects as spurious) and the nature of the diseases there mentioned (which certainly were of a very bad, or, if you please, malignant sort), that it was drawn up much about that terrible time, and perhaps the very year of the plague; yet not as a description of the plague itself (for then it would have been *περι λοιμου*),

but only of a malignant year, not many degrees removed from the other."

We now return to Hippocrates.—ED.

In Thasus, the son of Parion, who lived above the Temple of Diana, was seized with an acute fever, which at first was continual, burning, and attended with thirst. He was from the beginning comatose, and again watchful. His belly loose. His urine thin. The sixth day oily urine, with ramblings. The seventh, worse in all respects; no sleep; the urine as before; lightheadedness, together with bilious, fat, stools. The eighth, he bled a little at the nose; vomited æruginous stuff in a small quantity; and slept a little. The ninth, no alteration. The tenth, a remission of all the symptoms. The eleventh, a sweat, but not all over. He grew cold all over, and in a short time warm again. The twelfth, an acute fever; many bilious, thin stools; a thin cloud in the urine; and a rambling head. The seventeenth, great uneasiness, having had no sleep, but his fever did not increase. The twentieth, a sweat all over; no sleep; bilious stools; an aversion to food; and a coma. The twenty-fourth, a relapse. The thirty-fourth, no fever; the body not bound; but he grew hot again. The fortieth, no fever; the body bound, but not long; an aversion to food; a gentle fever again, but in the erratic way continually, sometimes present, sometimes not; for, if it left him or if he was easier, it returned again. What he eat was of the worst kind, and in a great quantity. After the return he slept badly, and was lightheaded. The urine was then thick, but turbid and bad. The body sometimes bound, sometimes lax. He was also continually feverish, had many thin stools, and the *hundred and twentieth day* he died.

This patient's belly was constantly, from the first day, either lax with many bilious liquid stools, or bound with hot and undigested matter. The urine bad all along; and a coma for the most part, with pains, watchings, loathing of food, and a burning fever continually.

In Thasus, the woman that lived by the cold Spring, after being delivered of a daughter, and not cleansed, was taken with an acute fever the third day, and a chilliness. But, long before she was brought to bed, she had been laid up with a fever, and aversion to food. After the shivering, the fever became continual, and acute, attended with a sense of horror or chilliness. The eighth day and

the following she was lightheaded, but came to herself again presently, and had many thin, watery, bilious stools, without thirst. The eleventh, she came to herself again, but was inclined to a stupidness; made a great deal of thin and black urine; and kept awake. The twentieth, was a little cold outwardly, and warm again presently; rambled a little, and kept awake. Her stools as before; and her urine watery, and plentiful. The twenty-seventh, neither fever, nor stool, but not long after a violent pain of the right hip that lasted long. She grew feverish again, and made watery urine. The fortieth, the hip was a little easier; but she had a continual cough, and very humid; no stool; a dislike to food; and the urine as before. The fever not entirely off, and the paroxysms in the erratic way, sometimes present, sometimes not. The sixtieth, the cough ceased without any sign; no concoction appearing in what was spit, nor any separation of what is usual, but the right jaw was convulsed. She was also comatose, and lightheaded again, but came to herself presently. Her aversion to food still continued; the jaw came to itself; the stools were a little bilious; the fever increased, not without chilliness; and the days following she lost her speech, recovered herself again, spoke, and died the eightieth.

This patient's urine was all along blaek, thin, and watery. A coma came on, with fasting, despondency, watchings, anger, impatience, and melancholy.

In Thasus, Python, who lived above the Temple of Hereules, after labour, and weariness, and eareless eating, was taken with a great shivering, and an acute fever. His tongue was dry, thirsty, bilious. No sleep. His urine blackish, with a thin cloud above, and no sediment. The second day about noon his extremities were cold, especially his hands and head. He lost his voice, and could not speak; was short-breathed; in a little time grew warm; was thirsty; had a quiet night; and sweated a little about the head. The third, a quiet day. In the evening, about sunset, he grew a little cold; had a very restless night and no sleep; and voided little hard pellets. The fourth, in the morning early, he grew easy again, but about noon worse in all respects. He was also cold; lost his voice and speeche too; was worse and worse; in time grew warm again; made black urine, with a little floating cloud; had a quiet night, and slept. The fifth, he seemed to be easier, but complained of a weight in the belly with pain; was thirsty; and had an uneasy

night. The sixth, in the morning early, he was quiet, but about sunset his pains increased, and he was worse; but, after a good discharge in the evening from a glyster, slept in the night. The seventh, he was qualmish in the day, and a little impatient; made oily urine; at night was much out of order, rambled, and got no sleep. The eighth, slept a little betimes in the morning, but presently grew cold, lost his speech, and breathed but faintly and less and less. In the evening was hot again, and delirious; but, as the day advanced, was a little easier. His stools simple, small, and bilious. The ninth, was comatose, and qualmish, when he was raised, but not very thirsty. About sunset was very restless, rambled, and had a bad night. The tenth in the morning early was speechless, very cold, very feverish, sweated much, and died.

His pains were upon equal days.

He that had a phrensy and was laid up the fifth day, vomited much green thin matter; was feverish and chilly; sweated much and continually all over; and had a weight and pain in the head and neck. He had also thin urine, with little clouds scattered up and down, that subsided not; thundering stools; rambled much; and got no sleep. The second day betimes in the morning he lost his speech; was very feverish; sweated, but did not lose his fever; trembled all over; and at night was convulsed. The third, was worse in all respects. The fourth, died.

In Larissa, one who was bald was taken suddenly with a pain in his right thigh, and nothing that was applied to it did him any good. The first day an acute and burning fever, which abated a little, but the pain still continued. The second, the pain of the thigh abated, but the fever increased. He was also somewhat impatient, without sleep, cold in his extreme parts, and made a great deal of water, but not good. The third, the pain of the thigh ceased, but he grew lightheaded upon it, greatly disordered, and full of tossing. The fourth, about noon, he died in a very acute manner.

In Abdera, Pericles was taken with an acute, continual, fever and pain. A great thirst succeeded, and a qualmishness; nor could he contain what he drank. He was also somewhat large-spleened, and heavy-headed. The first day, blood came from the left nostril; the fever raged much; and his urine was turbid, thin, copious, without a sediment after standing. The second, worse in all respects, but the urine was thick indeed, and rather subsided; and with respect to his qualmishness he was easier, and slept. The third, the

fever abated. The urine was increased, digested, and had a great sediment. The night was pleasant. The fourth day about noon, a great hot sweat all over. The fever was carried off by it, and returned not again.

In Abdera, a virgin, who lived upon the Holy Way, was seized with a burning fever, thirst, and watchfulness. Her menses came down then for the first time. The sixth day she was very sick at her stomach, high-coloured, shivering a little, and restless. The seventh, no alteration. The urine thin indeed, but well-coloured; the belly quite easy. The eighth, she was deaf, very feverish, watchful, qualmish, shivering a little, but yet in her senses, and made the same urine. The ninth, and the following days, no alteration. The deafness remained. The fourteenth, the mind was disordered, and the fever abated. The seventeenth, she bled much at the nose; the deafness abated a little; but the following days she was qualmish, deaf, and lightheaded. The twentieth a pain in her feet came on; her deafness and delirium went off; she bled a little at the nose, sweated, and lost her fever. The twenty-fourth, she relapsed, and was deaf again; the pain in her feet remained, and she grew delirious. The twenty-seventh, sweated much, and lost her fever and deafness; the pain in her feet remained a little, but in other respects the crisis was perfect.

In Abdera, Anaxion, who lived by the Thracian Gates, was seized with an acute fever. His right side was continually in pain, attended with a dry cough, that brought nothing up the first days. A thirst came on, with a want of sleep, and urine that was well-coloured, much, and thin. The sixth day he was lightheaded, and received no benefit from warm applications. The seventh, was very uneasy. The fever increased, and the pains abated not. The cough was very troublesome, and a difficulty of breathing came on. The eighth, he was blooded in the arm, and that plentifully, as he ought. The pains abated, but the dry cough still continued. The eleventh, the fever abated; he sweated a little about the head; coughed still; and brought away from the lungs something more humid. The seventeenth, he began to spit a little concocted matter, and was relieved; but was thirsty, and the lungs were not well cleansed. The twentieth, he sweated, lost his fever, and after the crisis was easier. The twenty-seventh, the fever returned; and much digested matter came away by coughing. The urine had a large white sediment; the thirst went off; and sleep came on. The

thirty-fourth, he sweated all over, had no fever, and was perfectly freed.

In Abdera, Heropythus was taken with a pain in his head as he was upon his legs, and not long after was forced to lie down. His house was by the upper path. An acute burning fever came on, with a vomiting of much bile at the beginning; a thirst; great uneasiness; and thin black urine, sometimes with, sometimes without, a cloud atop. The night was uneasy; the paroxysms of the fever uncertain; and for the most part out of the common course. About the fourteenth day he grew deaf; the fever increased; the urine, as before. The twentieth, and the following days, he was very light-headed. The fortieth, bled much at the nose, and came more to himself. The deafness remained still, but was less. The fever abated. The following days he bled again often, and a little at a time. About the sixtieth his bleedings stopped; but in the right hip was a violent pain; the fever increased; and not long after pains attacked all the lower parts. It happened too, that the fever was either greater, and the deafness considerable, or that, upon an abatement of these, the pains in the lower parts, about the hip, were stronger. About the eightieth, there was a general remission, but it did not go quite off. The urine was well-coloured, and had a good sediment; and the deliriums were abated. About the hundredth, a great discharge of bilious matter downwards, that did not cease presently. These were succeeded by dysenteric complaints and pain; though in other respects he was very easy. In fine, the fever went off, the deafness ceased, and upon the *hundredth* day a perfect crisis happened in this burning fever.

Nicodemus, in Abdera, after venery and drinking, was seized with a violent fever. In the beginning he was qualmish, heart-burnt, thirsty, with a burnt tongue, and thin black urine. The second day the fever increased. He was also chilly; qualmish; got no sleep; vomited bilious yellow stuff; made the same urine as before; had a quiet night, and slept. The third, every thing abated, and he was easy; but about sunset he was taken with an uneasiness again, and had a bad night. The fourth he shivered; was very feverish; in pain all over; made thin urine, with a cloud in it; and was very delirious. The seventh, easy again. The eighth, all the other complaints abated. The tenth, and the following days, he complained of pains, but not so much as before; and both pains and paroxysms were all along rather upon equal days. The twen-

tieth, white thick urine, that subsided not upon standing; a great sweat; the fever seemingly spent: but about sunset he grew hot again, and had the same pains, with chilliness, thirst, and a little rambling. The twenty-fourth, much white urine, with a good sediment; and a great hot sweat all over, that put an end to the fever, and produced a good crisis.

A peevish, melancholy woman, in Thasus, was taken, after grieving upon some occasion, with watchings, dislike to food, thirst, and great uneasiness, while standing and walking about. She lived near Pylades's, upon the Plain. The first day, as the night came on, she grew fearful, talked much, desponded, and had a little fever. The next morning early was much convulsed, and, upon the convulsions intermitting, was lightheaded, and talked obscenely. Her pains were many, great, and constant. The second day, no alteration; no sleep; the fever higher. The third, the convulsions ceased, but the coma and delirium remained. She waked again, got up, and could not contain herself; was very lightheaded, and very feverish. The same night she had a plentiful sweat, but not all over; the fever however left her; she slept, came to herself perfectly, and had a crisis. About the third day the urine was black and thin, and the cloud in it for the most part round and floating. At the crisis her menses came down plentifully.

In Larissa, a maid was seized with an acute burning fever, attended with want of sleep, thirst, a fuliginous (or sooty) dry tongue, and urine that was well-coloured, but thin. The second day she was uneasy, and got no sleep. The third, had several watery stools, and the following days the like, without fatigue. The fourth, the urine was thin, a little in quantity, with an elevated cloud that subsided not. A delirium at night. The sixth, she bled very freely at the nose; shivered a little; sweated plentifully and hot all over; and the fever came to its crisis. But in the course of the fever, and upon the crisis happening, her menses came down then for the first time, she being a young virgin.

She was all along qualmish, subject to horrors, red in the face, and had a pain in her eyes, with a heaviness in her head. The crisis happened without a relapse, and her pains upon equal days.

Apollonius, in Abdera, was ill a long time, but not so as to be confined. He was a large-bowelled man, had an old pain about the liver a long while, and was at that time troubled with a jaundice, bloated, and of a whitish complexion. Upon eating beef and drink-

ing intemperately, he was at first seized with a little warmth, and went to bed. But upon using milk plentifully, both goat's and sheep's, boiled and raw, and a bad diet withal, all his complaints were made considerably worse. For his fever was exasperated, and of what he took in, very little to speak of passed through him. His urine was thin and little; his sleep, nothing at all; but a bad kind of inflation, a violent thirst, a coma, a painful elevation of the right flank, a coldishness all about the extremities, a little rambling, with a forgetfulness of what he had said, and at last a strong delirium laid hold of him. About the fourteenth day from the time that he shivered, grew hot, took to his bed, and was mad; he bawled out, was greatly disordered, talked much, and then was silent. After this he grew comatose, and had many bilious, unmixed, crude stools. His urine was black, little, and thin; his uneasiness great; his stools various, sometimes black, little, and thin; at other times fat, crude, and acid; and at last milky to appearance. About the twenty-fourth he was easier; in other respects no alteration, but came a little to himself, (whereas, from the time he laid down, he remembered nothing) and presently after lost himself again. Every thing hurried on for the worse. About the thirtieth, he was very feverish; had many small stools; was delirious; cold in his extremities; and dumb. The thirty-fourth, he died.

This patient, during my attendance, was all along disordered in his belly; his urine thin and black; and he was comatose, watchful, cold in his extremities, and perpetually delirious.

A woman in Cyzicus, who was delivered with much difficulty of two daughters, and not well cleansed afterwards, was taken at first with a chilliness and acute fever, attended with a weight and pain of the head and neck. She could get no sleep from the beginning; was silent, sullen, and inflexible. The urine was thin, and without colour. She was also thirsty, and for the most part qualmish and uneasy. The belly irregular, sometimes loose, and sometimes bound. The sixth day at night she was very delirious, and got no sleep. About the eleventh, was mad, and came to herself again. The urine black, thin, and, after a while, oily. The stools many, thin, and turbid. The fourteenth, she was much convulsed; cold in her extreme parts; lost her senses; and had a suppression of urine. The sixteenth, was dumb; and the seventeenth, died.

In Thasus, Dealces's wife, who lived upon the plain, was taken

with a chilliness and acute fever, occasioned by sorrow. She was covered up from the beginning, and, without ever speaking to the last, felt about with her hands, plucked off, scratched, and gathered the nap of the clothes ; cried, and presently after laughed ; got no sleep ; had no stool, though the belly was stimulated with something ; drank a little at the request of others ; made a little thin water ; was but moderately feverish to the touch ; and cold in her extremities. The ninth, was very delirious, and soon after recovered herself, but was silent. The fourteenth, her breathing was deep and seldom, long and short. The seventeenth, another stimulus was used to the belly ; after which what was drank passed through, without any gathering together, or stoppage. She was insensible of every thing ; and her skin was distended and dry. The twentieth, she talked much, and again recovered herself, but was afterwards dumb, and breathed short. The twenty-first she died.

This patient's breathing was all along deep and slow. She was insensible of every thing ; was always covered up ; and either talked much, or was silent to the last.

In Melibæa, a young man, heating himself a long time with drink and venery to excess, was taken with a chilliness, a nauseousness, and want of sleep, but without a thirst. The first day, he had many stools, with a great flux of humours, and the following days many watery ones. The urine was thin, little, and without colour. The breathing seldom, deep, and long. The hypochondres distended, but somewhat soft, and that for a considerable length on both sides. He had also a continual palpitation of the heart to the last ; made oily urine ; rambled moderately ; was composed again and quiet. His skin was dry and distended ; his stools many, thin, biliary, and fat. The fourteenth, was worse in all respects ; rambled, and raved much. The twentieth, was mad ; threw his limbs about ; made no water, and scarce kept his drink. The twenty-fourth, died.

THE SECOND BOOK OF EPIDEMICS.

FÆSIUS, p. 944.

It would seem from Haller's prefatory remarks, that Galen refers to certain books, which he insists must have been formed by Thes-salus, from the common-place book of Hippocrates. The *first section* of the present one, pays attention to the subject of crises, more carefully and better arranged than any of the Hippocratic books. The other sections are entirely promiscuous. In the second section are some imperfect histories of patients, and of diseases, such as angina, &c. Section third contains the Perinthian epidemic; and predictions are intermingled with the history of diseases. In the fourth section, we have an account of the vessels, pretty much like that in the book "De Ossibus." The histories of diseases are introduced; among which is to be found a paralytic affection arising from the use of vitiated grain.^a The two last sections contain predictions, and a mingled mass of other matters.

There appears to be here, as well as elsewhere, much useless variation in the divisions of these books, as given by Fæsius, Haller, Gardeil, and others, dependent, it may be presumed, on the individual fancy of each. Such diversity, however, renders reference more difficult, and appears to be called for by no solid reason.—ED.

Gardeil, in some preliminary remarks on this book, says, that it is generally believed that the second, fourth, fifth, sixth, and seventh books on Epidemics, are not productions of Hippocrates; at least the same order that exists in the first and third, is here defective. We have, however, a commentary by Galen on the sixth book, which he looks upon as being the work of the Father of Medicine. In my opinion, continues Gardeil, the fifth and seventh books are quite as interesting as the sixth, in consequence of a considerable number of surgical observations. We might even be authorized,

^a Analogous to what has been ascribed in later times to the use of ergotated rye.—ED.

he adds, to consider all the five books above-mentioned, as the real works of Hippocrates, since we find in them the principles and facts precisely as we read them in the other treatises that are usually acknowledged to be his, such as the one "De Humoribus," &c. This, however, by no means proves that all the seven books on Epidemics, wherein so little order is preserved, have emanated from the same author to whom we are indebted for several of those we have given, yet all are generally regarded as being nearly of the same period, and as emanating from the same school. Many general propositions are given in an aphoristic form, accompanied with numerous observations.

Clifton, in the beginning of this book, leaves out several pages, amounting to nearly the whole of the first section of Fœsius, stating in a note, that it consists of "aphorisms of various kinds that noways agree with the title of the book, and so are placed under their proper heads in other parts of this work," &c., to which he makes reference.

I cannot commend his translation on many occasions; a better one, and more accurate to the text, is a desideratum.—ED.

In Cranon, in the summer, were carbuncles. It rained, during the excessive heats, very much, and continually, but more with the southerly winds. Under the skin were thin sharp humours, which, being confined, grew hot, and caused an itching; after which pustules broke out, like what comes upon a burnt part, and occasioned a sense of burning underneath.

In this city inveterate pains are attended with cold; fresh ones, with heat; and most of them from the blood. Those from the hip are likewise cold.

A woman had the heartburn, and could not be easy; but upon steeping the finest flour of barley in the juice of quince, and eating but once a day, she vomited no more; as was the case of Charion.

Changes, where the change is not for the worse, are of service; as in fevers to vomit after taking a medicine. But where a vomit terminates in something simple and unmixed, there corruption is denoted, as in the case of Dexippus.

Serapis swelled after a looseness, but the exact time of the itching I know not, though it was not long. An abscess in the flank, that mortified, was her death.

Stymargus's wife swelled too, after recovering from a short looseness designedly stopped, and a miscarriage of a female child four months old.

Moschus, who was much troubled with the stone, had a little tumour like a barley-corn upon his upper eyelid in the part next the ear, which ulcerated inwardly. The fifth and sixth day the matter that was pent in broke out, and the complaints below were taken away. He had also a swelling of the gland by the ear, and another in the neck, right against the upper swelling.

Aristæus's wife's brother fatigued himself upon the road when he was hot, and so brought little black swellings, or tubercles, upon his leg, with a continual fever. The next day he sweated, and after that upon the other equal days, without being quit of his fever. His spleen was a little suspected; he bled often from his left nostril, though but little at a time; and was freed. The next day a tumour appeared behind the left ear, and the day after another behind the right, but this was less and grew warm. Both of them subsided gradually, without coming to suppuration.

He that came from Alcibiades had, a little before the crisis, a swelling in his left testicle from a fever. His spleen was large too, and his crisis happened upon the twentieth day. After this he grew a little warm now and then, and his spitting was somewhat florid.

She, who brought up little or nothing to speak of with her cough, was seized with a palsy in her right arm and left leg, without any alteration in her countenance, or understanding, or any other part; and even here it was not vehement. About the twentieth she began to go better, perhaps from the breaking out of her menses, which was then the first time; for she was a young virgin.

Apemantus, and the builder's father that broke the head, and Nicostratus, did not cough at all, but on the contrary were in pain about the kidneys. Being asked, they confessed they were always eating or drinking.

Hercules swelled the eighth day of his illness.

To one that suckled, pustules broke out all over the body, which, upon leaving off, were dispersed in the summer.

The currier's wife, that made the leathers, after she had been brought to bed, and to appearance perfectly well delivered, had a part of the membrane, chorion, left behind, which came away the fourth day with great difficulty; a strangury being upon her.

Soon after she proved with child again, and had a son. This course lasted many years, and at length her menses stopped. When she was brought to bed, her strangury gradually left her.

Another woman had a pain in her hip before conception, which was cured by conception. The twentieth day after the birth she was in pain again, and delivered of a son.

Another woman with child had little pustules upon the lower part of the right leg, and the thumb of the right hand, in the third or fourth month of her pregnancy; to which the chips of frankincense were applied. But whether she was brought to bed or not, I cannot say; for I left her in her sixth month. She lived, as I remember, at the house of Archelaus, by the precipice.

Antigenes's wife, who lived with Nicomachus, was delivered of a child all over fleshy, but distinct in the principal parts, and about the bigness of four fingers. It had no bones, and was afterwards thick and round. The mother was asthmatic before her lying-in, and in her delivery vomited a little matter like that which comes from the boil called a felon.

She that was delivered of two daughters after a hard labour, and was not well cleansed afterwards, swelled all over, and became very big in her belly, but fell away in her other parts. The reds continued for six months, and then the whites the rest of the time, in great quantities. These evacuations hindered her conception; but her menses came again pure, unmixed, and in a proper manner.

In lienteries of long standing, an acid belching, where nothing of this kind has happened before, is a good sign; as in the case of Demænetas. Art at this time should try to imitate nature; for such disturbances make a great alteration, and perhaps acid belchings will carry off a lientery.

Lycias, who was cured by drinking hellebore, was at last attacked with a painful swelling of the spleen, and a fever; and the pain reached up to her arm. The splenic vein in the elbow was opened, and beat often. Sometimes again it was not opened, and the pain went off spontaneously, or with a sweat. Upon this going off the spleen reached to the right side; her breathing was doubled within, and not great; she grew lightheaded; was covered up; troubled with wind, but nothing passed downwards, nor by urine; and, before she was delivered, she died.

The swellings, that were produced by a great flux of humours on

each side the throat, did not ulcerate, but passed off to the left ; the spleen was affected with pain, and there was no crisis.

Hieron's crisis was the fifteenth day.

Cous's sister had a swelling upon her liver like the spleen, and died the second day.

Bion bled at the left nostril, after making a very great quantity of urine without a sediment ; his spleen being hard, and gibbous. He got over it, but had a relapse.

Those who had the quinsy were thus affected. The vertebræ of the neck turned inwards, in some more, in others less, leaving a manifest cavity outwards ; and here the neck upon touching was painful. It was also somewhat lower than the process called the tooth, and not altogether so acute. In some it was very evident by the greatness of the circumference ; but the throat was not inflamed, except by the tooth above-mentioned, but subsided. The parts under the jaws swelled, but not as when inflamed ; nor were the glands at all inflamed, but in their natural state. The tongue indeed could not easily be stirred, but seemed larger and more prominent ; and the veins under it were very evident. They could not swallow, or but with great difficulty ; and, if violence was used, the liquor returned by the nose ; through which part the voice came likewise. The breathing was not attended with great elevation of the shoulders. In some the veins in the temples, head, and neck were tumefied ; and in these, where the pains were renewed and augmented, the temples grew a little hot, though in other respects they were not feverish. The greatest part kept clear of suffocation, unless they desired to swallow their spittle or something else ; nor did the eyes sink at all.

Where the tumour affected not any one side, but came directly forward, none of these, so far as I remember, became paralytic, but all recovered. Some grew easy in a very short time, but the greatest part continued forty days, and that without a fever. Many had some remains of the tumour a very long time, as appeared from their swallowing and their voice. The wasting of the uvula was a proof that the distemper was not quite gone off, though they seemed to have nothing bad about them. Where the tumour appeared sideways, there a palsy followed in the part from whence the vertebræ inclined, and they were drawn on one side. These were most evident in the face, the mouth, and the septum of the uvula. Add to this, that the lower jaws were changed in propor-

tion. The palsies did not affect the whole body, as in other cases, but stopped at the hand of the quinsy-side. What they spit was digested, and a hoarseness followed. Where the tumour was direct, they also spit. But where a fever attended, there the difficulty of breathing was much greater, the spittle could not be contained in speaking, and the veins were more tumefied. The feet, which are coldest of all, were remarkably so at this time; and those, who died not immediately, were unable to stand upright: but those, that I was acquainted with, all died.

Coughs began the fifteenth or twentieth day about the winter solstice,^a from the frequent changing of the southerly and northerly winds, and snowy weather; some of which lasted but a little time, others longer; and were succeeded by peripneumonies in abundance. Many had a return again before the equinox, forty days for the most part from the beginning. In some indeed they were very short, and went off well; in others, inflammations of the throat, quinsies, palsies, and that disorder of the eyes called nyctalopia, happened, especially among children. The peripneumonies were very short; but inflammations of the throat came at last after coughing, or else held them a little while in the room of the cough. These were of short duration, especially the disorder of the eyes now mentioned; but the quinsies and palsies were either hard and dry, or little, and seldom attended with digested spittings. Some indeed brought away a great deal. Where any took more than ordinary pains in speaking, or fell into a shivering, there a quinsy was generally the consequence. Where any used their hands much, their hands only were paralytic: but where they rode, or walked much, or exercised their legs any other way, there paralytic weaknesses fell upon the loins or legs, with a weakness and pain in the thighs and shins. The hardest and most vehement coughs were such as ended in palsies. All these things happened in the relapses, but not very much in the beginning. In many they remitted about the middle, but did not leave them entirely, and appeared again at the return. Where the voice was broke with coughing, there the

^a "This is the seventh section of the sixth book of Epidemics; a section entirely independent of the rest of the book, and of a piece, in some measure, with the observations we have been just now seeing. Whether he means fifteen or twenty days before or after the winter solstice, does not appear from the text."—CLIFTON.

Clifton employs too great a license on many occasions—as here, and in not unfrequently leaving out portions of the text.—ED.

greatest part escaped a fever, and some had it but a little. Add to this, that neither peripneumonies, nor palsies, nor any thing else appeared in this case, but the crisis was determined by the voice alone. The disorder of the eyes above-mentioned was as when it comes from other causes, and affected children most. The black of the eye had a great variety, where the pupils were small; but in short it was generally black. The eyes were rather large than small, and the hair straight and black. Women were not equally fatigued with coughing, but a few had fevers. Of these very few came to peripneumonies, and such as did were among the elderly sort; all of whom recovered. The reason of this was, in my opinion, their not going abroad so much, and their not being at all so liable to be seized as men. Quinsies, and those of a very mild kind, happened to two free women, but among the slaves frequently, and, where they were violent, they proved fatal very soon. Many men were also seized, some of whom recovered, others died. In a word, those who were able but to drink had a very mild and easy time; those, who could not speak distinctly besides, had a more troublesome and tedious one. Those, whose veins in the temples and neck were swelled, were somewhat bad; and those, who breathed with great elevation of the shoulders, were very bad: for these grew hot also. The disorders were thus ally'd, or determined, as here described. The first happened without the last, but the last not without the first. They died very soon, after shivering now and then as in a fever. As they were not oppressed with frequent motions or risings to stool, I tried what stimulating the belly, and what bleeding would do, but nothing was of service to speak of. I also bled them under the tongue, and some I gave a vomit to. These things happened always in the summer, as many other things did of the eruptive kind. So painful ophthalmies, when the drought was greater than ordinary, were very common.

Swellings of the glands were likewise common, because the liver was inflamed and out of order; and where they proceeded from an artery ill-disposed, as in the case of Posidonius, it was a bad sign.

We came to Perinthus much about the summer solstice. The winter had been serene and southerly; the spring and summer very dry, to the setting of the Pleiades; or, if any rain fell, it was in small drops. The Etesiae blew but little, and that not constantly. In the summer many burning fevers raged among the people;

during which they were free from vomitings, but subject to thin, watery, frothy stools in abundance, without bile, but not without a sediment now and then in that that was set by, and in that part of it which was exposed to the air. Now, where no alteration happens at any time, as to the appearance of the excrement, it is a bad sign. Many were comatose and lightheaded in their fevers, and some became so after sleeping, but recovered themselves entirely upon getting up. They elevated their shoulders in breathing, but not much. The urine was thin in most, and little in quantity, but in other respects not without colour. Bleedings at the nose were very rare; and so were swellings behind the ears; of which more notice will be taken afterwards. There was no swelling upon the spleen, nor upon the right hypochondre; neither did any great pain, or vehement distension attend it, but yet there was something of an indication, and the crisis happened for the most part upon the fourteenth day, partly by sweat, partly by shivering, with very few relapses. During the drops that fell in the summer, they began to sweat in their fevers, and some fell into them from the beginning without any injury; others about this time, and the crisis went off this way. In the summer fevers, about the seventh, the eighth, and the ninth day, little miliary roughnesses, very like the bites of gnats, appeared upon the body, without any great itching. These lasted to the crisis; but none of the men had them that I saw; nor did any of the women, that had them, die. Their appearance was foretold by a thickness of hearing, and a coma, where they were not very comatose before. These complaints did not last the whole year, but in the summer and to the setting of the Pleiades they were comatose and sleepy, but afterwards more watchful. Nor in fine did they die during this constitution or season. The purging could not be checked even by diet; but one might imagine that an irrational method of cure might be serviceable, though the discharges in some were very great, occasioned by lying on a bed in the cold; for cold ulcerates. The warming such bodies ought to be gradual, without offering any violence to nature; and as to those who are troubled with signs or complaints of this kind, whether more or less, viz., gaping, coughing, sneezing, yawning, stretching, belching, and flatus, all such tend to destruction.

Zoilus, who lived by the wall, was seized with an acute fever from a digested cough. His face was red, and his body bound, unless when loosened by art. His left side was painful, and the left

ear very painful ; the head not so much. Spitting continually a somewhat purulent matter, he could not get well, but in other respects had a crisis, and discharged much matter by the ear, about the eighth or ninth day. The beginning of the ninth the pain of his ear ceased ; but how the crisis could be without a shivering I know not. About his head was a great sweat, and about his ear and left side a fixed burning heat. With the pain of the ear above, the other pain ceased, especially about the shoulder-blade ; but first came on a great spitting, which at the beginning was florid, and so on to the seventh or eighth day, and after that difficult and painful. The belly was bound till about the ninth or tenth day ; the pain was quite removed, the swelling abated, and little sweats came on, but not critical, as appeared from other circumstances, and the going off. For, when the pain of the ear began, the belly was loose ; the abscess from the ear was the ninth, and the crisis the fourteenth, without any shivering the same day. Add to this, that when the ear broke, the spitting became more copious and more digested ; but sweats and tetter about the head lasted long, though they dried up (in a manner) the third day.

Whatever disappears without the proper signs makes the crisis difficult, as in the erysipelas that happened to Polemarchus's maid.

Scopus, upon an acrid, saline, biliary, distillation from the head, an inflammation of the chops, and a bad regimen, was bound in his body, and seized with a continual fever. His tongue was dry ; his sleep gone from him ; the rim of his belly violently, but equally, distended, the distension proceeding gradually to the bottom of the right side ; his breathing, pretty frequent ; his hypochondres in pain, both in breathing and turning ; and he brought away, without coughing, a thickish matter. Upon taking peplum, the pain went off from the hypochondre, but nothing passed through. The next day two suppositories put up appeared no more ; but the urine was thick and turbid, with a smooth and even sediment. The turbidness occasioned no stool ; the belly grew softer ; the spleen was swelled, pointing downwards ; and his drink was mead with vinegar. The tenth, a little watery blood came from the left nostril, which gave him very little relief. In the sediment of the urine was something whitish and thin, sticking to the vessel, that was neither like, nor very unlike, seed, and continued so some little time. The next day (the eleventh), the crisis came on, and he lost his fever. His stools were somewhat viscid, and mixed with bile as they

came away. His urine was a great relief to him, both as to quantity and sediment, which, before he began to drink wine, was a little like thin phlegm. Though his stools were little upon the eleventh, they were at the same time viscid, stercoraceous, and turbid.

Query? Whether such a discharge is critical, as in the case of Antigenes in Perinthus?

Hippocratus's wife, after a quartan of a year's standing, was taken with a swelling, and was manifestly coldish with it. It went all over her body; a sweat followed upon it, and a crisis. Her menses afterwards came down in great abundance, continued longer than usual (having been stopped before), and seemed unwilling to give over.

In hemorrhages, attended with pulsations, the figure or position of the part is to be studied; and, if they happen in very depending parts, they are always to be elevated. So moderate ligatures in blood-letting promote the evacuation, but violent ones suppress it.

Those who are of a sanguine and somewhat bilious nature are subject to sour belchings, and perhaps at last fall into the black jaundice.

In Ænus, those who lived continually upon leguminous food, whether men or women, became infirm in their legs, and remained so. And those who lived upon vetches, or tares, complained of pain in their knees.

In order to recover the colour and fuse the humours, we should study to put a man in a violent passion; and, upon other occasions, to bring on cheerfulness or timorousness, and the like.

If the whole body is out of order, the cure should be general; if otherwise, particular.

Stymargus's servant, the Idumæan, upon a distortion of the mouth of the uterus, in her being delivered of a daughter, was seized with a pain in her hip and leg, which grew better by bleeding in the foot; but her body trembled all over. We are therefore to consider the occasion, and the beginning of that occasion, in diseases.

In the fourth section of this second book, we find that from the constant use of some kind of grain, [“ex assiduo leguminum usu, feminæ et masculi, crurum impotentes facti sunt, ac vitam degreunt.”—Fœs., Hal.] several symptoms were induced, not dissimilar to those produced from ergoted rye.—ED.

THE FOURTH BOOK OF EPIDEMICS.

Fæsius, p. 1120.

Of all the books on Epidemics, says Haller, this one to me appears of the least importance. All is intermingled and confused: imperfect histories of diseases, and aphorisms inadequately confirmed. Some few things appear, which possibly were written by Hippocrates, or were transcribed from him. Galen refers it to the Collectanea of Hippocrates, edited without the corrections of Thessalus,—nor is it unlikely. Much is interspersed respecting the seasons, and the atmospheric changes. Mention is made of the Cynic, who called the author to a patient. Now, as Diogenes was posterior to Hippocrates, and was also the founder of that sect, it is by many supposed, that the author of this book must be some physician posterior to Hippocrates.

Gardeil, in a note to this book, says, it is difficult to determine the country in which the patients herein mentioned are to be assigned, since this is not expressly mentioned. The same may be said of the books that follow. Nor must we, from the title of Epidemics, believe that they are confined to such diseases. They are rather to be viewed as a choice collection of observations.

Outline of contents.—Metastasis of certain humours after the vernal equinox; notice of various patients, some of them of interest; relapses frequent after the autumnal equinox; the state of the atmosphere, and the diseases in winter; frequent abortions; other cases. State of the urine in different persons; notice of the state of the sick towards the end of autumn; interesting case of a young man attacked with copious epistaxis on the third day of his illness, continuing till the sixth, with delirium and coma on the seventh. He seems to have surmounted this, and had a relapse, and that more than once. A discharge from the left ear of a viscous, thick, and ichorous matter, fell upon the teeth, inducing great destruction of the parts adjoining, viz., the palate bones, and upper jaw, and

septum nasi, with other effects; the result is not mentioned.—Crises, &c., with detached remarks and cases. A cursory notice of a *large star* or meteor,^a followed by an earthquake. Menstruation during pregnancy not uncommon; case of delivery on the seventh day of seventh month; the woman goes out in four days; injury from, &c. Another case of injury to the jaws and teeth; various cases; a curious one stated of a woman, whose mouth was twisted to the right side, but which was turned to the left in the fifth month of pregnancy. A slave relieved from a swelling and tension of the belly by the return of menstruation, after a suspension of *seven* years. Observations on errhines, on tumours, on sciatica, &c.; peculiarities or diversity in the onset of diseases; observations on the intestinal evacuations, &c. Diseases occurring at *Aeno* and elsewhere; various results of cough in this state of the air; nyctalopia; decay of the teeth; expectoration; some few aphoristic remarks towards the conclusion.

After the equinox and the setting of the Pleiades, a sort of corroding mucus, that opened the head, broke out above the ear; but in him who was with Leocydes, upon the foot; and in Phanodicus, upon the toes by the sole.

He, whose tibia was cut, had a blackness come upon the part. The ulcer was large on the outside, and the discharge from the hinder part. When it was cleansed, he was seized with a pain of the side and left breast opposite to it, grew feverish, and died of his fever.

The ropemaker complained of a very bilious disorder; and, upon applying caustical (or burning) remedies, he lost a great deal of blood downwards about the equinox.

A very old man, who had a great abscess, held out not above fourteen days.

He, who was marked and burned by Antiphilus, was freed from a bilious ardent fever (of that kind which is called $\tauυφος$) the seventh day. Three days after the crisis or thereabouts he spit blood, recovered, and had a relapse afterwards. His first crisis after this was, as it ought to be, about the setting of the Pleiades; and after

^a Sydus insigne visum est, quinto autem post sextoque die terrae motus extetit. Hal. ii. 255; Fœs., 1128.

their setting his biliousness extended to madness. Another crisis happened the ninth day without a sweat, and he got over it.

The Chalcidonian, who was brought from the gates to the market-place, about the equinox, being in pain from a rupture about the right breast, spit up now and then a pale greenish matter. The belly was in good order. A sweat began the seventh, which lasted for the most part to the eighth, and the crisis happened the fourteenth. About the fortieth, swellings appeared behind both ears: nor was it unlikely that a suppuration should follow, though it did not.

Aristodemus was burnt upon his breast; and so was the son of Philis, for an abscess that came after a fall; but he had had a pain higher before this.

After the autumnal equinox relapses happen, and at other times to the winter solstice.

After the summer solstice, the wife of Achelous miscarried the sixth day, being full of blood and chilly. She sweated afterwards, and had a crisis the fourteenth. How many months gone with child I know not. Twenty days after this she said she miscarried of another male child; but, whether she said true or no, I cannot tell.

About the winter solstice the wind was northerly. Jaundices of very deep colours appeared, sometimes with a chilliness, sometimes without. The tongue was burnt up the third day. About the sixth and seventh, great disorders that lasted long. The fourteenth, an astringency in the belly that could not be removed by physic; and no sweats, as is usual in fevers. In some the spleens were small, extended to the right hypochondre, and rumbled upon being touched. Hemorrhages succeeded, and such depurations by urine, but more especially by stool (for the belly had been long bound), as produced a crisis. Where these things did not happen, but the spleens were tumefied, they bled at the left nostril.

After the solstice, rough winter weather, with northerly winds, and in a short time southerly, for fifteen days; and then abundance of snow for fourteen days more. About this season deep-coloured jaundices came on, that terminated not in a clear and evident manner, but returned again. After the snow came southerly winds and gentle showers. Runnings at the nose ensued, with and without a fever. In one person, who had been in moderate pain before, it fell upon the teeth on the right side, the eyebrows, and the eye. They

were hoarse too; the throat was inflamed, and the glands called $\sigmaπογγαί$ (amygdalæ) swelled, attended with soft swellings about the ears and jaws, that subsided with the fever. Many of these happened above and on each side, at the beginning of the fever; and some had the tonsils swelled in the autumn and the winter. Add to this, branny foulnesses of the skin came on; and many women miscarried all kind of ways, and had hard labours.

A maid, who had a crisis the sixth day, had a relapse the sixth, and another crisis in six days. And in six or eight days all the crises happened at that time.

About the setting of the Pleiades, the wife of Meander, the blind man, spit from the first a pale greenish matter, and soon after, about the sixth day, purulent. The liver swelled, and she had a little purging. What she spit was in a small quantity, white, broad, and like purulent flesh. She had an aversion to food, and died about the twentieth.

Thestor's servant, in the neighbourhood, was taken with a bilious severe purging, and a distension of the hypochondres, occasioned by something that was caustical. The sixth day after the purging was stopped, she had one large thin stool, fell into a sweat immediately, and had a crisis, without any more purging. The same hour she shivered and grew feverish, but it went off again the same hour.

The wife of Thersander, who was not very leucophlegmatic, fell into an acute fever upon suckling. Her tongue, as other parts were burnt up, was likewise burnt at the same time, and became rough like thick hail. Worms also came out of her mouth. About the twentieth she had not a perfect crisis.

About the setting of the Pleiades, Metrophantus's son, who was wounded on the head with a brickbat by another boy, was taken with a fever twelve days after; occasioned by rubbing the parts about the wound in cleansing it. A coldness succeeded, and the lips swelled immediately, but the skin beyond the ulcer was in many places very thin. Upon trepanning without delay, neither pus came out, nor was the patient relieved; but upon the left jaw, by the ear, (for here the wound was,) there seemed to be a collection of matter. This, however, went off too without suppuration, and there was immediately a collection in the right arm. The patient died the twenty-fourth.

After the setting of the Pleiades, he who had a pain in his ear lost his speech twenty days after, and became paralytic on the

right side, without a fever, but not without sweating. The right ear and the right eye gave way a little, and drew something from the lower part. The eye was distorted to the left with a great deal of pain; the neck became hard, and within three hours was equally painful.

After the setting of the Pleiades, the servant of the Attican, who had been ill with a quartan, had a stupid foolishness fixed upon him.

Another at the same time was taken with a true typhomania; which, upon the hips and legs becoming painful, went off; but what day I know not.

About the same time chillinesses; vomitings; and, after the crisis, aversions to food; biliary discharges; great, hard, painful spleens, and likewise hemorrhages were the complaints of some; and of others, at the same time, hemorrhages from the nose of a pale greenish colour, occasioned by the spleens.

In Cranon, the wife of Nicostratus, who was seized with a fever, complained at once upon the fourteenth day of a paralytic disorder (or imbecility) in her neck and other parts. She had had no stool to the tenth; breathed often and little; could not contain herself, but felt about with her fingers; was delirious, sweated, and had her neck, mouth, eye, and nose drawn to the right side. The sediment in her urine was white, like pulse, at one time; at another, white, stringy, and membranous; and at another, somewhat pale with a greenish cast, like the meal of lentils. Sometimes again the surface would be fat and greasy, and that in a heap, resembling sheep's wool; and not much dispersed, as a scattered cloud appears in urine. After this her urine would have no sediment at all, but something of this kind. Again, it would have some such sediment, at one time broad and scattered up and down; at another, turbid. Sometimes the cloud would resemble a blackish cloud of some consistence; at another time it would be soft and thin. Again, it would be thin, and of this kind; at another time, like horses' urine; and at another, dark and shady.

The lad, that was first taken delirious, made thin clear urine; and his evacuations the other way were thin and plentiful, without bile. His tongue was very rough; his fever burning; his belly tumefied; and he could get no sleep. In his ravings upon the eighth day (if I mistake not) he behaved very wantonly, getting up, fighting, and talking very obscenely, contrary to his usual manner. Upon making a great deal of thin water in a gushing manner (for

it had been suppressed), sleep came on, together with a continual sweat, that seemed from the circumstances to be critical, much about the tenth day. After this his madness returned, and he died suddenly the eleventh; occasioned (I imagine) by his drinking much neat wine a little before his madness. His age was about twenty.

In the autumn, Eumenes's wife vomited black bile, as was also evident from the smell. A fever ensued with chilliness, heartburn, and little biliary vomitings, in which came away a worm. Her stools were thin all along before the setting of the Pleiades, and stopped about that time.

Hemorrhages; short fevers, that returned immediately for a little while; aversions to food; extreme languors and lassitudes; nausea and heartburns happened about the same time, together with a discharge of worms about the crisis, shiverings, and biliary complaints.

The young man that was a stranger bled much at the nose the third, the fourth, and the fifth day; the sixth it stopped, and a moderate delirium followed. The seventh, no stool; a comatose disorder. The third day a relapse; the belly loosened; the urine I saw not. About the crisis things were as they ought. But about the setting of the Pleiades southerly winds set in, with gentle showers. The young man had then a great many mucous, biliary, digested, viscid stools; and a violent fever continually, with a dry tongue. The sixth day it came to its crisis. The seventh it returned again, and went off the same day with a trembling. The sixth day there was a glutinous thick discharge from the left ear.

The boy, that had the phagedænic ulcer, had his lower teeth, and the fore-teeth of the upper and lower jaw fall out by suppuration, and a cavity was left there. Now, where the bone of the palate comes away, the nose sinks in the middle: and where the upper teeth before, the end of the nose becomes broad. The fifth from the fore-teeth has four roots, two of which are united to both the next teeth, and all the extremities turned inwards. The third tooth is more liable to suppuration than all the other, and to occasion thick rheums from the nose, as well as pain in the temples. This was eaten away, especially the fifth, and in the middle was a tubercle of the two fore-teeth; the less was first eaten away in the inside by the two next. The seventh had a thick sharp root.

The Athenian boy had a pain of his tooth, the left side below, the right above, that was carried off by an abscess in the right ear.

After the Pleiades the weather was mild, cloudy, and misty. The crises happened upon the fifth, sixth, seventh day, and even later. The fevers were subject to return, to be erratic, to be bilious, and attended with aversions to food. Dysenteries also, with aversions to food, and vehement fevers, were complained of. About the setting of the Pleiades the southerly winds came strong, attended with hemorrhages, and fevers nearly resembling tertians, besides others of another kind, in which the patient is cold and shivering perpetually. They call them *Ηπιαλα*.

He that belonged to the shoemaker bled plentifully, purged a little, and had his crisis upon the seventh, with a shivering.

He that lived at the last public house bled plentifully the fourth, and immediately was lightheaded, bound in his body, and his hypochondres hard and painful. By means of a suppository the sixth day he had a yellow bad stool. The seventh in the morning early, was exceedingly restless, bawled out greatly, and had a pulsation of the vessels about the navel.

In the acutest fevers the pulsations are oftenest and strongest, as the paroxysms are in every disease, towards the evening.

With respect to the beginnings, the paroxysms, the first of the morning, the continuation of the distemper, and the season of the year, are to be taken into consideration.

The wind was southerly after the setting of the Pleiades. Crises came the fifth, then an intermission for one day, and a return the next. Eruptions of a soft and lax kind, like bladders, or like the effects of the prickly acanthus, also appeared. About the same time a great roughness came upon the skin, but without itchings or weepings, especially now. There were also tetterers above the skin, like what happened to Pythodorus's wife, and him who kept the public house; not without a fever. But as to Pythodorus's wife, she was seized, pretty near the beginning of her fever, with a great weakness in the hips.

After the setting of the Pleiades came chilliness and hemorrhages from the nose.

The shoemaker had his crisis the seventh, an intermission one day, the next a return, and another crisis the fourth.

One who belonged to Leocydes, had his crisis the seventh; and another the fourth.

Moschus bled plentifully from the left nostril the ninth, and a little from the right; had his crisis the fourteenth, as he ought; but

at the beginning was much disturbed. The seventeenth, was guilty of mismanagements in diet. The nineteenth at night arose a small tumour on the right ear, hard within, but a little soft without, and painful without remission.

In those who are very bilious, especially where a suppuration is, what comes away by purging is like the ink of the cuttle-fish. Such was the purging of him who had the cupping-glass applied, when his hip was in pain. It removed downwards into his leg, and he was easy.

He who fell from the horse of clay, and had a cupping-glass applied immediately, complained of an inward burning. The twentieth, upon its breaking out again afresh, a hemorrhage ensued, with a discharge of feculent corroding matter.

The Tenedian woman miscarried the fourth day of a child, that, as she said, was thirty days old. She had also a loose small stool, a burnt tongue, and a crisis the fourth.

After the setting of the Pleiades disorders of the spleen came on, and to the fifth day hemorrhages with a crisis. Upon the seventh, the urine was like the water in which tares have been washed, all of a piece, and after that clear. A relapse followed. Megaris's son had also an intermission, and that without a hemorrhage, but the urine was white, thick, and all alike, as in Artigenes's case.

About the winter solstice a great star^a appeared, and the fifth and sixth day after, an earthquake.

^a "As to the great star that is said, in the fourth book of Epidemics, to have appeared about the winter solstice, attended with an earthquake, all the information I have been able to get (and for which I am very much obliged to that most ingenious and learned gentleman, Mr. Machin, Astronomy Professor at Gresham College, and Secretary to the Royal Society) amounts to this, viz., that there were two comets in the days of Hippocrates, and both of them attended with an earthquake. The first appeared about the time of the winter solstice, in the month Gamelion, in the second year of the 88th Olympiad, i. e. in the 427th year before Christ, the 5th year of the Peloponnesian war, and the 33d year of Hippocrates's age (according to Soranus's account of his birth); Eucleis (or Euclides, the son of Molon), the successor of Diotimus, being then Archon of Athens. See Arist. Meteorolog., cap. 6, lib. i. and Joh. Philopon. Meteorol. Arist., f. 96, p. 2, edit. Ven. 1551.

"The other was a great comet, called by Aristotle ὁ μέγας κομήτης, i. e. the great comet, to distinguish it from all others. This appeared also in the winter in a clear frost, about sunset, and was attended with the earthquake and inundation of Achaia, that destroyed so many places and cities mentioned by Senecca (nat. quæst. lib. 7,) and others; Aristæus (or Asteus, as he is called by some) being then Archon of Athens, viz., in the fourth year of the 101st Olympiad, i. e. in the 373d year before

Antigenes's wife, who was in Perinthus, remained asthmatical, and had her menses come down at a time when she did not know whether she was with child or not. Her belly was sometimes small, sometimes large; for she was always coughing, as if she had been walking faster than ordinary. She was eight months gone when it stopped, and had been feverish before.

The wife of Apemantus's brother miscarried the seventh day of a girl, that, as she said, was sixty days old; and about the ninth was in great disorder. After the crisis she had a pain in the right side, as if from a distortion of the womb. She conceived again soon, and miscarried.

Another was delivered of a daughter with the whites upon her, another with the reds, as it should be.

Chillinesses, nauseas, aversions to food, relapses, bilious complaints, hemorrhages, and disorders of the spleen were to be met with, and most of them attended with pain from the left side.

Apemantus's wife, when she was turned on this side, was affected in her right eye; when on the contrary, in her flank.

Aristophon's daughter was feverish the third and fifth day, and remained dry for the most part; but her belly was lax and discomposed, the crisis difficult, and about the thirtieth day she lost her fever.

Pustules, that come upon no violent exercise, reach the seventh day, and are somewhat livid (the maid that lived behind Herous was taken with a shivering); the white and large are not of any great service in those who are seized with a deep stupidness, or dozing, or in diseases that are not of the falling kind, or where the bile stops; neither are those serviceable that subside not, whether the body be loose or bound.

Christ, and the 87th year of Hippocrates's age. But the appearance of this comet, though it is said to be in the winter, is not so particularly described as that of the other; Aristotle mentioning the appearance of the first to be about the winter solstice, agreeable to the Hippocratic memorandum; but of the second to have been in the winter only, without mentioning what time in the winter. Thucydides likewise observes, that in the fifth and sixth years of the Peloponnesian war there were many tremblings or shakings of the earth, and the plague, that had not been quite extinguished, broke out again at that time, and continued above a year after; so that it is very probable, if the malignant year already mentioned did not happen about the time of the plague in the beginning of the war, it was about the time of this comet's appearance, viz., in the fifth year of the same war; such appearances, and such tremblings, generally producing very sickly seasons."—CLIFTON, Preface.

Zoilus, the carpenter, had a trembling slow pulse ; the discharges by stool and urine moderate, but without colour ; the bottom of the belly distended on both sides directly to the navel, with an acute fever, an aversion to food, and no thirst.

The clerk of the market's daughter at Tecomaius's, when her pregnancy was uncertain, vomited for two months, sometimes phlegm, sometimes bile. After this she had a hard labour, was perfectly well cleansed, and vomited as before to the thirtieth. Then a purging came on, and her vomiting stopped. A lientery followed, and her menses kept up, but for two years she had the piles in the winter.

The two brothers, that lived by Ceerops's, were at the beginning seized with black stools ; had afterwards feculent bloody stools, and, from very frothy ones, bilious.

He, who by agreement lift up the ass, immediately grew feverish, and bled the third, the fourth, the fifth, and the seventh. A crisis came the eighth by stool.

He, who was concerned in the mines, and had his right hypochondre stretched ; his spleen large ; his belly distended, hardish, and flatulent, without colour ; was taken with a pain in his left knee, but had a relapse again, and after that a perfect crisis.

Temeneus's son had a little difficulty of breathing, so as to make him pale with a greenish east, which colour reacheed to his hands too.

The husband of the woman that lyed-in near Sitodoeus's, who had a jaundice upon him, and sent for me the seventh day, died the eighth without any evacuation by stool or urine. His flanks were large and hard, and his breathing quick ; nor was his forehead moist with the pain, before he died.

The wife of this person miscarried of a girl the seventh day in her seventh month, the signs of which appeared the fourth. A pain seized her in her feet at the beginning, and, upon the fever ceasing, her difficulty of breathing was not carried off, but remained still. The pain likewise affected her hands and arms.

Where the urine stopped before the crisis, relapses were of long continuance.

Temeneus's sister's crisis was with a shivering. A pain seized her hands and shoulders upon the sudden going off of her pale greenish colour. These pains ceasing, her head was affected ; the

upper eyelids were tumefied, and the tears ran out. The rest I am a stranger to. Her first crisis was the seventh day.

The case of him who kept Menander's vineyard was the same, except that at the beginning he had thin stools, which stopped afterwards, as well as the urine; but a crisis followed, without any shivering the seventh day, because of the purging that had happened before.

Potamon's son had no purging the seventh day, nor a shivering two days before the crisis, nor, for the same reason, a suppression of urine.

Hegesistratius, who had had an abscess near his eye, had a collection of matter about his last tooth. The eye was healed, and the nose discharged thick matter; but about the gums little round caruncles broke out, which about the third day seemed to suppurate, but it went off afterwards, and immediately his jaws and eyes swelled. Now, wherever abscesses form themselves about the eyes in burning fevers, a redness appears upon the cheeks, and a hemorrhage follows. The like happens in abscesses behind the ears; and perhaps abscesses in the joints are more likely to follow; but this I am not perfectly satisfied in.

Shiverings, with tremblings, distensions of the hypochondres, and a breaking out of the menses, happened the seventeenth day. If these things continued thus, in some the crisis was the third, in others the fifth, and in others the seventh.

Hegesistratius's two last teeth were in their turns eaten away. The last had two tubercles above the gums, one near the erosion, the other opposite. Where they both touched, there the roots were broad, alike, and answered to one another. On either side half remained that was almost round.

The woman, that had a hemorrhage the fourth and sixth day, had a crisis the seventh, with great redness.

The other, that had a violent pain in her head, had her crisis about the twentieth; at which time her hypochondres were hot and burning. The seventh day she did not bleed much; her stools were thin; and about the eighth an abscess appeared by the right eye.

A man was affected in the same manner, except that his crisis happened the seventh day, with a moderate swelling of the spleen on the left side. The eightieth day the eye was affected in this person, and longer too; perhaps, because it came after the crisis, and because there was much to come away.

Temeneus's sister had a difficulty of breathing, and a distension of the flanks a long time. Whether she was with child or no, I know not. Her body was bound at first, and then it was she vomited; afterwards the vomiting stopped, upon a great deal of viscid biliary matter passing downwards, without any hindrance from the hypochondres. The eleventh, the phlegmon attacked the right thumb: it broke, and the vomiting returned. Upon this she grew better, her dozing and fever abating. Her breath was also freer; because she brought up foul nasty stuff. The sixteenth her breath was little and quick, her fever came on, and she died.

She had a fever before the abscess, and died the seventh day after the abscess. She was also something florid.

Apemantus's sister's son had a swelling upon his hypochondres and spleen; a difficulty of breathing; a discharge of viscid, biliary, and somewhat stercoreaceous matter downwards; and a weariness after working. The twentieth, his feet were affected. Query? Whether the crisis after such weariness does not happen upon the joints, rather than on the eyes? His hypochondres were distended too, and he had a dry gentle little cough.

What is left after a crisis is apt to cause relapses, and what is separated in the course of the disease. So will a spitting digested before its time; so will the belly, as it happens to be affected; so will intemperance, and the like.

Apemantus, who complained of pains in his fundament, his right flank, and a little below his navel, made bloody urine before the pain in his right side, which gave over the third day. The carpenter too made bloody urine from a pain of the contrary side in the same direction, and upon its stopping, both of them had a sediment the third day. Apemantus was very much heated; the other felt nothing but on the left side.

Nicostratus had also something at the extremity of the right side, lower than where it happened on the left. It reached too in both above the flank even to the navel.

The old woman at Sosileus's, who was of a leucophlegmatic habit, had hard, white, rough and scaly swellings upon her legs, and upon her feet too, but less. The parts below the thighs were also affected, and in many this complaint passes off with difficulty. Add to this, that the loins were also affected, the belly slender, the flanks softish, and the breath not very short. Most of these ceasing, our next care was about the eyes becoming grayish; a disorder

that was somewhat milder than the other. The pains of the hip and leg seemed to depend upon the womb: for a sweet-smelling suppository of meal and ointment dispersed and put an end to them quickly. The time of the abscess (or disorder) about the eye was a year.

One had a pain about the navel, where the pustules were not perfectly suppurated. The like happens too from dysenteric complaints.

In the village of Hippolochus there was a boy, who had something in both his hypochondres, that was in the lower part like the brasier's wife, who had a dropsy, which upon watery stools passing off was softened a little. This was upon the right side, all alike, but raised above the rest, and in some measure round. His navel was black from the birth, and deeply ulcerated; nor was any scar brought upon it. The glans of the penis was naked too, but not on a sudden, or from the birth; and became more so afterwards. He vomited for the most part, was feverish, and averse to food, but recovered. About the seventh day of his confinement to the bed (for he had been ill before), upon drinking much water, and perhaps committing other irregularities, he grew very restless and uneasy, and was somewhat convulsed. The convulsion ceasing, he died before we were aware of it; but first made water plentifully, and wind passed off audibly. The parts above were not at all softened; but, immediately upon his dying, a great relaxation followed; and the whole body appeared red as if beaten with rods, except where the tumour and the heat remained long.

One of Abdera had an evacuation downwards. Another had a swelling forwards, without a fever; and the swelling was to the touch like an abscess.

A servant maid that was asthmatical, and subject to hemorrhages, at the time of her menses was taken with an asthma. These stopping, a fever came on; her left breast suppurrated above, and her ear from the beginning.

Olympiodorus's servant bled at the right nostril, and had a crisis the twentieth in the way that fevers generally terminate; and his stools were such as were commonly in the summer, like those of Hipponax.

Hyle, the servant of Aristides, upon taking a purge the eighth day, had the appearance of those who bear purging well, if their strength is not unreasonably pulled down by it; and voided neither

frothy nor bloody stools, but like eggs, as the wife of Heraclides did, who was purged briskly, and bore it with ease.

One, in the village of Bulagoras, upon purging began to be feverish from the spleen. Now those who have a rising on the right side, but no distension, are red. She was rather red than otherwise, and had a purging from the beginning; and it was expected it would have fixed upon the eye. The seventh day a salt humour ran down from the eyes like tears. It ran likewise through the nose, and into the throat, and upon the left ear. The fifteenth, she sweated, and shivered, but had no crisis. Before the shivering she grew very pale with a greenish cast; the countenance was distended, and fell. The opposite ear to the spleen, and the side, grew painful.

Children were subject to purgings, and dry coughs; and sometimes, towards the conclusion of the coughs, an abscess was formed in the shoulder.

The fuller was in pain about his neck and head. The seventh day his hand was numb. The ninth, his leg was numb too, and his cough ceased.

She, whose jaw was drawn aside, felt a contraction in her womb to the left side five months after.

In Cranon, Lycinus the grammarian, who was ill of a bilious fever that came upon a swelling of the spleen, was taken with a heaviness of the head, and some little hard tubercles or roughnesses about the spleen. Both his lips had ulcers on them, round within and small, and afterwards a little blood came out of the opposite part.

The bought servant, that I saw, who had a great hardness on the right side, not very painful, with a belly large and distended, but not like a dropsy; and who in other respects was fat, and not very short-breathed, but without colour, missed her menses for seven years. A dysentery attended her without a tenesmus, and after this the hardness became painful. A slow fever came on, but not above seven days, and her stools were like amber, somewhat glutinous, and large. She was well some days, and after that her menses came down; the hardness grew soft; her colour laudable; and her body thick.

Minois's wife, who fell into a mortification from too great a pressure upon an incision, presently gave notice, (upon the matters

fixing on the lungs,) how many days she was to live, and that something else was concealed within.

Upon putting any thing up the nose, if a fever ensues, or if the pain is removed, a flux is produced of thick matter from the nostril. But if neither the pain is removed, nor a fever excited, the matter is thin, and perhaps burning; as the thin matter in Hegesippus, who had something put up over night; but it was thick in Celeuris's son, of Corinth, who was like an eunuch.

Digested abscesses in diseases are known to be critical by these marks, viz., if, being of a hot burning nature, a fever follows not; or if, hard to be borne, they are nevertheless easily borne: as was the case of Charon, in what settled upon his fundament. But in Leambius, whose intestine was thought to be ulcerated, his arm and seat on the left side, upon taking medicines for a dysentery, were ulcerated, and a fever followed.

He, who was distended with wind, had his flank tumefied and painful. Upon drinking much milk and pure wine, and sleeping afterwards, he was taken presently with a sickness at his stomach and heat. Afterwards, making a fire, and, instead of meat, eating meal baked over the coals, his body was tied up, and something like pus came away. But, though the anus was inflamed, I affirm he had neither fever nor pain.

The old man, who lived in the stone-porch, had a pain in his loins and both his legs, which also affected both his thighs, and sometimes his shins; sometimes also his knees. This continued long, and returned often. His feet, legs, and loins swelled; the glands in his groin swelled a little too; the belly was hard; and all the lower part of his belly distended and painful. For the most part his bladder was hard and painful, attended with eruptions and heats.

Aristæas, of Amphilochus's village, was lightheaded the fourth day. His stools were pale and greenish; his sleeps sound; and his colour white.

Some at the beginning had a sort of trembling in the fingers, and lips, when they spoke; but in other respects were nimble-tongued enough, though not with the best manners. Such had a redness in their faces for the most part; were lovers of wine to excess; or, after vomiting advantageously, swelled.

He that lived at Medosadas's, who had many thin watery stools that were not bilious, had his hypochondres yielding and tumid.

He was also comatose. About the fourteenth, while the crisis was going forward, a shivering seized him without trembling, attended with a relaxation, a languidness, and a falling down of his limbs; his belly was loose; the coma continued; and he was lightheaded after sleeping, but not mad. The fourteenth, had a crisis, none of the critical signs opposing it.

Just so it was with the other person, who at the beginning had stools that were glutinous, of which the thick part proved critical. He was watchful too; and afterwards had stools that were somewhat glutinous, somewhat bilious, digested, more bilious, and not thin: but, when they began to have a consistence, the crisis soon came on. The hypochondre appeared distended about the sixth, with heat and pain, as when the veins are distended and agitated. After that he slept the seventh, and had a crisis the ninth. Both of them were white-coloured, not yellow. The watery stools, exposed to the air, were smooth and thin upon the surface, very like woad or yellow amber, and had a sediment at the bottom.

A softish distension of the right side denotes a phrensy, if it does not go off upon the fever's going off.

If, upon the softness of the belly, something happens to be collected there, hard, and painful, and of such a bad quality as not to be dispersed, perhaps a suppuration will follow from such a swelling.

Swellings on the right side, as many as are in a great measure soft, especially upon pressing, if a murmuring follows, are not to be deemed of a bad quality; as in the Amphilochian, and the Medosadean, who were both of them comatose and delirious in their sleep.

He who had an ulcer upon his shin had red large pustules break out, upon using the Attick ointment: and this, instead of a cough that was afterwards troublesome, for he had no cough before.

In Ænus, as many as were chilly, and wounded in the head, were in a bad way, and came to suppuration. They had also a pain in their feet upon travelling, from a tenesmus; and, in often attempting to discharge, a weariness. Such was the case of Clinias, who was averse to food, fell away, and discharged a matter that was sometimes a little bloody, at other times pure pus.

Hippeus's wife, who was dropsical, coughed for three years in the beginning of the spring, collected a great quantity of matter,

and in the winter became dropsical, but was relieved by purges for that purpose. The maid-servant died.

Those among the coughers, who laboured with their hands, as the boy that twisted osiers, and Amyntas's son, were both of them paralytic in the right hand only, and the cough ceased; after which they had it with the cough. Those who rid on horseback, or travelled, had it in their loins and thighs. But the coughs were for the most part dry; or, if not, very violent.

Enmyris's wife, who was taken ill (but not in the usual manner) seemed to be without a fever, and yet had something of a typhus. After this a trembling came on all over, a wasting, an aversion to food, a thirst, and a coldness.

Those who had the disease of the eyes called nyctalopia, and made a great deal of water, afterwards made but little; but upon coughing and growing feverish had abscesses broke behind the ears about the seventh or eighth day.

Enmyris's daughter was feverish, and pus came out of her ear about the eighth day; but I am not certain. Some had a tooth eaten away, especially the third of the upper jaw. In some it was painful, and suppurated; in others the suppuration was in the ears; and these coughed much more vehemently than those. Others again had a collection of matter with a fever, and were freed the seventh. Upon the hypochondres being irritated no solution happened; and, upon the belly's being softened, there were little glutinous concretions, not of any service; the urine like blood; the spittle frothy.

He the Cynick brought me to, was much disordered the seventh day, and had a crisis the fourteenth. The bad symptoms dwindled away by degrees. His throat was clear; and what he spit was little, broad, and digested. A few drops fell from his nose; his head was heavy; his hands and legs somewhat paralytic; his belly loose, and to good purpose; and his feet always warm. He also slept, and had nothing behind his ears, because of his digested sputtings.

Demaratus's wife was warm in her feet, even when chilly; but, whether it tended to suppuration or not, she died.

The old man who died was taken ill with his wife, who had something concealed in her very furious; but upon a thickish worm coming away, and the refreshment of a little food, her complaints immediately ceased; she slept, and was quite well. The

old man had the skin of his body stretched, and his extremities cold. He was also soft, and trembled from the beginning in his lips, hands, and speech; was moderately lightheaded; and laid with his mouth open, not much oppressed in his breathing. He died at last, but how many days beyond twenty I know not.

Where the hypochondres and the belly discharge compressed matter in abundance, without any rumbling, as in Abdera, the excrement is variegated.

What is spit up in peripneumonies is in some biliary, when the disease will go off; in others very yellow, when the crisis will be short.

If such, as appear at the beginning, appear the same afterwards, this is an argument of very little concoction; and the crisis is as in him who lived with the master, or as I have seen it at other times.

Nicippus in his fever had frequent emissions, without any inconvenience; and was foretold that they would cease, when the fever was come to its crisis; and so it happened.

Critias was pestered with dreams in his fever, from which I know he was freed after the crisis.

Alcippus, who was subject to the piles, was forbid to be cured, and upon being cured went mad. An acute fever coming on, carried the other off.

In acute fevers, those who are thirsty, and deprived of drink by heir physicians or themselves (though they could drink a great deal), are the better for cold water given to vomit them; for much biliary matter will come away.

That the nerves (or tendons) attract one another, is plain from this: for, if the upper tendons of the hand are wounded, the hand will incline downwards, drawn by the lower; and so vice versa.

A dry cough produces a swelling of the testicle; and what comes from a cough upon the testicle must be cured by bleeding. Inflammations cause coughs. They also come upon fevers that arise from swelled glands.

THE FIFTH BOOK OF EPIDEMICS.

FÆSIUS, p. 1141.

To me, says Haller, there seems nothing in this book unworthy of Hippocrates. The part which adverters to the manifest affinity of sutures and fissures, is pointed out by Celsus, and by Plutarch, in praise of this great man. It is in parts obscure, and difficult to comprehend; but it contains histories of various surgical cases, not always indeed coherent, but many of which are uncommon and useful. Peripneumony from metastasis of angina; tetanus from aerid applications to a wound; and death from a slight blow on the head. The distinction between arteries and veins might lead to the idea of the book being of a later period. Galen ascribes it to Draco, or to the second Hippocrates. He considers the seventh book as spurious, but ascribes the second, fourth, and fifth to Hippocrates, although probably not edited by him. To me, adds Haller, the fifth and seventh appear much superior to the others mentioned.—ED.

The gardener's wife, in Elis, had a continual fever, and received no benefit from purges. Below the navel the belly was hard, swollen, and in great pain. Upon its being handled, and pressed pretty much by the hand dipped in oil, a great deal of blood passed off downwards; after which she grew well, and continued so.

Timoerates, in Elis, after hard drinking, was seized with madness from black bile; and by the help of a purging potion brought away (though not without much uneasiness) a great deal of phlegm and black bile in the daytime, and had no more stools in the evening. After drinking some gruel he fell asleep, and did not awake till sunrise; but seemed all the while to the bystanders to be dead, neither fetehing his breath, nor perceiving any thing that was said or done. His body was stretched out, and stiff; yet he was alive, and got up again.

Scomphus, in Oeniadæ, died of a pleurisy the seventh day, delirious, after having taken a purge the same day that wrought but little. The day before he was in his senses, but upon purging grew delirious.

Phœnix and Andreas, two brothers in Oeniadæ, had a swelling in one of their cheeks, and the lip that was opposite to the cheek and eye. Nothing appeared inwardly upon examination, nor was there any abscess outwardly, but it swelled, and putrefied, without discharging any thing. Both of them died; but Andreas died the seventh, after taking a purge to no purpose; whereas Phœnix had the putrefied part cut all round, and the ulcer discharged a great deal before he died. He died, however, though he held out long.

Pyridamus, in Oeniadæ, began to be delirious the tenth day in an inflammation of the lungs; but, being taken care of, came to himself again, and what he spit up was clearer than it had been. The disease grew better; a great deal of sleep followed upon it; but his eyes looked as in the jaundice, and about the twentieth he died.

A man in Oeniadæ had the following complaint. When he abstained from food, his belly rumbled mightily, and was in pain; and the very same complaints returned in a short time after he had eaten, and the food was ground small. His body also fell away and wasted; the food he took afforded no nourishment; and what passed downwards was of a bad sort and burnt. The rumbling and the pain were least perceived immediately after eating. He found no benefit from purges of every kind, both upwards and downwards; but being blooded at times in each hand, *till he had hardly any blood left*, he grew easier, and got rid of his complaint.

Eupolemus, in Oeniadæ, felt a pain in his right hip and groin, the nearest joining of the hip to the groin, and the forepart of the hip. Upon losing a vast deal of black thick blood from the ankle, and taking a smart purge downwards, he grew easier. The pains indeed did not cease, but the hip, the joining, and the part about the groin suppurred, though not without an increase of pain: for the pus laid deep, rather at the bone than in the flesh. He was neglected for some time in this condition, till he became extremely weak; and then a great many large eschars were made by the actual cautery, near one another, and a vast discharge of thick pus ensued. A few days after this he died, partly from the largeness and number of the ulcers, and partly from the weakness of his body. Whereas had one large incision been made, or even a second (if it

had been necessary), and the pus discharged that way, and all this in time, he might have recovered it.

Lycon in Oeniadæ was in other respects in the same condition, but the pains extended to the leg, though not very much. Here indeed was no suppuration, and yet he did well after a long time; but then he took physic, was cupped, blooded, and seemed to be better of his complaints.

A man at Athens was seized with an itching all over, especially in his testicles and his forehead, which proved exceedingly troublesome. His skin was thick from head to foot, in appearance like that of a leper; and could not be taken up any where for the thickness of it. This man could receive no benefit from any body; but, upon using the hot-baths at Melus, got rid of his itching and his thick skin. He died, however, of a dropsy afterwards.

A man at Athens was taken with the cholera (or overflowing of the gall); purged upwards and downwards; was in pain; and could not be relieved of either vomiting or purging. His speech failed him, and he could not move out of his bed. His eyes were misty and hollow. Convulsions seized him in the stomach from the intestine, and a hiccough followed. He also purged much more than he vomited. But upon drinking hellebore after the juice of lentils, and upon this the other lentil juice, in as great a quantity as he could, a vomiting ensued, which put a stop to both his evacuations; but he grew cold. His lower parts were therefore bathed very much up to his private parts, till the upper grew warm again. He recovered upon it, and the next day drank some thin gruel.

Gorgias's wife in Larissa, who had a suppression of her menses for four years, almost entirely, complained of a pulsation and weight in her womb, whichever side she lay on. She conceived afterwards, and conceived again upon the first. In nine months she was delivered of a *live girl with an ulcer on her hip*. The membranes came away, and with them a great flux of blood. The next day, the third, and the fourth, clotted blood came away; a fever attended for the first ten days; and the rest that came away was red. Her face, legs, feet, and one thigh swelled very much; her appetite failed her quite; and her thirst was very great. The coldest water was of service to her, but wine by no means. Her belly, after the first child came away, was somewhat softer, though it did not fall entirely, but was harder than it should be, and without pain. *Forty days after the first, the second child came away,*

like a lump of flesh; the belly fell; all the swellings went off; the flux was small; the blood offensive; and she recovered.

A woman in Pheræ was troubled a long time with a violent pain of her head, and could get no relief from any body, nor even from purging the head; but was easiest when her menses came down freely. Fragrant pessaries applied to the womb were of service to her, when her pain was violent; and a little purging followed upon it. Her pains left her upon proving with child.

A woman with child in Larissa lost a great deal of blood in fourteen days in her tenth month, but most three days before her delivery. The fourteenth, a dead child fell out of the womb, with *its right arm growing to the side*. The third day, the same hour of the night the child was born in, the membranes came away, and the whites followed. After this, for three days and nights, a great deal came away, but not immoderately. This was succeeded by a fever that lasted two days and as many nights, attended with pains all over the belly and the hips, especially the lower part of the belly, by the pubes.

Hippothenes in Larissa was supposed by his physicians to have an inflammation of the lungs, but the case was quite otherwise. The beginning of his illness was from a fall upon his back in a hard place, and another falling upon him, as he was wrestling. He was afterwards washed with cold water, got his supper, and seemed to be heavier. The next day, was feverish, coughed without spitting, and breathed quick. The fifth, hawked up bloody matter, but not much; began to be delirious; and upon coughing complained of a pain in his breast and back. The sixth, bled about a quart at the nose, upon sneezing; in the evening neither spoke, nor perceived what was done or said. The eleventh, died.

He was, for five days, sometimes perfectly in his senses, sometimes not, and without a fever. He spit nothing at all; nor had he any rattling; because there was no spittle to occasion it.

Scamandrus in Larissa had a mortification in his hip, and an abscess of long standing at the bone. A large incision being made, even to the bone, and unction used afterwards, a convulsion began the twelfth day after the incision, and held him strong, reaching from the leg to the ribs, and affected also the other side. The leg was sometimes contracted, sometimes extended, and he had the use of his other limbs, but his jaws were set. The eighth day after the first convulsion he died in another. The cure was carried on

by applying warm bottles and fomentations of tares to the whole body, not omitting a glyster; by which the faeces that had been long detained, came away in a small quantity. He also drank a biliary purge, and even a second; from which indeed there was a discharge, but to no advantage. After a little sleep he took another strong purge of the like kind, and in the evening died about sunset; but in all probability might have held out a long time, had not the physic been too strong for him.

A boy belonging to Palamedes's stables of Larissa, about eleven years old, was struck by a horse upon the forehead above his right eye. The bone seemed to be hurt, and a little blood spurted out. A large incision was made by the trepan even to the marrow, and the bone thus affected was healed; the other lamina (*viz.* the anterior) growing again presently. Twenty days after this a swelling appeared about the ear, attended with a fever and shivering; and this swelling was greater in the day, and painful. The fever began with shivering; and his eyes, forehead, and whole body swelled, rather on the right side of his head than otherwise, though the left was not entirely free; but no bad consequences followed. At length a continual fever came on; and these complaints lasted eight days, but were less. However, by burning, evacuating downwards by a purging potion, and applying a cataplasm to the tumour, he recovered. As to his complaints, they were not at all occasioned by the wound.

Theophorbus's son in Larissa had the scabies (or leprosy) of the bladder; made viscid urine; was in pain at the beginning and going off of his water; and rubbed his glans. After drinking a sharp diuretic nothing passed into the bladder, but he vomited a great deal of purulent matter and gall, part of which went also downwards. His belly was in pain, and as it were burnt within, while the rest of his body was cold, and entirely unbraced. Nor could he take any thing at all. His belly was grievously ulcerated, and that by the strength of the physic altogether; for the third day after it he died.

Antimachus's wife, in Larissa, after having been with child about fifty days, loathed her victuals the rest of the time, and complained of pain in the womb and the pit of her stomach for seven days. A fever came on, and nothing passed downwards. Upon drinking a stronger dose of elaterium than was proper, she vomited burnt bile, occasioned by her abstinence and fever. For she had drank no-

thing at all. She vomited a little again with violence, and with it some grumous matter. After this she grew sick, lay down, and, finding herself weak, would drink no more water to encourage it. The intestines were upon this seized with a terrible pain, (for the medicine had ulcerated them,) and presently with the stools she voided something that was viscid, stringy, and a little bloody, as if the guts had been shaved. Her weakness and the sickness at her stomach increased continually, and the purging amounted to almost three pints. This indeed stopped, by pouring a great deal of water upon the belly, but still she could take nothing; and about midnight she died; though in all probability she might have lived, if she could have drank water, and vomited immediately before it passed downwards.

Onesidemus's servant in Larissa had her stomach and bowels ulcerated by bile that was set afloat of itself; upon which bile and blood passed off upwards and downwards, not without a fever. She took, as she was a weak woman, a weak potion of elaterium, little in quantity and mixed with water. Upon this she vomited a great deal, and purged more; and in the evening it came upon her again. The next day she was feverish, but not much; the belly was ulcerated, and she had the same stools as before. The third she died about sunset, the fever raging vehemently.

The case appeared to be altogether desperate, but not at all from drinking cold water, while the vomiting lasted. But when the stomach, cleansed by the water, was become cold, she drank the cream of barley cold, and had some of the same injected.

Eudemus, in Larissa, who was troubled with the piles to a great degree and long, having but little blood left, was seized with the flowing of the gall. The body indeed was very little affected with it, but the belly was thrown into purgings, and what came away was bilious. The piles also came out. Upon drinking something to pass downwards he was purged well, and upon drinking the cream of barley after it he was purged more, not without a pain in the hypochondre. The belly not being in the best condition, the piles were taken in hand; for he wanted a farther cure, and vomited afterwards. Upon rubbing something upon the part swelled, a fever came on, and never left him till it killed him; for if at any time it intermitted, a shivering succeeded, and fever came on again, and bilious stools followed with wind that sometimes passed off, sometimes not; and the belly was also in pain. The

piles were swelled without the anus, from the time the purgings were made use of; and the wind passed through them by the help of sneezing at the beginning.

A man at Larissa was wounded behind by a broad javelin, from one very near him, the point of which penetrated below the navel. The part was livid and swelled for a great way. Upon receiving the wound, a violent pain first seized him, and his belly swelled. The next day he took something to pass through him, discharged a little bloody matter, and died. His intestines seemed to be hurt, and his belly to be full of blood.

Apellæus, of Larissa, who was about thirty, or something less, was taken ill of a distemper that used to affect him by night in his sleep, rather than by day, and continued so two years before he died; attended with a vomiting of sometimes yellow, sometimes black bile, upon being waked. After purging the head smartly for a long time, and taking physic twice, it left him six months. He was a great eater, and of a biliary habit. A violent shivering seized him after much wrestling; a fever followed, and in the night his old distemper. The next day and the following he seemed to be well; but the next night it came upon him again, after he had supped, and taken his first sleep, and continued till supper-time the next day. Nor did he recover his senses before he died. A convulsion first seized his right side, then his face, and whole body, and after that his left side. When it seemed to be over, he grew comatose, snorted or rattled in his throat, and had a return of his distemper.

Eumelus of Larissa had such a stiffness in his legs, hands, and jaws, that he could neither extend nor bend them, without the help of another; nor could he open his jaws, without another did it for him. He was in no pain any where else, nor did he eat any thing but a sort of flummery, with mead for his drink. The twentieth day he fell from his seat backwards, and struck his head very hard against a stone. Upon this his sight grew dim; but he soon got up again, recovered himself, and was entirely free, except that, when he got up after sleeping, his joints seemed bound together. He was twelve or thirteen years old, and ill three or four months.

A maid in Larissa, after vomiting a little blood, had a collection of matter formed; upon which a fever coming, she could not get the better of it, till death freed her from all within three months. Before she died, her ears were so deaf that she could hear nothing

at all, unless one bawled to her very loud: and before this vomiting of blood happened, she was but in a weak condition.

Dyseris's servant, of Larissa, in her youthful days, complained of violent pain in the act of venery, and not at any other time. She never proved with child; but, when she was about sixty, was taken after noon with violent pains like labour-pains, having eat just before a good deal of garlic. She got up, when her pains were more violent than ever, and felt something rough in the mouth of the womb; but, fainting away afterwards, another woman put up her hand, and brought from her a *rough stone* as big as the *whirl of a spindle*. She grew well upon it immediately, and remained so.

A loaded wagon came upon the ribs of one who belonged to Malea, and broke them. Matter lodged for some time under the ribs, but upon being cauterized below the spleen, and the ulcer kept open with lint and the like, he held out ten months. After the skin was cut, a cavity appeared both ways, reaching to the omentum, not without putrefaction. It extended likewise to the kidney and the bones. The habit of this man's body was not perceived to be bilious, and so the putrefaction became great and dry, affecting the omentum and other fleshy parts. A dry medicine was here immediately necessary, while the strength of the patient lasted; for the moist medicines were so far from abating, that they increased the putrefaction. The moisture being stopped by the lint that were applied, a shivering and a fever came on; the putrefaction increased; and a fetid, blackish, putrid matter ran out. But before we undertook the cure, a great deal of such stuff was discharged every day, though not freely. By this we knew the nature of the disease, and that it was deeper than the skin. So that if every thing had been done for him in a proper manner, yet his case would have been desperate; even though a purging had also happened.

Autonomus died in Omilus, the sixteenth day, in the middle of summer, of a wound of the head, occasioned by the throwing of a stone at a little distance upon the sutures in the middle of the os bregmatis, or parietal bone. I did not perceive that the trepan was wanting; for the injury was received upon the very sutures (as was extremely clear afterwards), and so deceived me. A violent pain seized the collar-bone first of all, and after that the side, together with a convulsion in both hands; for the wound was given in the middle of the head, and the parietal bone. The trepan was

applied the fifteenth; a little pus came out; and the membrane appeared free from any corruption.

A young girl in Omilus, about twelve years old, died in the middle of summer, the fourteenth day, of a wound in her head, occasioned by somebody's throwing a door upon her, that bruised and broke the bone. The wound was right upon the sutures, and it was plainly seen there was occasion for the trepan. It was accordingly applied, but not so far as it ought; however, what remained came to suppuration. The eighth day she shivered, and grew feverish; and though she was not as she should be, yet she was as she had been some time before, when she had no fever. The ninth, the remaining part was trepanned, and a very little pus, streaked with blood, appeared underneath. The membrane was clear, and sleep came on, but the fever never abated more. The left hand was convulsed, the wound being rather on the right side.

Cyrenius in Omilus was burnt upon the belly for a collection of pus there; and, though it was thirty days later than it ought to have been, yet he was pretty well after it, and the pus that was in the belly was dried up. But eating afterwards, in the hottest time of the year, the fruits of the season and other improper food, he fell into a fever and looseness, and went off.

Hecason in Omilus was cauterized later than he ought, just as the other was, and almost the whole belly was dried up too; but a dysentery came on; and, as soon as he got over it, he eat of every thing till he swelled all over. The pus afterwards broke its way downwards; a looseness attended it; and he died.

Hecason in Omilus had an acute pain fixed in his hip, from the foulness of his body, and injudicious purging. Upon its going off a fever ensued, that confined him to his bed a long while. He neither drank any thing, nor was thirsty, but was weak and chilly. His distemper went off in a proper manner, as it ought, and his body was the better for what was given him. At last the distemper broke downwards, and went all off with a great deal of bile. He grew delirious upon it, however, and died; but seemed to be able to get over it.

A man in Salamis, falling upon an anchor, was wounded in the belly, and in great pain. The physic he drank passed neither upwards nor downwards.

The woman that cut her own throat was strangled; but a purging potion, that was given her a good while after, passed through her.

The young man who came from Eubœa, and had been purged very much, grew feverish upon its intermitting and stopping. Concluding from this that a vomit was necessary, he drank a weak one, viz., the root, and elaterium, and died four days after, without any evacuation; but he was sleepy, and his thirst could not be quenched.

The maid-servant, that was a foreigner, vomited a little from what she drank, and was strangled; but purged very much downwards, and died in the night.

The man of Eubœa, upon drinking a purging potion, was purged three days, and died. His hand suppurated up to his elbow.

Symmachus's boy was strangled with bile, as he was asleep in the night, and feverish. The physic he drank would not stay with him, nor was he purged in six days before he died.

He who lived by the race-house, and vomited blood in the night, died the next day, vomiting a great deal of blood, and strangled. The spleen and parts below it had a quantity of bloody matter pass that way.

The boy, that was struck by a mule upon the belly and the liver, died the fourth. His breath was quick, his senses confused, and a fever attended besides.

Hermophilus's son, who was ill eleven days, was feverish, bound in his body, and delirious at first, but it went off in the night. The next day he lost his speech, rattled as he lay, had his eyes distorted, and was feverish. A feather being put down his throat, he brought up black bile, and by the help of a glyster had a very great discharge.

Aristion's servant had a mortification about the middle of her foot from the inside obliquely, without any reason for it. The bones putrefied, separated, and came away in a fistulous manner by little and little. Upon a looseness succeeding, she died.

A woman in good health, and corpulent, complained of pain in her belly, a colic in her bowels, and with these a swelling, after drinking something upon account of conception. A difficulty of breathing attended, with great uneasiness of mind and pain. She also vomited blood, but not much, and fainted away five times so as to be thought dead. Neither the pain nor the breathing were relieved by vomiting with cold water; the only thing that relieved her was the *pouring about thirty firkins of cold water upon her body*. For after this a great deal of bile passed downward, and

she recovered; whereas, when the pain was upon her, nothing could pass.

'Antandrus, who was well in other respects after taking physic, seemed to have a pain about his bladder. A very great clearance and depuration was made there by what he had taken, and in the afternoon a violent pain seized him. The next day a suffocation, with great perplexity and restlessness. He vomited too, without any thing passing downwards, had a bad night, and no sleep. The third day a great deal went downwards, followed by blood, and so he died.

The cobbler of Pityus, as he was sewing a sole, ran the awl above his knee into his thigh about an inch, but no blood followed, and the wound closed up presently: however the whole thigh swelled upon it, and the swelling reached to the groin and flank. The third day he died.

A man received a wound in his groin by a dart, and recovered contrary to all expectation; for we saw the case. The head of the dart was neither taken out, because it lay very deep; nor was there any loss of blood to speak of, nor inflammation, or lameness; but *six years after* the accident we found the dart, and took it out. Our opinion is that it was buried between the nerves or tendons, without dividing either artery or vein.

Another received an insignificant wound to speak of (for it was not deep) a little below his neck behind from a sharp dart; which being taken out not long after, he was drawn and distorted backwards, as in the opisthotonus. His jaws were also fastened; and, if any thing moist was put into his mouth, and he attempted to swallow it, it returned again through the nose. In other respects he grew worse immediately. The second day he died.

A young man, running hastily over rough ground, felt a pain in his heel, especially the lower part. No moisture being collected, nor any abscess formed, the whole part turned black the fourth day, as far as the bone called astragalus, and the hollow part in the bottom of the foot. Before the mortification could break away or suppurate, he died, twenty days in all after the running.

He who was wounded by his eye, received it upon his eyelid, and the point of the dart went in deep, but the fang or beard of it appeared outwardly. Upon laying open the eyelid, every thing was taken out without any inconvenience: for the eye was saved and healed presently, and the blood flowed freely and sufficiently.

Nerius's handsome girl, about twenty, was struck upon the parietal bone with the palm of the hand by another young woman in play ; upon which a mist came on, and she could not breathe. As soon as she was brought home, a violent fever attacked her, with a pain in her head, and a redness about her face. The seventh day, above a spoonful of fetid reddish pus came out of her right ear ; she seemed to be better, and was lighter and easier. The fever, however, increased again, and was attended with a dozing, a loss of speech, a contraction of the right side of the face, a difficulty of breathing, a convulsion, and a trembling. The tongue was also confined, the eye fixed, and the ninth she died.

A young man, after drinking a great deal of genuine wine, fell asleep in a certain shade, and the serpent called Arges crept into his mouth. As soon as he perceived it, not being able to speak, he grinded his teeth, bit the serpent through, was seized with great pain, threw out his hands as if strangled, tumbled and tossed about, fell into convulsions, and died.

NOTE.—At this place Clifton leaves out several pages as they appear in Haller; and what follows is from the sixth book, omitting nearly the two first of the sections as given in Haller,—the only explanation for which is in the following note, which to me is not satisfactory.—ED.

"This is the first observation^a in the sixth book (see section the 2d, aph. 22,) that I could insert here; the former being all aphorisms of such a nature, as cannot be brought, with any propriety, into a book of Epidemics. The other observations are not so good as I could wish them, but yet must not be omitted."

^a This refers to the sixth book, beginning with "Broad eruptions," in the next page.—ED.

THE SIXTH BOOK OF EPIDEMICS.

FÆSIUS, p. 1164.

This, says Haller, is much of the same character with the preceding; and is said to have been transcribed from the note-book of Hippocrates, by Thessalus. Galen has commented upon it. It is a medley of histories of diseases, aphorisms, and predictions, frequently taken from the other writings of Hippocrates, often deficient in limitation, and half true. Herodicus ridicules his ratio medendi. Some physiological remarks are interspersed;—and a story is given of an Abderite woman, who was changed into a man, and whom the author in vain attempted to cure!

Gardeil, speaking of this book, says, that Galen had written a commentary on it, for the use of his disciples, a part only of which has reached us, from which we may however perceive how much he was frequently embarrassed to discover the real meaning of the author. This difficulty must now be much augmented; and he claims on this score the indulgence of the readers of his translation, stating that he had submitted its revision to several friends before committing it to press. These he gratefully names,—and asks for further favours from distant members of the profession, in case another edition should be required. He states this book as containing numerous sentences, mostly deserving attention, both in respect to hygiene and to therapeutics.—ED.

Broad eruptions, without any great itchings (such as Simon's were in the winter), were not relieved by vomitings; but perhaps warm fomentations applied might have been of service; for he, upon being either anointed by the fire, or bathed with warm water, was relieved.

The woman that lived by the great theatre, behind the Heroes monument, was taken with a jaundice that remained with her; and

the man that lived by Timenes's niece was taken with a blackness all over.

In Perinthus, the urine was like seed. Such was also critical. Complaints about the pubes are relieved this way, when the case is curable by urine: for, without much flatus, or much (but viscid) excrement passing off, it grew soft; the hypochondre not being large. The seventh day he ate some cabbage, while a difficulty of breathing was upon him, grew softer about the pubes, breathed well, and his belly was loosened by it.

The woman, that I first cured in Cranon, had naturally a large spleen. Her fever was of the burning kind, attended with great redness and difficulty of breathing. The tenth day she sweated upwards for the most part; but, the fourteenth, a little downwards.

Agasius's daughter, when she was a girl, was short-breathed; and, when a woman, was taken with a little pain not long after her delivery; and, upon lifting up a great weight, something seemed to crack in her breast. The next day she was asthmatic, and had a pain in her right hip. When this was troublesome, her asthma was so too, but ceased with the other's ceasing. What she spit was frothy, but florid at the beginning; and, after standing, resembled a bilious thin vomiting. Her pains were greatest, when she worked with her hands. She was forbid meddling with garlic, pork, mutton, and beef; or to bawl, or put herself in a passion, whenever she had occasion to speak.

Where a tumour in the head spread itself, there burnt alum was at first serviceable. Another abscess followed, perhaps because the bone was to come away. This happened sixty days after, above the ear, whereas the wound was higher, upon the crown of the head.

A man after a fatiguing journey, was quite spent, heavy, and fell a spitting; a cough coming from the top of his head. A smart fever ensued, that was very uneasy to the touch. The next day a heaviness in his head, with a burnt tongue. No blood from the left nostril, though picked with his nails. The spleen was large, hard, and painful.

The autumn is bad for consumptive persons; and so is the spring, when the fig-leaves are like a crow's foot.

In Perinthus, a great many were consumptive in the spring, occasioned in some by an epidemic cough, in the winter; and in others by the long continuance of disorders: for thus what was doubtful

before was now confirmed. Some indeed, who had been long ill, escaped a consumption, as those did who were troubled with nephritic pains; and so did some others, as the man, for instance, the Cynic brought me to.

Satyrus, in Thasus, surnamed Grypalopex, when he was about five-and-twenty, often spent in his sleep, and indeed often in the daytime. A consumption seized him about thirty, and he died.

The keeper of the wrestling-place in Abdera, whose name was Stheneus (or the strong man), after wrestling much with a stronger, and falling upon his head, went away and drank a great deal of cold water. He could get no sleep that night, was very restless, and cold in his extremes. The next day he went home; had no stool, though a suppository was put up; made water a little, whereas before he had made none; was bathed at night, but yet could get no sleep, or lie still, and was lightheaded. The third day, was cold in his extremes; grew hot, and sweated; but died this very day, after drinking mead.

Phaethusa, in Abdera, the wife of Pytheus, who had had a child formerly when she was very young, upon her husband's being banished, missed her menses a long time; and her joints grew afterwards painful and red. Upon this her body became manly, and hairy all over; a beard thrust out, and her voice became rough. Every thing was tried by us that was likely to bring down her menses, but all to no purpose; and not long after she died.

The same thing happened in Thasus, to Namusias, the wife of Gorgippus. All the physicians that I talked with were of opinion, that the only hope left was in her menses coming down again as they ought. But this could never be brought about, though we tried every thing; and she died not long after.

NOTE.—Here, throughout, large portions of the text are omitted by Clifton; giving his reasons therefor in the preceding note.—ED.

THE SEVENTH BOOK OF EPIDEMICS.

Fæsius, p. 1206.

THIS book, says Haller, is the production of the author of the fifth book, in both of which we find much repetition, and with little order, from his note-book, on the subjects of phrenitis, continued fever, dropsy, the diseases of pregnancy, and some surgical cases. A foetus remaining in utero nine years, is mentioned. The book contains a larger number of histories of epidemic diseases than the others, the best of which are at the commencement.

In his notes, Gardeil has taken the pains to point out some of the parts of this book with which Book V. corresponds.—ED.

After the dog-days the fevers were attended with sweats, nor were they thoroughly cold after sweating, but grew warm again, and were feverish a long time, had commonly a difficult crisis, and were not very thirsty. In some they ceased upon the seventh and the ninth day; in others upon the eleventh, the fourteenth, the seventeenth, and the twenty-second.

Polycrates had a fever, and sweated in the manner now mentioned. After taking a smart purge, his fever was so mild, that one could hardly perceive it, except in his temples. In the evening little sweats came on again about his head, neck, and breast, and afterwards all over; upon which he grew warm again. About the twelfth and the fourteenth the fever increased, his stools were few, and after purging he supped either broth or gruel. About the fifteenth, had a pain in his belly by the spleen and the left hypochondre, which was relieved by applying cold things rather than warm, and upon taking a soft glyster ceased entirely.

The same method relieved Cleocydes of a like pain and fever. About the sixteenth the heats seemed to abate; pure bile passed downwards; he grew fierce and audacious; breathed moderately,

and sometimes, when he drew it in plentifully, discharged it again tumultuously, as if he was swooning, or as a man breathes when he sits in the shade after travelling in the heat. The seventeenth, as he was sitting on his bench in the evening, he fainted away, lost his speech a long time, and was senseless. He drank some mead with great difficulty, the fibres of his neck being stretched, as when the throat is dried, and a general impotency upon one. At last he recovered himself with great difficulty, and the heats abated. After this his disorder left him the twenty-second.

About the same time Pythodorus was taken with a continual fever. The eighth day he sweated, and again grew hot. The tenth, another sweat. The twelfth, supped some ptisan, and to the fourteenth had no sensible fever, except in his temples; nor any thirst; and thought himself well. Sweats came on every day; and the fifteenth, after supping chicken broth he vomited bile, purged, and had his fever more than ever, but it stopped again. He sweated much, but the whole body, except the temples, was very cold, and the pulsation did not cease; it seemed however to cease for a little while, so that he thought he was going to be hot again. The twenty-fourth, after eating meat for many days, and dining, he was very feverish, and in the evening delirious as he slept. The fever was continual and strong, without any sleep for sometimes one, sometimes two nights; and all the rest of the time he was so heavy to sleep, that it was not the easiest matter to wake him. He was delirious too in his sleep; and, if at any time he was waked, he was hardly himself, had no thirst, breathed moderately, sometimes as Polycrates, and his tongue had some colour. Seven days after the relapse, ptisans were offered him; and, after the fourteenth, meat. The first seven days he broke wind and vomited, and sometimes matter a little bilious came away with his drink without any sickness, till a passage was opened downwards. The sweats left him after the relapse, except upon the forehead, where they were too small to signify any thing. His tongue, if he did not wash it after sleeping, faltered from the dryness of it, and ulcers broke out upon it, and also upon the lower lip, and about the teeth. His stools were few; but, about the fifteenth day after the relapse, more frequent and glutinous; which were stopped by a decoction of pomegranates. The urine, such as in long cases. Towards the conclusion a pain took him so in his breast, as he was swallowing his drink, that he put his hand upon it. This was removed by supping

cummin and egg. The tongue was relieved by a medicine made with the chips of frankincense. The fiftieth day from the beginning, about the rising of Arcturus, little short sweats came on about the loins and breast, with a coldness all over (except the temples), that lasted but a little while. The fifty-first, a remission, without a return the next day.

Eratolaus's boy was taken with a dysentery and a fever about the autumnal equinox. His stools were bilious, thin, frequent, and moderately bloody; but the pain of his belly vehement. Upon drinking whey and burnt milk his pains abated; his stools were somewhat bloody, and afterwards bilious; but he was forced to rise often, though without pain. Some part of the time, after the first six days, the fever seemed to the patient and to many others to be off, it was so imperceptible; but yet there was a pulsation in the temples, and the tongue faltered from its dryness. His thirst, however, was but moderate; and as to sleep, he could never obtain it. What he lived upon was soups and wines. About the fourteenth, hard, crude tumours appeared behind the ears, first one, then the other, which disappeared afterwards entirely, and were moderately painful; but his stools continuing, and all along bilious, the bile and the pain abated for some time, upon his supping the plant that was boiled with the meal; however, his discharges were still frequent and liquid; and his aversion to food so great, that he never took it but upon the utmost necessity. His fever, his tongue, and his thirst, were as I have related them, without any sweat at all. His memory failed him in such a manner, that, if he asked about any thing he had heard but a little before, after pausing a little he would ask again, just as if he had said nothing before; and upon sitting down would forget himself, if nobody put him in mind. This disorder he was sensible of himself; and yet fetched his breath like a man in health. From the thirtieth to the fortieth day the pain of his belly increased much; he lay down upon his back, and could not turn himself in the least. His pain was so violent that others were forced to feed him. His stools were large, separated, and thin, resembling sometimes the colour of the wine he had drank, and sometimes blood. The firmness of his body was wasted to the last degree; and so great a weakness came on, that he could not rise even with the assistance of another. If any one laid his hand between the navel and the cartilage (or pit of the stomach), there was a greater palpitation than is ever felt about the

heart after running or a fright. Upon drinking for two days together nine Attick cotylas^a of ass's milk boiled, a very great discharge of bile followed, his pains ceased, and his appetite returned. After this he drank about four Attick cotylas of cows' milk raw, at the rate of a quarter of a pint at a time, in a day, first mixing a sixth part water, and a little black, rough wine. He eat but once a day, in the evening, about half a chœnix of bread baked under ashes, or a little rock-fish, dressed plain, or a bit of goat or mutton. The milk was drank forty days without water, after the first ten days, with a small quantity of black wine. Seventy days from the first he sweated a little in the night after bathing; drank but little; and, after eating, drank his usual drink, or rougher than he used to take it.

Ctesicrates was relieved more by that preparation with the meal than by goats' whey, when the pain was all over his belly, attended with fatigue, rising often, stools a little bloody, and a swelling in his feet. So was Adrianus for about twenty-five days; but Cæneus had most benefit from ass's milk boiled.

Cydis's son was taken, about the winter solstice, with a shivering, a fever, a pain of his right ear, and a pain of his head. He had been subject to this sort of pain from his infancy, with a running, and a fistula of a bad smell. While it was thus, he was generally without pain; but now his pain was acute, attended with a pain in his head. The second or third day he vomited bile, and, as he sat, had a bilious viscid stool, of a pale yellow like an egg. The fourth and fifth, was a little lightheaded; and the pain of his head and ear violent, with a fever besides. The sixth, was purged with the herb mercury, upon which the heat and pain seemed to be carried off. The seventh, was in a manner well, but the beating in his temples did not leave him, nor did any sweat follow. The eighth, supped the cream of barley, and in the evening the juice of bete; slept in the night, and had no manner of pain. The ninth, was in high spirits till sunset; but at night the pain of his head and ear returned with vehemence; and immediately, upon the pain's becoming vehement, pus ran out of the ear; but all that night, and the next day, and the greatest part of the night, he knew nobody, and groaned continually. The next day he came to himself; the pain ceased; the heat was milder; and, upon taking another soup

^a An Attick cotyla is something more than our half-pint. See Arbuthnot's Tables.

or drink made of mercury, had, the eleventh day, phlegmy, slimy, fetid stools. The twelfth and the thirteenth, was pretty well. The fourteenth, began to sweat all over from daybreak till noon, sleeping and being so comatose that it was not the easiest matter to wake him. In the evening his sleep left him, and his body was moderately cool, but the beating in his temples remained. The fifteenth and sixteenth, supped some juices or creams. The seventeenth, his pains returned again at night, with lightheadedness, and a discharge of pus. The eighteenth, nineteenth, and twentieth, he was mad, bawled out, and attempted to raise himself up, but could not keep his head still; and, stretching out his hands, was always catching at something in vain. The twenty-first, sweated a little about his right side, breast, and head. The twenty-second, sweated most about his face; and, as to his speech at that time, if he took very great pains, he could say whatever he had a mind to, distinctly; but, if he did not take such great pains, imperfectly, and by halves. His mouth became paralytic, and his jaws and lips were always in motion, as if he had a mind to speak. His eyes moved quick, looked earnestly, and the colour of the right one was as if it had been blood-shotten. The upper eyelid swelled; his cheek was red before he died; all the veins in the face appeared; his ears were contracted; his eyes no longer winked, but were fixed, and the upper eyelid was elevated, as when something falls upon the eye. When he drank, a sound followed it, as it fell into the thorax and stomach, just as in Chartades's case. His breathing was generally moderate all along; his tongue of a pale white colour from the beginning, as in an inflammation of the lungs; his head in continual pain; his neck so stiff that it could not be moved with the head; and the spine from the neck downwards strong and inflexible. His posture in lying was as we have said already, and not always with his face upwards. The pus was serous, white, very troublesome to be dried up with sponges, and besides very fetid. As he drew near his end, he was insensible when his feet were touched.

Harpalidas's sister, in the fourth or fifth month of her pregnancy, had watery swellings in her legs, a swelling in the hollow part of her eyes, and her whole body puffed up as in a phlegmatic habit. Besides these she had a dry cough, a difficulty of breathing of the erect kind, and an asthma of the same. Sometimes she was so near suffocation in her breath, that she was obliged to sit up in her

bed continually, without being able to lie down; and, if she had any inclination or thought of sleeping, it was in a sitting posture; but yet she was seldom feverish. The child within her was the greatest part of the time without motion, and fell down as though corrupted or dead. Her asthma followed upon it near two months, but upon using beans mixed with honey, licking honey itself, and drinking Ethiopian cummin in wine, she grew easier. After this she coughed up a great deal of digested, phlegmatic, white matter; her difficulty of breathing went off, and she was brought to bed of a girl.

Polycrates's wife, in the summer, about the time of the dog-days, was taken with a fever. Her difficulty of breathing was less in a morning, and greater after the middle of the day, and a little quicker. She coughed and hawked up, immediately from the first, as those do who have pus within them. In the inside, about the windpipe and upper part of the gullet, there was a roughness and hissing. The countenance was of a good colour; the cheeks red, not indeed extremely, but moderately florid. In process of time the voice grew hoarse, and the body wasted. About the loins were breakings-out; and the belly at last became loose. The seventieth day she was feverish, but very cold outwardly, without any beating in her temples; and her breathing was quicker. After the beating ceased, her breath was so quick that she was forced to keep' sitting till she died.

In the windpipe there was a great noise; her sweats were bad; but she was very composed to the last. The coldness continued above five days; and after the first she continually hawked up purulent matter.

The woman, that lived above the gates, had a little fever in her old age, which, upon ceasing, was followed with a pain of her neck down to her back-bone and loins; parts that she was not very strong in. Her jaws and teeth were so set, that a probe could not be introduced; her speech faltered, from the body's being paralytic, immovable, and weak; but still she kept in her senses. By warm applications and warm mead there was something of a relaxation the third day; and after this, by the help of soups and broths, she recovered perfectly. This happened about the end of autumn.

The anointer by Harpalis, growing impotent in his hands and legs about autumn, drank a medicine rashly that purged him upwards and downwards, after which he grew feverish. Something

fell upon his windpipe that hindered his speaking; and whenever he spoke he was asthmatic, as one in a quinsy with a hoarseness. He had also the suffocation and other symptoms that attend a quinsy, but no swelling. The fever and the cough increased, and a great deal of moist phlegm was hawked up. In the course of his illness a pain seized him in his chest and left breast; and, when he would rise or be moved, he was very asthmatical, and sweated upon his forehead and head. The complaints about his throat continued, but in a less degree, the pain removing to the chest. Upon these considerations he used beans with honey from the beginning; but, when the fever was upon him, rather warm oxymel, and a lambative of honey plentifully. After fourteen days all his complaints ceased; and, before it was long, he had very good command of his hands and legs.

Chartades had a burning fever, discharged much bile upwards and downwards, could get no sleep, and had a round swelling upon his spleen. The third day he rose early, upon a rumbling in his belly without pain; and, as he was discharging, above a gallon of fresh blood came away. After stopping a little, concreted lumps of blood came away the third time. His heart was sick, and greatly disordered; and a little sweat broke out almost all over, with a gentle fever. At first he seemed to be perfectly in his senses; but, as the day advanced, his sickness and restlessness increased; his breathing was a little quicker; his speech and reception bolder, and again more humane, than occasion required; and he seemed inclinable to faintings. Nor did the soups or the barley-water that were offered him take them off; but his breathing towards evening was exceedingly difficult; his tossing, first on one side, then on the other, very great, without being able to rest one moment. His feet were cold, his temples and head rather hot, with many little sweats about them, as death approached. His drink occasioned, as it passed, a sound about the breast and stomach; which was as bad a sign as could be: and, while he was saying that something wanted to pass downwards, he fixed his eyes, and in a short time expired.

Hermostolemus's wife was taken in the winter time with a fever and pains in her head. Whenever she drank, it was with so much difficulty that she got up and said she had a great uneasiness at her heart, or at least the mouth of her stomach. Her tongue was livid from the beginning; and the occasion of all seemed to be a chilli-

ness after bathing. She got no sleep night nor day. After the first days she complained no more (upon our asking) of the pain of her head, but of pain all over her body. Her thirst was sometimes vehement, at other times moderate. The fifth and sixth, and almost to the ninth, she was delirious, but came in some measure to herself again, and spoke her words by halves, being comatose. Sometimes she reached out her hand to the wall, and clapped a little cold pillow that was under her head to her breast. At other times she threw off the clothes. Her right eye was a little bloody, and wept. Her urine such as we always count bad in children. Her stools from the first yellowish, and afterwards very watery, but of the same colour. The eleventh day the heat seemed to be more moderate. The thirst left her sometimes so far, that, if they did not give her any thing, she never asked. After the first time she commonly slept in the day, and kept awake in the night, complaining of more pain at that time. The ninth, her stools were watery, and so they were the eleventh. The following days she commonly got up often, and had the same sort of stools. The first days of her illness she was violently passionate, grieved like a child, cried out aloud, was frightened, and looked about her, when she came out of her coma. The fourteenth, it was a hard matter to hold her, she jumped and bawled so, on a sudden, and with as much vehemence, as if she had been struck, or was in great pain, or in a great surprise from somebody's seizing and detaining her a little. After this she was quiet again, comatose, and slept perpetually, without seeing at all, and sometimes without hearing, but not without frequent changes (almost the whole day) from one to another, first of ruffle, then of quiet. The next night she voided something a little bloody like slime, and again like muddy slimy stuff, and after this very leeky and black. The fifteenth, violent agitations of the body with frights, but the bawling moderate. Upon this followed fierceness, rage, and crying, if what she had a mind to was not reached her presently. She knew every body and every thing immediately from the first days. That about her eye went no further; but her unreasonable madness, and bawling, together with the change before-mentioned, followed to the coma. She heard unequally; sometimes very well, even though one spoke but low; at other times a louder voice was necessary. Her feet were always of an equal warmth to the last with the rest of her body, but the sixteenth less. The seventeenth, greater moderation than the other days; but at

night, contracting herself as if a chilliness had come upon her, she grew more feverish and very dry, other complaints of the like kind following. Her hands trembled; her head shook; her eyes looked bad; her thirst so vehement, that, after she had drank, she asked again, snatched the mug, and drank plentifully; nor could they pull it away from her. Her tongue was dry and very red; her whole mouth and lips ulcerated and dry. She carried both her hands to her mouth trembling, and fell a chewing; and, if any one offered her something to chew or sup, she drank and supped plentifully and like a mad woman, looking all the time badly. Three or four days before she died, such a chilliness came upon her that her body was contracted and covered up, and her breathing rendered very difficult. Her legs were stiff, her feet cold, her thirst and understanding, as before. Her gettings up to stool were either to no purpose, or what came away was little and thin, with some small tension. The last day of all, viz., the twenty-third, the eye was large in the morning, and she looked about but little, and was easy, sometimes without being covered, or without being comatose; but in the evening the right eye moved about, from the external angle to the nose, as if she was looking at, or wanted, something. She knew every body, and answered to what was asked her. A little after this, her speech, broke with bawling and hoarse withal, faltered.

Amphiphrades's son was taken in the summer with a pain of his left side, a cough, and many watery bilious stools. The fever seemed to go off about the seventh, but the cough continued. His spitting was whitish and palish; but about the fourteenth, of a pale yellow colour. As the disease advanced, his breathing was always thicker and asthmatical, attended with a kind of wheezing about his breast and windpipe. He made use of soups, and kept his senses all along. About the twenty-eighth he died. Sweats sometimes broke out.

The cook, that had an inflammation of his lungs, had also a discharge downwards immediately. About the fourth he sweated much; the fever seemed to go off; and his cough was nothing to speak of. The fifth, sixth, and seventh, was feverish again, and sweated again the eighth. The ninth, hawked up pale yellow matter. The tenth, purged very much, but not often. The eleventh, was easier; and the fourteenth, quite well.

Hermoptolemus, after the setting of the Pleiades, grew feverish,

coughed a little, and his tongue was as in an inflammation of the lungs. The ninth, he sweated, and was cold all over, to appearance. About noon they gave him the cream of barley, and he grew hot. The eleventh, he sweated again; and, upon his belly's being disturbed, had bilious stools that were followed by a small cough. The fourteenth, what he hawked up was pale, and he rattled in his throat. The fifteenth, after having been sensible all the time, he died.

Another person had the like noise upon the roof of his mouth; his tongue was dry, as in an inflammation of the lungs; his senses remained, and he died.

Posidonius was also taken, in the summer, with a pain in his breast, hypochondres, and side, that lasted a long time, but without a fever. Many years before he had had a collection of matter in his breast; and, being chilly in the winter, the pain increased, and a little fever came on. What he hawked up was purulent. His cough was attended with a wheezing in his throat and a rattling. He also kept his senses to the last moment.

Bales's son, having been guilty of all kind of irregularities in the summer, had upon the sixth day a very red bad tongue; a faltering voice; discoloured eyes, that moved up and down as in winking, for want of sleep; and the colour of the rest of his body not very much upon the jaundice, but palish and livid. His voice was bad, and not distinct; his tongue, as in an inflammation of the lungs; his senses, not perfect; his breathing, manifestly bad, and yet neither thick, nor deep; his feet, cold as stones. About the ninth he died.

The woman with the quinsy, who lived at or by Metron's, had a pain of her right hand and leg, with a little fever, a gentle cough, and a suffocation. The third day, a remission. The fourth, was convulsed and dumb, rattled in the throat, grated her teeth, and had a redness in her cheeks. Not being able to hold out any longer, she died the fifth or sixth; and of this the lividness that was in her hand was a sign.

Bion, after having been long ill of a dropsy, had an aversion to eating many days, and was taken with a strangury. An abscess came upon the left knee, that suppurred; and he died.

Ctesiphon fell into a dropsy after a violent burning fever; and, being dropsical and splenetic before, the scrotum, legs, and belly were filled prodigiously. Towards the conclusion a cough came

on, with stranglings in the night, more from the lungs (as those have whose lungs are vitiated) than elsewhere. Three or four days before he died, he shivered, was feverish, and, in the inner part of the right thigh by the middle vein that comes from the groin, a sort of lividish erysipelas gathered, that had withal a redness. At night a pain seized him about the heart, which was soon followed by loss of speech, strangling, rattling, and death.

One in Olynthus, who had also the dropsy, presently lost his speech, was lightheaded day and night, and died.

Prodromus's son could not speak plain in the summer; had a burning fever; a tongue so dry that his words could hardly be heard; a violent purging; and recovered.

Leophoridas had an acute fever, after the winter solstice, attended with a pain of the flanks and belly; many liquid bilious stools; a stupid heaviness in the daytime; a peripneumonic tongue, and no cough. The twelfth, his stools were black, little, and leeky. The fourteenth, the fever seemed to go off; after which he made use of soups. The sixteenth, the mouth was very salt and dry. The beginning of the evening a shivering came on, and a fever. The twenty-first, about the middle of the day, he shivered and sweated. The fever went off, but yet a little heat remained. At night he sweated again. The twenty-second at night another sweat, and the heat abated. All the former days he was without a sweat, but the belly was humid, even in the relapse that afterwards seemed to happen.

Theocles's relation, who lived above, was taken with an acute fever, during the Pleiades. The sixth day it seemed to go off, and she bathed herself as if it was gone. The seventh, in the morning her cheek was very red, but which I don't remember. In the evening she was very feverish again, fainted, and lost her speech. Soon after this she sweated, and recovered perfectly the seventh.

Theodorus's wife lost a great deal of blood in a fever in the winter time; and, upon the fever's going off the second day, a weight first attacked her in her right side as if from the womb, and afterwards an acute pain of the breast. The pain in the side, upon fomenting the part, abated. The fourth, her pains returned. Her breathing was quicker; the windpipe wheezed a little, as she was scarce able to fetch her breath; and, lying with her face upwards, she could not easily be turned. At night the fever was more acute, attended with a short delirium. The fifth in the morning she seemed

to be easier. A little sweat broke out first upon the forehead for a short time, and then was diffused for a long time over all the body down to the feet. After this the violence of the heat abated, and the body was colder to the touch than it seemed to be by the arteries, the beating of which was greater in the temples than any where else. Her breathing was quicker; now and then she was delirious; and worse in all respects. Her tongue was all along very white; and she had no cough, except a little while the third and the fifth day. She had no thirst, but spit. Her right hypochondre was very much tumefied about the fifth, but after that softer. The third, she had a little stool from a suppository. The fifth, another that was liquid. The belly was soft. The urine viscid and like seed. The eyes like one fatigued, looking up and moving about with difficulty. The fifth, at night, she was very much out of order, and after that delirious. The sixth, she sweated much, about the same hour that the forum used to be full, first in the forehead, and afterwards all over a long time. She came to herself, and put her affairs in order; but about the middle of the day was very delirious. As to the cold, that was as before; but every thing about the body was heavier. In the evening her leg fell out of bed; she threatened her little boy unreasonably; then held her tongue, and was quiet again. About the first sleep she was very thirsty and mad; sat down and abused the company; then held her tongue, and was quiet again, and seemed to doze away the rest of the night, but her eyes were not closed. The next day she answered for the most part with nods; was quiet in her body, and tolerably sensible in her mind; and sweated again the same day. Her eyes were dejected as before, rather lying upon the lower eyelid, and looking fixed and stupidly. The whites were pale and deadish, and the whole colour pale and black. Her hands were generally employed about the wall, or the clothes. A great noise attended drinking, and it was returned upwards by the nose. She spread out her hands, picked up the nap of the bedclothes, and hid her face. After sweating, her hands were like crystals; a cold sweat followed, and the body was cold to the touch. She jumped up, bawled out, grew mad, breathed hard, trembled in her hands, and, as she drew near her end, was convulsed. The seventh day she died. The sixth, made but little water in the night, and that, upon drawing it out with a twig, appeared viscid and seedy; got

no sleep all the time; and after the sixth day made water a little bloody.

Antiphanes's son had a pain of his right side in the winter, with a cough and fever; but yet he eat, went about, was a little feverish, and seemed to have something broke within him. The ninth, the fever remitted, but did not leave him; his cough was much, thick, and frothy; his side was painful. About the fourteenth, and again about the twentieth, his fever seemed to leave him, but returned again. The heat indeed was but small, and in a little time left him. The cough was sometimes gone, sometimes vehement, with much strangling; then it abated, and he hawked up afterwards a great deal, coughing as if he should be choked. The purulent matter, that fell upon the vessel, boiled and frothed; and in the throat was generally a hoarse roughness and a kind of wheezing. He was always asthmatical, and breathed quick; seldom well. After forty days, and near sixty (as I remember), the left eye was blinded by a tumour without pain; and, not long after, the right. The pupils were very white and dry; and in a short time after this blindness (not above seven days) he died, rattling in the throat, and talked much out of the way.

The like symptoms happened from the like causes about the same time to Thessalion, as to the boiling, the frothing, the pus, the cough, and the hoarse roughness in the throat.

Polemarchus's wife had a swelling about the windpipe in a quinsy in the winter, and was very feverish. Upon being let blood the strangling in the throat went off, but the fever continued. About the fifth her left knee was painful and swelled; something seemed to be gathered about her heart; and she breathed as a man does after being dipped over head and ears. Such a sound came from the breast, as those impostors make, who, in prophesying events, speak from their belly, and are therefore called *εἰγαστρικοί*. About the eighth or ninth at night a purging came on, and her stools were many, liquid, tumultuous, bad, and fetid. Her speech failed her, and she died.

Aristippus, after receiving a wound in his belly from a javelin, had a great deal of difficulty to survive it. A violent pain of the belly came on, which heated it presently to such a degree that nothing passed downwards. He was sick at his stomach, and vomited bile of a very deep colour, after which he seemed to be easier, but in a little while his pains returned again with vehemence; the

belly was burnt up as in an ileus; he grew hot and dry, and in seven days expired.

Neopolis, from the like wound had the same complaints; but by the use of a sharp glyster had a great discharge downwards. The colour diffused over him was thin, pale, black. His eyes were squalid, heavy, turned inwards, and fixed.

He, who was wounded upon the liver by a dart near hand, had his colour changed presently to deadish. His eyes were hollow; and, after tumbling and tossing about with great anxiety, he died before the assembly was dismissed, the very day that he was wounded.

He who was wounded upon the head with a stone by the Macedonian, though the wound was little more than skin deep upon the left temple, was seized with a dizziness, and fell down. The third day he lost his speech, was exceedingly restless, feverish but not much, and had a small beating in his temples, as when the heat is mild. Add to this, that he lost his hearing and his senses, and could take no rest. The fourth day a dew broke out about his forehead, and under the nose down to the chin. The fifth, he died.

Æniates was wounded in Delus with a javelin upon the back part of his left side, but the wound was not painful. The third day his belly was in a little pain, and voided nothing; but, upon having a glyster at night, a stool followed, and the pain went off. The anus came out to the scrotum. The fourth, such a violent pain seized the pubes and the whole belly, that he could not rest. Bilious vomitings of a deep colour came on; his eyes were pale with a greenish cast, and like the appearance they make in a swoon. After five days he died. Add to this, he was a little hot.

Audellus being wounded in the back, a great deal of wind came through the wound with a noise, and blood followed it; but, upon applying, with a bandage, the medicine for green wounds, he recovered.

Philias's most unfortunate boy, upon the forehead's being laid bare, was taken with a fever the ninth day. The bone turned livid, and he died.

Phanius's son, and Euergus's, upon the bone's being livid, attended with a fever, had a separation of the skin from the bone, but the pus made its way inwards. Upon applying the trepan, a thin, serous, palish, fetid, deadly sanies came up from the very bone.

Vomitings came on in these patients, and towards the conclusion convulsions. Some in this case make a shrill noise, and others are quite impotent. Again, if the wound happens on the right side, the left is affected; if on the left, the right.

Theodorus's son, basking himself in the sun, the ninth day, was taken with a fever the tenth from the bone's being bare, though nothing at all to speak of. A lividness came on with the fever; the skin separated; and his voice was very shrill. The twenty-second his belly swelled, especially about the flanks. The twenty-third he died.

Those, whose bones are broke, are feverish upon the seventh day; sooner, if the weather be hot; and immediately, if they are very much broke.

Exarmodus's little boy was affected pretty much in this manner, and had a pain of his thigh, but not opposite to the wound. His voice was also shrill, and his neck painful.

Posidocreon was convulsed the third day, continually hot, and died the eighteenth.

Isagoras's son, who was wounded in the back part of his head, recovered the fifth, though the bone was shivered and turned black, but did not separate.

The master of a great ship had the forefinger and the lower bone of his right hand broke to pieces. An inflammation came on, a mortification, and a fever. The fifth day he was purged moderately; the heat and pain abated; and part of the finger fell off. After the seventh, a little gleet came away; and after this he said he could not pronounce his words plain. A prediction was made, that that kind of convulsion which draws one backward would happen; to which contributed the jaws being set, and drawn down to the neck. The third day the above-mentioned convulsion seized him all over, and he sweated. The sixth day after the prediction he died.

Telephanes's son, by Harpalus' freed woman, received a wound or bruise of his great toe. An inflammation came on, with a vast deal of pain. Upon its abating he went into the field, and, as he was going, a pain took him in his loins, for which he used bathing. At night his jaws were set, and the convulsion that draws one backward seized him. What he spit was frothy, and came from him through his teeth with difficulty. The third day he died.

Zeno, the son of Damon, had an ulcer about the bone of the leg

or the ankle by the tendon, that was now grown clean. Upon the application of a corroding medicine he fell into convulsions of the opisthotonic kind, and died.

Menon, who was but in a weak condition (about the rising of Arcturus and before) from a fever in the summer and a looseness, upon being fatigued with a journey was taken with a pain of his left side; and the cough, that he had had before from a catarrh, was now become vehement. He could get no sleep, and bore his fever from the very first with great uneasiness. The third day he sat down, and spit pale matter with a gentle wheezing and rattling in his windpipe. About the fifth day his breathing was commonly thick; his feet, shins, and extremities for the most part cold and uncovered. A bilious looseness came on from the first, and was moderate enough. The seventh, eighth, and ninth he seemed to bear his illness easier, got some sleep, and what he hawked up was more digested. The tenth, and even to the fourteenth, it was very white and clear. The right hypochondre was softer, and made the breathing easier; but the left was distended. However, upon using a suppository, a moderate discharge followed. The thirteenth, the spitting was pale again, and more so the fourteenth. The fifteenth, it was of a leek-colour; and a fetid, bilious, liquid stool followed frequently. The left hypochondre was swelled. The sixteenth, the swelling was very great; he rattled in his breathing; sweated about the forehead and neck, seldom about the breast. The extremities, and the forehead, were generally cold; the vessels in the temples kept beating; his sleeps were comatose day and night towards the conclusion; and his urine crude from the first, and of the colour of ashes. About the tenth, and to the thirteenth, it was thin, and not coloured at all; but from the thirteenth, just as at the beginning.

Cleochus had a pain of his side and a fever. The fever afterwards remitted, a sweat came on all over, a great deal went off by urine; after which it grew very turbid.

About the setting of the Pleiades, Olympiades's wife, who was eight months gone with child, was taken with an acute fever upon a fall. Her tongue was dry, reddish, and of a pale yellow, as in a burning fever. Her eyes were of a pale yellow, and the colour deadish. The fifth day she miscarried without any difficulty, and her sleep seemed to be of the comatose kind. In the evening, when they took her up, she was not sensible, but recovered her hearing

a little by the help of a sternutatory. She also drank some ptisan, and coughed a little in the drinking, but did not recover her voice by it, or bring any thing up. Her eyes looked dejected; her breath was fetched with much heaving, and drawn through her nose; her colour was bad; and a little before she died, a sweat appeared upon her feet and legs.

Nicolaus's wife had large swellings behind both her ears from a burning fever; one of which a short time after (the fever now seeming to abate upon the swelling's appearing) subsided about the fourteenth day, without any signs of solution; and so the fever returned again. The colour was deadish; the tongue rough, very thick, whitish, and dry; the discharge downwards much, liquid, and fetid all the time; and, before she died, (which happened about the twentieth) her body was consumed by the quantity.

Before the setting of the Pleiades, Andreas was taken with a chilliness, a fever, and vomiting. It appeared to be a semitertian from the first. The third day, while he was attending the forum again, he grew chilly and feverish; vomited pure bile; was light-headed, and at night easier again. The fifth, was very much out of order. The sixth, had some good stools from an infusion of mercury. The seventh was worse, and after this the fever was more continual. He had no sweats from the beginning, and was thirsty. His mouth in particular was dried up a little, and he could drink nothing with pleasure, there was so much disagreeableness about his mouth. His tongue was dry, inarticulate, rough, and of a pale white colour. He was also watchful, sick at his stomach, relaxed all over, and as it were broke to pieces. His tongue was sometimes so dry that he could not speak, without stammering, till he had washed his mouth. What he lived most upon was ptisan. The ninth or tenth day, the little swellings that were behind his ears disappeared without any sign. The urine all along had a colour, but no sediment. The fourteenth, he sweated upwards, not much indeed, but moderately. The seventeenth, the heat went off. After the tenth, his body was so bound as to discharge nothing without suppositories. About the twenty-fifth, small pustules that itched a little, and were hot, as if burnt with fire, broke out. A pain was also felt about the armpits and the sides, which afterwards removed to the legs, without any signs that were critical, and there ceased. Bathing was of service, and anointing with the ointment

made with vinegar. Two, or perhaps three, months after, the pain that he had complained of at times fixed upon his kidneys.

Aristocrates was taken, about the winter solstice, with a lassitude, a chilliness, and heat. The third day a pain of his side and loins came on, together with a hard swelling, that, arising from the armpit, reached all over the right side, and was red the whole way at first, but afterwards livid, as if heated and burnt with fire. He was also sick at his stomach; bore his illness badly; was very thirsty; had a whitish tongue; made no water; and was coldish in his feet. After an infusion of mercury he had a small, liquid, whitish, frothy discharge downwards. At night he heaved very much in his breathing; sweated a little about the forehead, was cold in his extreme parts; sick at his stomach and restless; bloated in his neck, but without a cough; and died very sensible.

Onesianax had an inflammation of his eyes about the autumn, and afterwards a quartan; in the beginning of which he was very averse to food, but in the progress of it very well pleased with it. Polychares was also affected in a quartan after the same manner as to eating; but Onesianax had a looseness before and for a long time after his fever, attended with a discharge of much white mucous matter; sometimes a little blood came away, without either trouble or pain; and, besides these, he had a rumbling noise in his belly. After the fever a hard tumour was formed about the anus, which remained undigested a long time, but at last broke into the gut, and became fistulous outwardly. As he was walking in the forum, flashes appeared before his eyes, that hindered him from seeing the sun very well. Upon quitting his place he was a little lightheaded and convulsed in his neck; and, when he was brought home, he scarce saw any thing, and was hardly himself. First of all he looked about upon those that stood around him; and his body was so cold that it could scarce be warmed by the application of warm things, and fomentations applied under him. When he came to himself, and got up, he was not for going out, but said he was afraid; and, if any body spoke of dangerous diseases, he withdrew himself for fear. Sometimes he said he was hot in his hypochondres, and the flashing of his eyes followed upon it. His evacuations downwards were copious, frequent, and like what he had had in the winter. He was bled, took hellebore, drank cow's milk, and before that, ass's, which agreed well with him, and stopped his

looseness. He likewise drank water from the beginning, walked about, and was purged in his head.

Anechetus's son was thus affected in the winter. Upon being anointed by the fire after bathing he grew hot, and immediately fell into convulsions like epileptic fits; and, when many of these had attacked him, he looked about, and was not quite in his senses. After coming to himself he was convulsed again the next morning, but did not foam much. The third day he could not speak distinctly. The fourth, made signs with his tongue. The fifth, could not speak at all, but was stopped at the beginning of the words; and the very same day his tongue was very much affected; a convolution came on, and he grew lightheaded again. Upon a remission of these, his tongue recovered, with difficulty, its former state. The sixth, he abstained from every thing, not excepting his soups and drink, and took nothing more.

Cleochus, after weariness and exercise, was seized with a swelling in his right knee upon the use of honey for some days, especially towards the lower part about the tendons that are under the knee. He went about, however, though a little lame. The calf of the leg swelled, and was hard even to the foot and the right ankle. His gums about his teeth were large, like grape-stones, livid, black, and without pain, when he did not eat. His legs were free from pain too, but when he got up: for the swelling came upon the left side, and was not so livid. In the swellings that were about the knees and feet, something like pus seemed to be contained; and at last he could neither stand nor go upon his heels, but was forced to keep his bed. Sometimes he was manifestly hot; loathed his victuals; and yet was not very thirsty, nor got up to his seat. A sickness and uneasiness attended him, and sometimes he was pusillanimous. Hellebore was prescribed him, and his head was purged. His mouth was also relieved with the medicine made of the chips of frankincense, mixed with other things. Lentil broth was also of service to the ulcers in his mouth. The sixtieth, the swellings subsided upon the second dose of hellebore, and only a pain affected the knees as he was laid. A humour mixed with bile fell upon his knees, and that many days before he took the hellebore.

Pisistratus had a pain and weight in his shoulder a long time, while he was walking about, and in other respects well. But in the winter a great pain of the side attacked him with heat, a cough, and a hawking up of frothy blood, which brought on a rattling in

the throat. He bore all this well, and was perfectly in his senses. The heat, the hawking, and the rattling abated; and about the fourth or fifth day he got well.

Simus's wife, who was shook in her delivery, had a pain about her breast and side, accompanied with a cough, a fever, purulent hawkings, and a consumption. The fever lasted six months, with a continual looseness. At last the fever stopped, and after that the looseness; but in seven days' time she died.

Euxenus's wife, too, seemed to derive her illness from fomenting. The heat never left her, but was rather greater towards the evening, and she sweated all over. When the fever was about to increase, her feet, and sometimes her legs and knees, were cold; a little dry cough came on, when the fever began to grow worse, and then ceased; but a rigor all over continued a long time; and she was all along free from thirst. Upon taking a purge, and whey afterwards, she grew rather worse. From the beginning she was entirely free from pain, and breathed well; but about the middle of the time a pain took her in her right side, attended with a cough, an asthma, and a hawking up of little, white, thinnish matter. The chilliness was no longer from the feet, but from the neck and back; the belly was more liquid; the fever abated with a great sweat; and the coldness returned again. Her asthma had great variety, and she died in her senses the seventh day after the remission.

Polemarchus's wife began to be feverish in the summer, but it left her the sixth day. After this she crept about, was hot at night, and, after another intermission, the fever seized her again, and held her near three months, with a violent cough, and a hawking of phlegm. From the twentieth day her breathing was always quick; noises were heard in the breast; and a sweat was commonly upon her. In a morning the fever was milder; a chilliness sometimes came on; and sleep ensued. She was also sometimes loose in her body, sometimes bound; and tasted her victuals tolerably. About the middle of the time a pain took her in her knees and legs, so that she could neither bend nor stretch them out without assistance; and this complaint of the legs continued to the last. As she drew near her end, her feet swelled up to the legs, and upon being touched were painful. The sweats and the shivering went off, and the fever was always increasing. Before she died, a looseness came on, but her senses still continued. Three days before she

went off, a rattling in the throat came on, and upon the return of it she expired.

Hegesipolis's little boy had a gnawing pain about his navel near four months, which in time increased. He beat and twitched his belly; was troubled with heats; and wasted away, except in his bones. His feet and testicles swelled. That part of his belly was puffed up, as when a disturbance or looseness of the belly is coming on. He was also averse to food, and lived upon nothing but milk. As he drew near his end a looseness came on, with a discharge of bloody, fetid sanies; the belly was exceeding hot with it, and he died vomiting a little phlegmy substance, that one would have almost taken for seed.

Plateas's boy had the suture of his head very much hollowed in his last moments, and in time of health was always beating the forepart of his head with his hand, but especially as he drew near his end, and yet the head was not in pain. In the left thigh the parts below the groin were livid (perhaps the day before), and his testicles were grown slender.

Hegetoridas's son was affected in the same manner, and died; but with this difference, that he had more vomitings towards the conclusion.

Hippias's sister, who was ill of a phrensy in the winter, tore herself the fifth day (not knowing what she did), as she was doing something with her hands. The sixth, at night she lost her speech, was comatose, bloated in her cheeks and lips as a person in his sleep, and died the seventh.

Asandrus was chilly, had a pain of his side, and in his knees and thigh; after eating grew delirious, and in a short time died.

Cleotimus, the cobbler, after a long illness, and a feverish disorder, had a rising like a tubercle about the liver, which fell upon the intestines, and occasioned a looseness. Another such tubercle came about the liver above, near the hypochondre, and he died.

Some were troubled with a violent pain of their head, and heat at the same time. Now where it affects half the head, and something of a thin or digested humour discharges itself downwards by the nose, or ears, or throat, there is the greatest security; but where these parts are dry, and the corruption of the brain very great, there danger is to be feared. If, besides all this, there is a ruffling, or bilious vomiting, a stupidness of the eyes, a loss of speech, or but a word now and then, or any delirium, death and

convulsions are then to be feared. Again, where a pain seizes half the head from a catarrh, and, the humour discharging itself by the nose, a gentle fever succeeds, in five or six days they grow cold again.

Echecrates, the blind man, had a violent pain of his head (rather behind, where the neck and head join), which proceeded to the crown, and in time to the left ear, affecting half his head very much. A mucous matter came away constantly, but commonly burnt a little; a little heat followed it, with a loathing of his food. In the day he was easy, but in the night in pain; and, when the pus made its way out at the ear, every thing ceased. This eruption happened about winter.

Query,—Whether, in all collections of matter, and in disorders of the eyes, the pains are at night?

Those who have coughs in the winter, and especially with the southerly winds, are subject to fevers during their hawking up much thick matter; but then they commonly cease in five days. But coughs will extend to forty, as in the case of Hegesipolis.

Those who have sometimes a cessation of great heats, are cured of them by sweating, not indeed all over the body, but either about the neck, the armpits, or the head.

Charites was taken in the winter with an acute fever upon a cough that was epidemical. He threw off the bed-clothes; was comatose, and uneasy; his urine was red, like the washing of vetches, with a large white sediment immediately from the first, and afterwards a reddish. The seventh, he had a little stool from a suppository. The coma continued, but without uneasiness. A dew appeared upon his forehead. He slept at night, and the heat was milder. The eighth, snipped some ptisan, and remained comatose till the eleventh, the heat in a great measure then ceasing. Upon coughing he always hawked up a great deal with ease, first viscid, white, thick, and after that digested like pus. The urine after the eleventh was clearer, the sediment rough. The thirteenth, a pain on the right side to the flank and lower part of the belly. The urine stopped, but was relieved by an infusion or decoction of the Calliphyllo. The fifteenth, the pain returned again. The sixteenth, at night, the pain of the flank came more upon the belly, but was carried down by an infusion or decoction of mercury. The heat was spent within twenty days; but the hawking up of thick matter with ease continued forty.

The bellies of people should be gently purged in diseases, when the humours are digested; the lower, when you are satisfied that they are settled downwards: (this may be known by the patient's not being sick at his stomach or uneasy, or heavy in his head) and when the heat is mildest, or when it ceases after the fits; the upper (or the stomach) in the fits themselves; for, when the upper parts are sick, or uneasy and heavy, the humours are then raised upwards spontaneously. For this reason no purge should be given at the beginning, because at such a time they are purged spontaneously, or delays are dangerous.

The great process of the elbow being wounded by a fall, a mortification came on, and upon that a suppuration. When the matter was digested, a thick glutinous sanies was pressed out, and soon stopped, as in the cases of Cleogeniscus and Demarchus, the son of Aglaoteles. So again from the very same causes no pus came out, as in the case of *Æschylus*'s son; but in most cases, where pus is gathering, a chilliness and fever attend.

Alcmanes, recovering from nephritic complaints, and being blooded downwards, the disease was translated to the liver. The heart was in such violent pain that the breath was suspended by it; the belly discharged with difficulty little pellets like goats' dung; there was no sickness or anxiety at the stomach, but sometimes he shivered, and was a little feverish. He sweated, too, and vomited. While the pain was upon him, he received no benefit from a glyster of sea-water, but from a decoction of brans he did. He had an aversion to food seven days; drank a simple kind of mead, lentil broth, and thin panada, with water after it. He then drank water, and eat a little of a boiled puppy, with a small quantity of maize as old as possible. As the time advanced, his diet was neat's feet, or pigs' petty-toes boiled. The next day he drank water again, rested, and covered himself up. For the nephritic complaint a glyster of wild cucumber was given.

Parmeniscus's boy was deaf, and received benefit from his ears being cleansed with wool, and then oil or netopum poured in, without any syringing. He was also ordered (and to advantage too) to walk, rise early, and drink white wine; to abstain from herbs, and to live upon bread and rock-fish.

Aspasius's wife had a violent pain of the tooth, with a swelling of her jaws. Upon washing with castor and pepper, and holding the same in her mouth, it abated. Her strangury complaints abated

too. The flour or meal that is mixed with ointment of roses is also healing.

Headaches from the womb are taken off by castor.

The greatest part of hysterics are caused by winds, as is plain from belchings, noises about the belly, swelling of the loins, and pains about the kidneys and hips. Black wine that has been kept so long under ground as to have nothing of the must left; or one third spices, and two of flour, boiled in sweet-scented white wine, and poured upon a cloth, apply, when it is daubed with the ointment, as a cataplasm, where the hysterical pains affect the belly.

Callimedon's son, who had a hard, large, crude, painful tubercle in his neck, was relieved by bleeding in the arm, and a cataplasm of torrefied linseed moistened with oil and white wine, not hot, nor much boiled, or else boiled in mead with the flour of fænugreek, or barley, or wheat.

Melisander was relieved by bleeding in the arm, in a great swelling of the gums, attended with much pain. Egyptian alum at the beginning is also of service as a repressoresser.

Eutychides was seized at last with cramps in his legs, and a purging, from a cholera morbus. He vomited a great deal of bile of a deep colour, and very red, for three days and nights; drank something upon his vomiting; was mighty restless, and sick at his stomach; nor could he contain any thing that he either drank or eat. His evacuations by urine and stool were much suppressed; soft faeces came up with the vomitings, and also made their way downwards.

The Cholera Morbus, "witness the case of Bias, the champion, who was naturally voracious," proceeds from eating of flesh, especially swine's, with the blood in it; vetches; drinking to excess of old sweet-scented wine; insolation, or being exposed to the sun; from cuttle-fish, lobsters or cray-fish, and crabs; and from eating of herbs, especially leeks and onions. It also comes from boiled lettuce, cabbage, and the cruder docks; from desserts, sweetmeats, summer fruits, as apples, and ripe cucumbers; from milk and wine mixed; from tares, and new barley meal.

The summer is most productive of choleras, and intermitting fevers, and such as are attended with chillinesses. These are sometimes of a bad sort, and pass into acute diseases; but care must be taken. The fifth, the seventh, and the ninth days are the principal

indicants in these diseases; but it is better to be upon our guard to the fourteenth.

Calligenes, when he was about twenty-five, had a catarrh and a great cough, attended with much difficulty in bringing the matter up, but without any discharge downwards. This continued for four years, with gentle heats at the beginning. Hellebore was of no service at all, but a spare diet was, in conjunction with exercises of several kinds, eating of bread, drinking of black wine, eating with bread whatever he would, whether flesh or fish; and abstaining from every thing sharp, salt, or fat; the juice of silphium, and crude herbs; and with walking much. Drinking of milk was of no service, but drinking something more than three spoonfuls of sesamum with soft wine was.

Timocharis, in the winter, had a defluxion upon his nose, that was stopped entirely by venereal recreations. A lassitude and heat came on, with a heaviness in the head, and a great sweat, first about the head, and then all over. Sweats were familiar to him in time of health. The third day he recovered.

Cleomenes's boy began, in the winter, to loathe his food; fell away upon it, but had no fever; vomited his victuals and phlegm; and seemed thus disgusted two months.

The cook, that had the bunch upon his backbone after a phrensy, received no benefit from any kind of purging potions; but black wine, eating of bread, abstinence from bathing, anointing the part, and gentle friction after unction, with warming the part gently, and not by much fomenting, were of service to him.

Tesimus's daughter, upon drinking something for that purpose of her own head, miscarried of a foetus thirty days old. Pain followed upon it; and, whenever she drank, she vomited much bilious, pale, leeky, black stuff. The third day was convulsed, and bit her tongue. The fourth I came to her, and found her tongue black and large; the whites of her eyes red. She got no sleep, and died the same day at night.

The girl that fell from the precipice lost her speech, was exceedingly restless, vomited at night, bled a great deal from the left ear that she fell upon, drank mead with difficulty, rattled in her throat and breathed quick like a dying person. The veins about her face were distended; her position was supine, her feet warm, her fever not much, but yet sometimes acute, with great stupidness in her understanding. The seventh, she recovered her speech; the heats were milder; and she got over it.

Onisantides was relieved, in a pain of his arm in the summer time from an abscess, by bathing or moistening his body and his arm for a long time in the sea. For three days together he drank a white watery wine lying in the sea, and made water there before he came out of it.

The fuller in Syrus, who was ill of a phrensy, and had a trembling in his legs after burning, was marked upon the skin like the bites of gnats. His eye was large, and the motion quick. His voice broken or interrupted, but yet distinct or intelligible. His urine clear, without a sediment. Query—Whether from his purging with thapsia? The eighteenth it remitted, and went off without a sweat.

Nicoxenus, in Olynthus, seemed to have the like remission the seventh day with a sweat. He afterwards took soups, wine, and grapes dried in the sun. The seventeenth day I came to him, and found his tongue burnt up, with a heat upon him, but not very vehement outwardly; his body was terribly loose and flabby; his voice so broke that it was a trouble to hear him, though it was at the same time distinct; his temples fallen; his eyes hollow; his feet soft and warm; and a distension about his spleen. He could not keep the glyster, but returned it. At night a stool came away a little solid, and a small quantity of blood; I suppose from the glyster. The urine was clear and bright; his position in bed supine; his legs parted as through excessive weariness; but he could get no sleep all the time. The heat went off within twenty days. His drink was bran-water, with the juice of apples and pomegranates, the juice of torrefied lentils cold, and the washings of meal boiled into a thin soup. He got over it.

The fullers had large and hard swellings of the glands, without pain, about the pubes, and the like about the neck. A fever attended at first for ten days, and a cough succeeded upon their breaking. The third or the fourth month the belly wasted; heats came on; the tongue was dry and thirsty; the evacuations downwards difficult; and death put an end to all.

Pherecydas, after the winter solstice, lost a pain of his right side at night that he had been used to before. He got his dinner, went out, was chilly, and at night feverish, but without pain. A dry cough came on. A great deal of urine, with much sediment, that appeared from the first like shavings, smooth, and dispersed, but after four days was turbid. The urine was not without colour,

and had a sediment, but no collection appeared in the chamber-pot, when it was cold. The third day, a natural stool. The fourth, by the help of a suppository, stercoraceous and biliary stools, with a great flux of humours. He slept a little in the night, and a little more in the day; and was not very thirsty. The same day, especially at night, the skin about his forehead and other parts was continually soft. The fever seemed to the touch to be brought under, and a dewy moisture broke out. The pulsation of the vessels in the forehead (or temples) was very obscure. Whenever he turned, or went to stool, a heaviness came upon him for a little while, but he was free from pain all along from the first, and after being sick at his stomach a little while vomited. The seventh, by means of a suppository had three stools, biliary, stercoraceous, very liquid, and pale; rambled a little; and soon had a dew upon his forehead again. He covered his face with the clothes, looked about again to no purpose, as if he saw something; winked again, and threw his clothes off. The ninth, a sweat began in the morning about his breast, and continued till he died. The fever raged; the delirium continued; he sweated much about his forehead, but with a terrible or whitish appearance; the skin under his hair was marked; his right hypochondre tumefied; and his discharges downwards biliary. The eighth, he was marked, as if bit by gnats. Before he died, he coughed up things like mushrooms, made of slime and surrounded with white phlegm; a little before which he hawked up white, milky, concretions.

A certain person was taken with a chilliness in his sleep after supper. The next morning he got up, and complained of a heaviness in his head, was chilly, vomited, and had the same heaviness still. At night it abated, and remained so till about the middle of next day. Then he grew chilly again, and passed the night but badly. The next day he was very feverish, had a stupidness in his head, vomited much bile, the greatest part of it porraceous; was better in all respects after it; slept at night; was cold all over next morning; sweated a little, and had a dew upon the greatest part of his body. His spleen (for he pointed to the place with his hand) had a collection of something without pain, that went off again presently. At night he got no sleep. About the hour of the assembly's meeting, the fever was exasperated; a sickness at the stomach came on; a dizziness; a pain of the intestines and head; and a vomiting of porraceous, smooth, viscid matter like phlegm. About sunset

every thing ceased. He sweated about the head and neck; and after vomiting had a stercoreaceous, liquid, bilious discharge, neither black, nor convenient. The night and next day were tolerable. At night again he got no sleep; vomited in the morning as before, and also the next day, without any sickness. The pain of the head went off after sweating. In the evening every thing abated. The ninth, no vomiting, but he was rather hot. In other respects he seemed to have no fever, but yet had a pulsation in the temples. No pain any where, but a continual thirst. The same day, as he got up upon the stool, he fainted very much; by means of a suppository he voided black bilious shavings, and what dropped away was of a stercoreaceous colour. The voice was broke; a heaviness attended turning; the eyes were hollow; the skin of the forehead stretched. As to the rest, he breathed well, and was composed; generally turned to the wall; and was moist, curved, and at rest in his bed. His tongue was also smooth and white. About the tenth day and after, the urine looked red about the edges, and a little white in the middle. The twelfth, the same bilious and abraded droppings from the suppository, and afterwards faintings. After that the mouth was dried, and always washed; and, if the water was not very cold, like snow itself, he would say it was warm. There was no thirst complained of. He always put the clothes off from his breast, nor would he suffer his gown to be warmed. The fire was at a distance, and but little. Both his cheeks were red. After this his speech was inarticulate, and he grew hot again a day or two, and then it terminated.

Androthales lost his speech, was ignorant of what passed, and withal delirious. But, these going off, he went about many years, and then relapsed. His tongue remained all the time so dry, that, unless he washed his mouth, he could not speak. There was also a great bitterness for the most part. The mouth of the stomach was sometimes in pain, but this was taken off by bleeding. Drinking of water and mead was of service to him. He also drank black hellebore, but nothing bilious passed off, or but very little. At last, being taken ill in the winter, a lightheadedness came on; the tongue was affected in the same manner as it had been; the heat was small, and without pain; the colour of the tongue nothing at all; and the voice, as in a peripneumony. He threw the clothes off of his breast, and ordered them to carry him out, as though he wanted to make water, not being able to speak any thing plain, nor

to keep his senses. He was accordingly led out, and died at night, after having lain two or three days.

Nicanor's disorder was of such a kind, that, when he was obliged to go to a drinking-bout, he was always afraid of a flute; and, when the piper began to play, the music immediately threw him into such a great fright, that he was not able to bear the disorder of it, if it was night; but if he heard it in the day, it gave him no uneasiness at all. This continued with him a long time.

Timocles, who was with him, seemed to be dim-sighted, and of a broken texture of body; and said he could not pass by a precipice, or over a bridge, or cross a ditch, though never so shallow, and that through fear of falling; but at the same time could go through that very ditch. This lasted some time too.

Phænix's complaint was of such a nature, that flashes like lightning seemed to dart from his eye, and generally his right eye. Not long after, a violent pain seized his right temple, and then his whole head and neck. The back part of his head at the vertebræ swelled; and the tendons were upon the stretch and hard. Now if he attempted to move his head, or to open his teeth, a pain seized him from the violence of the stretch. Vomitings, whenever they happened, removed the pains now mentioned, or made them easier. Bleeding was also of service; and hellebore draughts brought away all sorts of humours, especially porraceous.

Parmeniscus, who was formerly in a despairing way, and desirous of death, would sometimes be in his right senses, and well disposed. In Olynthus, he was taken one autumn with a loss of speech, but lay quiet, attempting to speak as little as possible; and, when he did speak any thing, he lost his speech again. Sometimes he slept, sometimes kept awake; tossed about without saying a word; was under great anxiety, and clapped his hand to his hypochondre, as if he was in pain there. Sometimes he turned away his face, and lay quiet; was feverish continually, but breathed well. At last he said he knew those that came in. Sometimes he would not drink for a whole day and night, though it was offered him; at another time he would snatch up the pitcher, and drink all the water. His urine was thick like that of beasts of burden. About the fourteenth it abated.

Conon's maid-servant, from a pain that began in her head, grew lightheaded, bawled and lamented mightily, and was seldom quiet.

About the fortieth day she died, but lost her speech, and was convulsed, ten days before she died.

Timochares's servant died in the same manner, and about the same time, affected (to appearance) with the same melancholy disorders.

Nicolaus's son was taken about the winter solstice with a chilliness after a drinking-bout, and was feverish at night. The next day he vomited a little pure bile. The third, while the assembly was full, sweated all over; lost his fever, but soon grew hot again. About the middle of the night shivered, was very feverish, and the next day shivered again at the same hour, but soon grew hot again, and vomited as before. The fourth, from an infusion of mercury had a very good stercoreaceous liquid stool, but somewhat fetid. The urine was of the colour of ashes, not unlike the mercury infusion, but without any sediment; nor was there much urine, and but little cloud. The left flank and loins were in pain. He thought to fetch his breath well after vomiting, but fetched it sometimes double. His tongue was white, and had a small concretion sprouting out like a lupine, on the right side. He was withal a little thirsty, watchful, and lightheaded. The sixth, his right eye seemed larger than ordinary. The seventh, he died; but before his death his belly swelled, and his back parts were red after death.

Meton, after the setting of the Pleiades, had a fever, and a pain of the left side to the collar-bone, so acute that he could not possibly rest. The inflammation continued, and his stools were many and bilious. In about three days the pain went off, and the heat about the seventh or ninth. A cough attended, but what he hawked up was neither somewhat bilious, nor large in quantity, but a coughing up of phlegm succeeded. He tasted what he eat, and sometimes went out as if he was well; but was sometimes taken with little heats, that lasted not long. Gentle sweats came on at night. His breath, while the heat was upon him, was thicker; his cheek red; and about his side, under his armpits, and even to his shoulder, he felt a weight. The cough continued; and the medicine he took brought away bilious stuff upwards. The third day after the physic, pus broke out, forty days from the first of his illness. About five-and-thirty days after, he was purged again, and grew well.

Theotimus's wife, in a semiterian, was sick at her stomach, vomited, was chilly at the beginning, and dry. As it advanced, the heat was very great at the beginning of a fit; but upon drink-

ing mead, and returning it again, the chilliness and the sickness went off; after which she drank the juice of quinces.

Diopethes's sister, in a semitertian, had a violent pain at the mouth of her stomach, when the fit came on, and it lasted the whole day. Other women had nearly the same complaint; but, about the setting of the Pleiades, men were more rarely affected in this manner.

Apomotus's wife, about the time of Arcturus, had a violent pain at the mouth of her stomach upon a fit, in a semitertian, coming on. She vomited too, and had hysterical chokings at the same time, besides pains in the back near the spine. These, when they got there, put an end to her stomach-pains.

Terpidas's mother, who came from Doriscus, after miscarrying of twins by a fall in the fifth month (one coming away immediately, enclosed in a certain membrane, and the other in about forty days), conceived again. But in the ninth year she complained of violent pains in the stomach a long time, beginning sometimes from the neck and spine, and ending in the lower part of the stomach and groins; at other times from the right knee, and ending in the same place. When the pains were about the stomach, the belly was swelled; and when it went off, the heartburn came on, without any stranglings indeed, but the body was as cold as if it laid in water. At the time the pain was upon her, the other pains returned all over, but with more mildness than at first. Garlic, silphium, and all acrid things signified nothing; nor sweet, nor acid things, nor white wines, but black wines, and bathing now and then were of service. Terrible vomitings came on from the beginning, and no food could be taken; nor did her menses come down with the pains.

Cleomenes's wife, about the time of the west wind's blowing, was taken, after a sickness at her stomach and a weariness, with a pain of her left side, that began from the neck and shoulder. She grew feverish, was chilly, and sweated. After the fever began, it abated not, but increased. The pain was vehement; a cough came on, and what she brought up was a little bloody, pale, and in great quantity. Her tongue was white; her stools moderate and liquid; her urine bilious. The fourth at night her menses came down plentifully. The cough, and the hawking, abated. The pain abated also, and the heat was very moderate.

Epicharmus's wife, before she was brought to bed, had a dysen-

tery with a great deal of pain, and stools that were somewhat bloody and slimy. Upon her delivery she grew well immediately.

Polemarchus's wife, who had been troubled with pains in her joints, was taken on a sudden with a violent pain in her hip from her menses not flowing. Upon drinking an infusion of bete, she lost her voice a whole night, and to the middle of the next day. However, her hearing and her understanding were good, and she made signs with her hand that the pain was in her hip.

Licinius's sister, who was a little past her bloom, vomited whatever she took for fourteen days, without a fever; brought away blood in her vomitings; and complained of belchings. A contraction and strangling was also about the heart. Upon taking castor, seseli, and the juice of pomegranate, all was stopped; but a moderate pain went off to the flank. The juice of a bulb, austere wine milk-warm, and loaves as small as possible dipped in oil, were made use of.

Pausanias's daughter, upon eating a raw mushroom, was taken with a sickness at her stomach, a strangling, and a pain of her belly. Drinking warm mead, and vomiting, were of service to her, and so was warm bathing: for in the bath she brought up the mushroom; and, when every thing was going off, she fell into a sweat.

Epicharmus, about the setting of the Pleiades, was taken with a pain of his shoulder, and a very great weight upon the arm. He was also sick at his stomach, vomited frequently, and drank water.

Euphranor's son had eruptions like the bites of gnats for a little while, and the next day he grew feverish.

After the west wind, great droughts set in to the autumnal equinox. In the dog-days were excessive heats, hot winds, sweating fevers, that immediately grew hot again. Tuberclles behind the ears appeared in many; particularly in the old woman with the cough, about the ninth day; in the young man whose spleen was out of order (the maid-servant's son) with a purging at the same time; in Ctesiphon, about Arcturus, and pretty near the seventh day; in the boy (the only case that came to suppuration); in Eratolaus's boy, where they went off again on both sides. No sweats followed; but a stuttering or lisping, from the dryness of the tongue. The Ornithiae blew much and cold; snows fell sometimes after clear weather; and after the equinox came southerly winds mixed with northerly, and frequent showers. Many coughs went about

epidemically, especially among children; and in many behind the ears were appearances as in the satyrs. Sometimes the winter, even before this part of it, was rough and turbulent, attended with snow and northerly showers.

Timonax's little boy, about two months old, had small eruptions on his legs, hips, loins, and lower part of his belly. The swellings were very red, and upon their subsiding, or going in again, convulsions and epileptic fits attacked him, without a fever, for many days before his death.

Polemarchus's son, who had been troubled with a collection of matter and hawking some time before, grew hot afterwards, and dropsical, attended with a swelling of the spleen, and an asthma. If he went at any time up of high ground, he grew faint and thirsty; and sometimes he had a little aversion to eating. A dry cough continued with him a long time. However he crept about, and, if he had no more than one stool a day, with ease, he seemed full, and his asthma and suffocation increased. At last a catarrh and hawking came upon him with a cough; and what he brought up was thick and pale, but purulent. The fever was smart, but seemed to go off; the cough was milder; and what he hawked up was clear. The fever returned again with vehemence; he breathed thick, and died, but shivered first in his feet, and afterwards grew cold. His breath was more intercepted; his urine stopped; his extremities cold; and he died sensible, three days after the return.

Thynus's son was oppressed almost to death with hunger in a burning fever; had a great many stools, with bile, faintings, and much sweating; grew very cold, and lost his speech a whole day and night. The cream of barley, that was poured down, stayed with him. His understanding was clear, and his breath good.

Epicharmus's son, from walking and drinking, fell into a crudity of digestion; and the next day, upon drinking water, vinegar, and salt, in the morning, vomited phlegm. After this he shivered, bathed with a fever upon him, and felt a pain in his breast. The third day, about daybreak, a coma seized him for a little while, and he became delirious, very feverish, and restless under his disorder. The fourth, he could get no sleep, and died.

Ariston's toe was ulcerated. A fever came on, and he could speak distinctly. The mortification spread up to the knee, and killed him. The ulcer was black, dryish, and fetid.

He, that had the cancer in his throat burnt, was cured by us.

Polyphantus, in Abdera, had a pain of his head in a violent fever. His urine was thick and much, and the sediment thick and turbid. The pain of his head not ceasing, medicines were ordered the tenth day to sneeze with; after which a violent pain of his neck attacked him. The urine was red and turbid, like that of a beast of burden. He rambled like a man in a phrensy, and died in strong convulsions.

The domestic of Euaclides was affected in much the same manner. After the urine had come away thick a long time, and the head had been in pain, she became phrenitic, and died in strong convulsions as the former. For urine, that is very thick and turbid, is a certain sign of pain of the head, convulsions, and death.

The Halicarnasseean, who lodged in Xantippus's house, was troubled in the winter with a pain in his ear, and a violent one in his head. He was then about fifty. A vein was opened by Mnesimarchus, from which the head, being emptied and cooled, was injured; for no suppuration followed. A phrensy took him, and he died. His urine was also thick.

Metrodorus's son, in Cardia, had a mortification of the jaw from a pain of the teeth, and a terrible excrescence of the gums. A moderate suppuration came on, and both the grinders and the jaw fell out.

Anaxenor, in Abdera, who was splenetic and ill-coloured, happened to have a swelling about the left thigh that disappeared on a sudden. Not many days after, that which they call epinyctis (from its beginning in the night) appeared upon the spleen, attended with a hard, red swelling. Four days after this a burning fever came on, and the parts all round looked livid and putrefied. Death ensued, but he was purged a little before that, and came to himself.

Clonigus, in Abdera, who had nephritic complaints about him, pissed blood by little and little, and generally with difficulty. A dysentery was added to his other misfortune. He was ordered to drink goat's milk in a morning, with a fifth part water, so that the whole quantity should amount to a pint and half; to eat in an evening bread thoroughly baked, and with his bread beet or cucumber. His urine was black and thin. He also eat ripe cucumbers. By this diet his dysentery stopped, his urine came away clear, and he continued the milk till the urine was come to its proper state.

A woman, in Abdera, had a cancer upon her breast of such a

nature, that a sanies somewhat bloody discharged itself through the nipple, which discharge, being stopped, killed her.

Dinius's little boy, in Abdera, had a slight wound upon the navel, that ended in a fistula; through which a thick worm sometimes passed, and sometimes bilious matter, (as he himself said,) when he was feverish. The gut being near, fell upon the fistula, and was corroded as that was. Another rupture succeeded, and would let nothing stay.

Python's son, in Pela, began to be very feverish immediately, and very heavy to sleep. His voice was lost, his sleeps came to him, and his belly was hard all the time. A suppository of gall being applied, a great discharge followed, and immediately upon that a remission. But the belly was soon swelled again, the fever raged, and the same heaviness to sleep came on. While he was in this condition, he took a little of those medicines that are made with wild saffron, wild cucumber, and meconium; upon which he fell into a bilious purging, and immediately the stupidness went off, the fever grew mild, every thing was easier, and the crisis happened the fourteenth.

Endemus had a violent pain in his spleen, and was ordered by his physicians not to eat much, to drink a little thin wine, to walk often, and to keep strictly to this method. He was also blooded; lived but sparingly in his eating and drinking; walked by degrees; drank black thin wine; and recovered.

Philistides, the wife of Heraclidas, was taken with an acute fever. Her face was red, without any evident occasion; and a little after, in the day, a shivering came on, and was succeeded, as she did not grow hot, by a convulsion in her fingers and toes; a little after which she grew hot. Her urine had something in it compact, cloudy, and as it were torn off. She slept at night. The second day shivered again; grew a little hotter in the day; the redness abated; the convulsions became more moderate; and the urine the same. She slept again at night, but laid awake a little, without any manner of uneasiness. The third, her urine was better coloured, and had a little sediment. The same hour she shivered again, grew very hot, sweated at night all over; but in the evening her colour was changed to a jaundice, and she slept the whole night. The fourth she bled very much from the left nostril, and her menses appeared a little in their natural course. But the same hour she grew very feverish again; her urine had the like compacted par-

ticles in it, and was in small quantity. Her belly, which was naturally bound, was now much more so, and nothing passed downwards without a suppository. She slept at night. The fifth the fever was milder; at night she sweated all over; her menses went on; and she slept in the night. The sixth, she made a great deal of water in a gushing manner, and with the same particles as before. It had also a little sediment of the same colour. About the middle of the day she shivered again, grew a little hot, and sweated all over. Her water was of a good colour, and she had a perfect crisis.

Tychon, at the siege of Datus, was wounded upon the breast by the engine they used to throw darts or stones with, and in a short time fell into a fit of tumultuous noisy laughter. The physician, who took out the woody part, seemed to me to leave the iron of the dart within, by the diaphragm. In the evening he had a glyster and a purge, being in pain. The first night was very troublesome to him; but in the morning early his physician and others thought him better; because he was quiet. A prediction was made, that a convulsion would come and carry him off. The next night he was very restless, got no sleep, and lay upon his belly for the most part. The third day betimes in the morning a convulsion came, and he died about the middle of the day.

The eunuch, that lived by Elealces's spring, fell into a dropsy from hunting and running about. He had had for near six years the complaints that proceed from such riding, together with a swelling in his groin, a sciatica, and defluxions upon his joints.

A person in a dropsy should use exercise, sweat, eat hot bread dipped in oil, drink but little, bathe his head much with hot or rather warm water, drink white thin wine, and take but little sleep.

He who had the tabes dorsalis died the seventh.

In those who at first bring up undigested pus, salt things mixed with honey are good.

Venery is a cure for a long dysentery.

Lionidas's daughter's menses were coming down powerfully, but diverted another way. Bleeding at the nose ensued, and a great change. The physician did not perceive it, and the girl died.

Philotimus's boy, a stripling about fifteen, came to me with the bone of his skull as incurable. The wound was above, upon the crown of his head, and he was cured by a discharge of pus from the cars.

Pythocles used to prescribe his patients water, and milk mixed with a great deal of water, by way of nourishment.

Kibes are to be cured by scarification, calefaction, and heating the feet as much as possible by fire and water.

Lentils, sweet apples, and herbs are bad for the eyes. But for pains about the loins, or hips, or legs, from hard working, bathing the part with salt water and vinegar, fomenting with sponges dipped in the same, and binding up with unwashed wool and lamb-skin, are good.

Drinking origanum is bad for inflamed eyes and the teeth.

THE BOOK OF APHORISMS.

APIORISMORUM LIBER,	FÆSIUS, Treat. ii. p. 1242.
LIBER APIORISMORUM,	HALLER, i. p. 460.
DES APHORISMES,	GARDEIL, ii. p. 128.

THIS book of Aphorisms,^a the most extensively known perhaps, and that which has probably been more frequently given to the world in an isolated form than any of the other writings that have reached us under the imposing title of Hippocrates, is divided under seven sections, by Fæsius, Haller, and others. C. J. Sprengel, in the English dress he has given to it, more than a century ago, (London, 1708,) has given it in eight sections, and has apparently added several aphorisms from other of the books that have heretofore been noticed. De Gorter has done the same, (Amsterdam, 1742,) and both accompanied with copious explanations and references. I have made a concise table of these different divisions, as in some respects they may be useful in reference.

	Sect. 1.	Sect. 2.	Sect. 3.	Sect. 4.	Sect. 5.	Sect. 6.	Sect. 7.	Sect. 8.	Total.
Fæsius, - -	25	54	31	82	72	60	88		412
Sprengel, - -	25	54	31	83	72	60	79	18	422
De Gorter, - -	25	54	31	83	72	60	79	14	418
Haller, - -	25	54	31	83	72	60	85		420
Gardeil, ^b - -	25	54	31	82	72	60	88		412

At the beginning of the eighth section, Sprengel remarks, that “A great many have omitted this eighth section; some have only added six aphorisms of it to the foregoing; but others have added the whole section as we have done here. For there are several of them that ought not to be despised.”

^a “APIORISMUS.—*αφορισμός*, est oratio, quæ omnes rei proprietates brevissimis verbis circumseribit.”—Castelli Lexicon.

^b Gardeil’s division is into seven books.

De Gorter, at page 886, gives the residuary aphorisms (405 to 418) under the title of *Aphorismi interjecti*;—with some slight explanation, not very dissimilar from Sprengel, of the circumstances leading to the diversity of different editors.

“ We might, (says Gardeil in concluding the book, and arranging the sections after Fœsius,) here remark, that in some editions, other aphorisms have been added that are not to be found in Fœsius; and we might augment the number of them, exclusively of those tracts that are written aphoristically, such as the Prognostics, Humours, Predictions, &c., by a variety of aphoristic sentences, especially from the books on Epidemics, and *De Locis in Homine*; but confining myself strictly to the Aphorisms really of Hippocrates. Those under the name of *Coacœ*, can scarcely be so regarded, although highly esteemed by ancient physicians, and which are truly a collection of Aphorisms, unaccompanied either by discussions or reasoning,—appearing to constitute a part of those writings that have been ascribed to Thessalus or Polybius,—or perhaps to some physicians of the celebrated school of Cos; though whether prior to, or after Hippocrates, is not fully settled.”

In what may be deemed a preface to this book, Gardeil says, “ The Aphorisms of Hippocrates are to be esteemed as general maxims, which he attempted to constitute from his practice, in proportion as the observation of the progress and issue of diseases presented various results. Certainly he could not consider all his Aphorisms as rules with no exceptions; but merely as facts of sufficient extent to deserve to be collected together; and every man endowed with a portion of genius and sagacity, in any profession, will be led by many circumstances to act like him. We all can judge that such a collection could never end, for it would be unceasingly augmented and corrected to the close of life. All admit, that in publishing this work in advanced life, he thought that it needed to be reviewed and corrected;—and we find scattered throughout the writings that appear under his name, many of such medical sentences, that could without difficulty be transferred to the close of this one.”

Haller, in noticing this treatise, says, “ That from time immemorial, it has been considered genuine, and as having been written by Hippocrates in advanced life and maturity of judgment. Yet it must be admitted by the lover of truth, that it was loosely performed, and handed to posterity; since many aphorisms are twice

repeated, and some are contradictory to each other, (which are all casually noticed by Gardeil.) The best parts are those that refer to the symptoms and termination of acute diseases; the worst are the physiological; some being false, respecting the foetus, the signs of conception and of fruitfulness, as likewise of abortion from venesection." He here makes reference to the eighteen spurious aphorisms of some editions, and then indicates the character of those in each section.

The first and second sections consist chiefly of aphorisms that have reference to regimen and evacuations both in sickness and in health. The third, to the influence of different seasons, and the diseases incident to the various ages of life. The fourth, considers the subject of purgatives and the nature of the stools; though after the twenty-eighth, a variety of different ones are introduced, and from forty-one to sixty-seven, a succession of aphorisms in respect to fever; and on urines, from thence to the end of the section. The fifth, relates to the female sex, at least after the twenty-ninth aphorism to the sixty-third. The others are various, and appertain to convulsions, phthisis, heat, cold, &c. There is but little order in the distribution of the various aphorisms of the sixth and seventh books. They refer chiefly to the signs and presages of disease and health, &c., as deduced from different circumstances; and much is suspicious as to the authority from whence derived. Some are of trifling importance, others but repetitions or coincidences of some of the other sections, or even of the same one.

With this we terminate the seventh section, venturing the remark, that, although so often quoted and spoken of, as a whole, the Aphorisms, collectively taken, add nothing to the celebrity of Hippocrates.—ED.

SECTION VIII.

EXTRANEous.

BESIDES the articles here mentioned, as found in the eighth section of Fœsius, accompanied with the Greek version; we find in Haller's edition (8vo. Laus., vol. iv. p. 199, et seq.) sundry other small tracts, and which, after those from Fœsius, I shall introduce among the *εξωτικα*,^a as probably their most appropriate location. How Haller comes by them, I do not altogether comprehend; nor how it is that Fœsius makes no mention of them, or at least of only two or three which are intermingled with the letters. I enumerate the letters as I find them in Fœsius, without reference to their contents.—ED.

EPISTOLÆ HIPPOCRATIS.

Haller, as a preface to these letters, says, they are very ancient, since Cato alludes to the one in which Hippocrates refuses his assistance to Artaxerxes. Many of them, however, are deemed problematical. The honorarium of ten talents from the Abderites to Hippocrates, was far beyond their means. The dream is unworthy of the gravity of Hippocrates, and the collection of letters appears to be rather the production of some sophist, than of that eminent man. Cratevas is manifestly of a different era; and the account of the plague cured by Hippocrates, can scarcely be reconciled with the narration of Thucydides; neither is it any where cited by Galen.

^a This section contains in the arrangement of Fœsius (p. 1271), under the title of *τὰ εξωτικα*, hoc est externa, the following articles: Epistolæ aliquot;—Atheniensium Senatus-consultum;—Oratio ad Aram;—Thessali Legati oratio;—Genus et Vita Hippocratis secundum Soranum.

1. Artaxerxes to Pætus, respecting the plague in his army.
2. Pætus to Artaxerxes, recommending Hippocrates to him.
3. Artaxerxes to Hystanides, præfect, offering high rewards for the services of Hippocrates.
4. Hystanides to Hippocrates, announcing this to him.
5. Hippocrates to Hystanides, refusing his services to an enemy.
6. Hippocrates to Demetrius.
7. Hystanides to Artaxerxes.
8. Artaxerxes to the Coans, threatening them if Hippocrates is not sent.
9. The Coans, in reply, refusing his demand.
10. The Abderite senate and people, to Hippocrates, in behalf of Democritus.
11. Hippocrates, in reply.
12. Hippocrates to Philopæmon.
13. Hippocrates to Dyonisius.
14. Hippocrates to Damagetus.
15. Hippocrates to Philopæmon.
16. Hippocrates to Cratevas.
17. Hippocrates to Damagetes, a long letter in relation to Democritus.
18. Democritus to Hippocrates.
19. Hippocratis de Insania scriptum.
20. Hippocrates to Democritus.
21. Hippocratis de Veratri usu libellus.
22. Hippocrates to his son Thessalus.
23. Democritus to Hippocrates, de natura humana.
24. Hippocrates to King Demetrius.
25. Decree of the Athenians in favour of Hippocrates and the Coans.
26. Oration of Hippocrates before the altar of Minerva.
27. Oration of Thessalus, his son, to the Athenians.

These letters are followed by an account of the life, family, and writings of Hippocrates, from Soranus, and Vander Linden, with numerous testimonials from various sources; the last of which is taken from the "Itinerary of John Mandevyle," chap. 6, and is entitled, "De filia Hippocratis mirabile." A curious relation, from a curious traveller!

Subsequent to these testimonials, we find in Haller, vol. iv. p. 345 to 367, a collection of what he denominates, "Fragmenta et Elogia" ex eodem Lindenio, from numerous ancient writers,—Plato, Aristotle, &c., down to Ulpian and Bartolus. Following which, appear the "Consentientia ex Galeno," from various authors, p. 367 to 398; and lastly, a division entitled "Contradicta et Defensa," p. 399 to 414, with which the edition of Haller terminates.

A few short treatises, introduced by Haller under his division of "Hippocrati adscripta opera spuria," vol. iv. p. 127, require to be here noticed, as some of them do not appear in Fœsius; and they are therefore here added to complete the object of the editor.

I. LIBER DE HOMINIS STRUCTURA, AD PERDICCAM REGEM.

HALLER, iv. p. 199.

Haller tells us this exists only in the Latin. It treats of the four elements; of nature; and the four humours of the human body, their constitution, and location, &c.; of arteries; veins; the causes of mirth or sorrow, pusillanimity, &c.; of lethargy, phrenitis, palsy. Some affections of the head depend on the stomach; sutures of the head occasionally wanting; colour of the hair, baldness, &c., explained. Three gradations of voice: grave, acute, and intermediate. Liver, its influence in digestion. Five senses. Fourteen constituents of man stated (qu. tissues?—Ed.), viz.: nerve, vein, artery, blood, spirit, flesh, fat, cartilage, nails, bones, marrow, hair, membrane, and humours. To these are added, in the female, milk and catamenia. Spine consists of twenty-four vertebrae, and as many ribs. Teeth more than thirty. Stomach in length five palms; intestines thirteen cubits. Names of the different fingers. The four seasons; their properties, &c. Some observations as to the non-naturals, &c.

II. DE NATURA HOMINIS.

HALLER, iv. p. 205.

This constitutes the twenty-third letter, of Democritus to Hippocrates, in the preceding list. It is, says Haller, a rhetorical description of parts of the body, in which much appears of a later period than that of Hippocrates. It is a piece of little or no importance.

III. LIBER DE ÆTATE.

HALLER, iv. p. 208.

A small treatise of two pages, which Haller says is a fragment; in which the signs are pointed out of foetal death at seven and eight months, in a better way than in the legitimate treatises under those titles. A description is given of certain human ova, of seven days' formation, discharged by whores, through the agency of abortives; in which the outline of every part was conspicuous. Septenary periods of life, &c.

A small fragment on the same subject, by Philo, follows. It is entitled, "De Ætate Fragmentum, ex Philonis Judæi, de Opif. Mundi," p. 24. It seems a mere abstract of the above, and of about the same estimate.

IV. DE SEPTIMESTRI PARTU, LIBER SPURIUS.

HALLER, iv. p. 211.

Undeserving of notice, says Haller.—It is, however, well to look into it, if only to become acquainted with some former opinions.

V. DE SIGNIFICATIONE VITÆ ET MORTIS, SECUNDUM MOTUM LUNÆ, ET ADSPECTUS PLANETARUM.

HALLER, iv. p. 214.

Altogether astrological, says Haller, and very remote from the wisdom of Hippocrates. It does not exist in the Greek, and is the production of some later writer. It runs over (in fourteen paragraphs, and sixteen pages) the whole signs of the zodiac, and of the moon's locality in relation to them. Its perusal will afford some insight into the absurdities of astrology; a science still pointed to, in the figure as a frontispiece to many of our annual almanacs!

VI. LIBER DE MEDICAMENTIS PURGANTIBUS.

HALLER, iv. p. 238.

Some things herein, says Haller, are taken from the Aphorisms. A bold defence is set up for the doctrine of elective purgation, founded on the difference of the four humours.

The great variety in the operation of purgatives noticed. The

same one at times operating powerfully, at other times, not at all. Sometimes what is not expected is discharged, or in smaller amount, &c. All which is explained, and leads to the division of purgatives into chologogues, &c., according as they act on the humours; and directions are laid down for the success of this: for, adds the author, it is a shameful misfortune to kill a man by super-purgation.

VII. DE VERATRI USU.

FÆSIUS, EPIST. XXI. p. 1287.—HALLER, IV. p. 241.

Haller here states, that much is taken from the Aphorisms, Prognostics, and Prænotions, relating to the ptisan, and menstruation, which are quoted as if the productions of the author of this treatise. Towards the close, some extension is given to the subject of purgation by means of sesamoid; and cases are stated wherein veratrum is appropriate, and cautions given as to its employment. Purgation, in this treatise, seems more intended for vomition, or purging upward (sursum).

VIII. DE ANTIDOTO.

EX ACTUARII METHODI MEDENDI, VI.—HALLER, IV. p. 243.

This is called by Haller, a “farrago aromatum,” and is said to be from Myrepsus. It is in the text called an antidote of Hippocrates, “quo usus corona Athenis est donatus.” Many virtues are attributed to its employment; its doses are stated, and mode of administration; its preparation is finally given, constituted of about twenty-five ingredients, and no doubt was equally a panacea with the *confectio Damocritis*, and *Theriaca* so celebrated by Galen!

IX. ANTIDOTUM.

EX NICOLAI ALEXANDRINI, DE COMP. MEDIC. I. 365.—HALLER, IV. 244.

Pretty much of the same character with the preceding, but consisting of only eleven ingredients, one of which is opium. This is also called an antidote of Hippocrates, and was used as a panacea! Hundreds might be formed of equal importance, by drawing out the names of medicines from a wheel, and manipulating the ingredients secundum artem!

X. DE RE VETERINARIA.

HALLER, iv. p. 247.

Much posterior (says Haller) to the period of Hippocrates. A farrago of remedies, many of a superstitious character. It is not altogether devoid of interest, as being of so remote antiquity, and not deficient in treatment of sundry affections of importance. Venesection described, &c.

I have now brought to a conclusion the immediate object in view, that of affording a general outline of all the writings that have reached us under the name of Hippocrates, rather than a complete translation of the whole. I trust such a work may yet appear in the English language; and, although it will be perceived that of nearly eighty treatises, scarcely a dozen are attributed undisputedly to him,—yet their antiquity alone would be a sufficient plea for the medical profession, to desire to know the state of that profession nearly three hundred years before the birth of our Saviour;—and that, even if it did not contain much really useful matter. Were I now half a century younger, with my present feelings towards the memory of that great man, and of his still greater successor, Galen, I should take pleasure in assuming the task; but at the age of more than “threescore years and ten,” I feel that the hour-glass of life must soon have its sand expended; and that other cares should now engross my mind. I will add, that imperfect as this present attempt is, by myself considered, I look forward with a fervent hope, that it may prove a pioneer for a more efficient labourer in the schools of Hippocrates and of Galen, when the present writer may perhaps, be holding an interesting communionship with those individuals themselves in a higher state of existence.—EDITOR.

A N A B S T R A C T
OF THE
W R I T I N G S O F G A L E N.



INTRODUCTORY REMARKS.

DURING several years, whilst holding successively the Professorships of Chemistry, and of Materia Medica and Pharmacy, in the University of Pennsylvania, I endeavoured in my Introductory Lectures to afford some slight information to my class, as to the character and writings of Hippocrates; and to vindicate him from the unwarrantable aspersions that have been cast upon him, even by those who considered themselves as being among his warmest admirers. That they derived their impressions of that great man from second-hand observations, whether favourable or unfavourable to him, I have no doubt; for I consider such an imperfect and partial acquaintance with his writings, as *being the only means* by which we can explain the singular circumstance, that fault has been found with him, and ignorance ascribed to him on subjects, which a due and personal acquaintance with his works, would have assuredly prevented. I pursued a similar plan with respect to Galen in two or three successive Introductory lectures, but the continuance of which was precluded by my separation from that institution. Being thereby prevented from pursuing the object I contemplated, I have long been led to think that it might not be unacceptable to the Profession, if I should, by slightly modifying the lectures, present a brief outline of the works of both those wonderful and accomplished physicians. In the preceding pages, my readers will have attained some slight view as to Hippocrates and his writings; and in those that follow, will be found an epitome of Galen—his illustrious successor, his warmest advocate moreover, and vindicator, as well as commentator; hoping that it might lead to an eventual consideration of a

debt of gratitude to him, of long standing, that of giving him *a complete and perfect English dress*; by which thousands, unacquainted with the Greek original, or the Latin translation, might be enabled to peruse with pleasure and with benefit, his learned lucubrations.^a

Not inferior, probably superior to Hippocrates, from possessing the advantage of four centuries of additional information, accumulated in the vast libraries of Alexandria, Greece, and Rome; improved moreover by the extension of that information, or rather its collection and concentration as it were into a focus, constituted of the Greek and Alexandrine schools, we cannot doubt that Medicine received its full proportion of attention; since, even prior to the time of Galen, it had obtained the fostering care of kings and princes. Mithridate, so called from the great King of Pontus, has reached the present day, though greatly modified; together with the Theriaca, prepared for use by the chief physician alone; and which last has been illustrated and described by Galen, in a curious and learned commentary, whilst it was held in the highest estimation for nearly fourteen hundred years.

That Galen and his doctrines should have so long maintained the highest rank in medicine, and been the arbiter of our science for upwards of a thousand years, will appear surprising to those alone, who are ignorant of him and of his imperishable writings! It is true, his works, originally in Greek, are from that cause a sealed book to a majority of the Profession; but numerous editions from the Juntas of Venice, and Frobinus of Basil, of the Latin translation exist, and might be obtained by all who really desire to consult them;—or at least if their high price should prove an obstacle to this, all will admit, that no public library, especially a medical one, can possibly be complete without them. Imagine them now presented in an English dress! how many embryos of the hundreds of our *since discovered facts and theories*, should we not behold?

^a I appeal to those who may honour these pages with a perusal, whether they have ever known fully, what were the subjects of the voluminous writings of Galen, even by name?—And I might make the same appeal with respect to a large portion of the writings of Hippocrates!—By a majority of the medical profession, if this appeal were truly replied to, I doubt not the answer would be in the negative!—And yet the names of both those illustrious authors are familiar to all the Profession as their household gods!!

The plagiarists of past and present times would stand forth in bold relief, and credit would be awarded to the great original! *Hinc illæ lachrymæ!*—Our authors wish not to withdraw the veil, or else it might with ease be accomplished. Galen has never yet been permitted to assume the British toga, although the Roman fitted him so well.

I cannot but admire the apathy with which those extraordinary productions are regarded by many of the learned professors of our science! who, whilst they employ the lighter works of fancy to form the chief intermedia between the present and by-gone times; they look through a glass, darkly, along a vista of more than fifteen hundred years, when Galen constitutes the object of their contemplation! Fain would I hope, that his works may yet be given¹ to the world, in such a dress, as readily to introduce them, not to our libraries only, but to our minds. May it devolve on America to discharge this debt;—but little hope can be anticipated from England, in this particular. It would present a mirror that would reflect back the images of facts and theories, long assumed and regarded as of domestic origin, with no acknowledgment of their Grecian source. Here, in the pages of Galen, would be discovered many of those great principles, both in theory and practice, which have, at different periods, been advanced as novelties; for Galen has remained a fixture only, on the shelves of medical libraries. As in the pages of Burton, the plagiarisms of Sterne have been demonstrated by Ferriar; so in those of Galen, an equally egregious memento of medical effrontery might be readily shown to exist. But who now, we may be permitted to inquire,—who reads his works?—Where indeed, with few exceptions, are they to be found, even in our public institutions for private reference? It is time that justice, so long delayed, should at length be exercised towards one of the most brilliant stars of the medical world. It is time to dispel those fanciful dreams, that in the mighty march of intellect, “all the talents” are concentrated in our present period, and that retrospection is unnecessary. The flippant usage of too many of our public writers and teachers, of denying to the ancients any merit, as if their intellects were barren as their own, cannot be too severely reprehended. Those ages which produced the poets and philosophers, whose works have reached us, and which have ever been considered as the standards of merit in their respective spheres; could never have been deficient in the yet more important and per-

sonally interesting science of medicine!^a Test this, by the writings of Galen alone, and its truth will conspicuously appear, in opposition to the *dicta* of our would-be master spirits, who fondly please themselves that they alone are the shining lights of the Profession; and which their vanity, and ignorance of those bygone writers whom they profess to condemn, yet, as opportunity serves, most ostentatiously quote, can alone explain.^b When we hear the ancients most unblushingly undervalued, let us set it down as a fact, that such persons have never examined the authors they condemn, and are therefore desirous of retaining others on a level with themselves, either of ignorance or indifference.^c

In following up the plan I have marked out, it is my intention briefly to glance at the contents of the several writings of the extraordinary person in question, that my readers may know what

^a "O vous qui jugez avec autant d'injusticee que de légéreté la physique de Séneque, et qui payez d'un souris dédaigneux et malin les fruits utiles de ses veilles ; oubliez le moment où vous existez, et ce que vous devez aux découvertes de votre siecle sur cette science : transportez-vous au temps où il a éerit ; proposez-vous les mêmes questions, et voyez si vous les résoudriez mieux que lui. Vous seriez peut-être très vains alors de renconter son erreur."—Avertissement de L'Editeur des Œuvres de Séneque, sur les Questions Naturclles. Vol. 6th, Paris edition, an 3.

In the above, the reader must be pleased to read "la médecine de Galen." Mutatis mutandis, the application is fully as correct.

^b Did time and space permit, I could furnish from Fabrieius a copious and extraordinary catalogue of "Opera deperditæ," which would probably astonish the reader, and lead him to regret the loss the world has sustained from the non-discovery of printing in those bygone times. We may, however, like the old woman and the empty eask, in Æsop's Fables, form some judgment of our loss, by the comparatively few that have fortunately been spared from the ravages of time, under the controlling influence of despotism, barbarism, and superstition.

^c These gentlemen might learn a lesson from Shakspeare's favourite knight, Sir John, at least, in relation to Galen, that would be useful to them.—*Vide Henry IV. Part II. Sc. 2.*

"*Lord Chief Justice.*—You would not come when I sent for you.

Falstaff.—I hear, moreover, his highness is fallen into this same whoreson apoplexy.

Ch. J.—Well, Heaven mend him ! I pray let me speak with you.

Fal.—This apoplexy is, as I take it, a kind of lethargy, an't please your lordship ; a kind of sleeping in the blood, a whoreson tingling.

Ch. J.—What tell you me of it ? be it as it is.

Fal.—It hath its original from much grief; from study and perturbation of the brain : *I have read the cause of his effects in Galen :* it is a kind of deafness.

Ch. J.—I think you have fallen into the disease ; for you hear not what I say to you.

Fal.—Very well, my lord, very well !—Rather, an't please you, it is the disease of *not listening*, the malady of *not marking*, that I am troubled with," &c.

they may expect to find in full, should they think fit to look into the venerable and nearly obsolete folios of their most illustrious predecessor; and if unable or unwilling so to do, that at least they may be checked in any attempt to decry them, by this slight epitome. It will consist, for the most part, of the simple outline (with a few exceptions more fully given), of those writings, as they have appeared to the editor; and which can scarcely be considered as even a skeleton, as it were, of the proudest work of which the science of medicine can boast, either in ancient or modern times, if estimated by its individual merits alone! No slavish and ignoble plagiarist was Galen. In thought, as in action, he appears to have been free: and those thoughts are evincive of superior genius, improved by all the arts and science of his own, and of preceding ages. In every page, his character stands forth in bold relief. His works are a library of past events, an encyclopedia of facts from every branch of medical literature; and forestalling many of the most extraordinary events of our own times; whilst even in experiments and in operations, *considered as novelties* in the present day, he has preceded them.

In order to comprehend the writings of Galen, he must, I think, be permitted to explain himself, through the context of other parts. That he was wrong on many points of physiology, when compared with those *deemed* perfect in our day, cannot be denied; but are we absolutely certain of the truth of all those we now maintain? Will not the fluctuation of the physiology of the last fifty years be adequate to set aside such flattering pretensions? The stamp of mutability is affixed to the science, now, at least as much so, as in the days of Galen; for, with all our boasted attainments, it can scarcely with justice be affirmed, that the superstructures we have erected, are more beautifully, or more securely and symmetrically arranged, than was that of Galen; or that we have, in truth, a system of physiology that is more settled or superior to his.^a Let us

^a I would earnestly request the older members of the Profession, (I mean those of thirty or forty years' standing), to cast a retrospective glance at the numerous changes in physiology, and pathology, and therapeutics, that have been given to the medical world, since their first connexion with it. Nearly a century ago, a Docteur Lizarri of Venice, published a defence of oleaginous remedies in bilious diseases, in opposition to the celebrated Tissot, who condemned their use. Lizzari affirms, that in order to favour his opinions, Tissot had even frequently mutilated the text of Hippocrates. A journalist of Venice, reviewing the work, exclaims, " Malheureux sort de l'humanité; il n'est

inquire how stands the fact, in two or three particulars. Whilst Galen regarded respiration as intended to cool and ventilate the blood, we have, at one time, been led to consider it as productive of animal heat, and at another, as being required to oxygenate, or, to decarbonize the blood. Now, of all these, which is true?—If some have supposed the air to be absorbed, in whole, or in part, in the different views of respiration, Galen had, before them, thought the same; and surely the ventilation of the blood, and conveying to it an aeriform fluid or spirit, as taught by the ancients, is an hypothesis at least as beautiful; and is by Galen as well maintained, as any of the present day; even if we cannot perceive in it a complete *forerunner* of those systems, which as now vamped up, are proclaimed as new, though based on a groundwork of nearly 2000 years. All this has been accomplished by the magic influence of a few new-fangled, and fresh-coined terms, derived from the fluctuating vocabularies of our changing systems of medical philosophy.

With respect to the various opinions as to the power and agency, by which the circulation is enforced and continued; whether by that of the heart alone, or by that of the arteries, or of both combined; it may be allowed us to inquire whether, with all our greater and more ample anatomical researches, aided by the microscope, and by injections, and by the most powerful physiological acumen, this interesting fact is better ascertained, or more conclusively substantiated than it was by Galen, who ascribes it to the heart alone; and finds his reasons, in part, on the synchronous character of its beat, with that of all the arteries of the body.

In regarding the *veins*, as the channel by which nourishment was conveyed to every part, according to our present views, Galen was in error.^a That he perceived the absolute necessity of a circulation, from the very facts themselves, of nourishment and growth in every part, seems to follow, as an almost necessary result; and one that can scarcely be supposed to have been beyond the speculations of his penetrating and inquiring mind. Now this is

pas encore décidé si l'huile est salutaire ou nuisible dans telles maladies, et les malades, meurent pendant la dispute?" Will not this equally apply at present, to much of medicine in its different branches?

^a It must be remembered that by the ancients, the term φάρ, was a generic one for tubes of every kind capable of conveying fluids. It was not limited to the vessels alone in the human body; but in order to discriminate between an artery and a vein, the former was called a pulsating, the latter a non-pulsating vein.

infinitely strengthened by comparing and connecting those disjointed or independent portions of his multifarious pen; in which a circulation is more than merely obscurely hinted at, as we shall endeavour to demonstrate in the progress of these pages. The assumption, (for it is nothing more,) that his idea of a circulation was simply that of a flux and reflux of the blood in the same vessel, like the rise or fall of the tide, will not coincide with the circumstances of the text in numerous parts of his works; and can only be maintained by those, who, at all hazards, uphold *the sole right of Harvey* to the discovery of the circulation in all, its most unlimited extent. We can at present merely surmise, that Galen could not have looked, either for a general, or partial nutrition, without some definite views as to a channel of communication, for the especial purpose of transferring to every part, an ever-moving fluid, which he undoubtedly regarded as containing the nourishment of the system at large, and that nourishment taken in, ab extra, daily, at his meals. How he supposed nutrition to be actually accomplished from the blood, as freighted with its important addition, we may partly comprehend from his ingenious doctrines of attraction and repulsion; together with other powers, which he ascribes to every organ of the body; doctrines probably not surpassed by any since promulgated; and quite as ingeniously built up and sustained. We ascribe the deposit of various matters, either of nutrition or secretion, to arterial branches of the circulating system; yet, at the same time we admit the anomaly of the secretion of bile from venous branches. It is not then, perhaps, incorrect to admit that Galen was *partially* right on points, in which, even now, from our absolute uncertainty as to the exact character of the *capillary link* of circulation, we have no positive or fixed conviction.

It may excite surprise, but it is not the less true, that by changing our present nomenclature for that of Galen, we find the doctrine of *Tissues* very distinctly taught by him;—a doctrine so ably and beautifully, and let us cheerfully add, more fully and satisfactorily enlarged upon by the celebrated Bichat. That a doctrine so luminous and harmonious, should have occurred to both these illustrious men, may be regarded as a strong presumption of its being founded in truth; and identifies in a powerful manner, the congeniality of their minds and pursuits. It is possible that Bichat derived his views on this subject from Galen; yet it is not improbable, considering the neglect into which the writings of Galen had

fallen, that Bichat owed it to himself. Their mutual and strong attachment to anatomical research, qualified them certainly, for far more extended views of physiology and pathology, than falls to the lot of the major part of the Profession. At an interval then, of nearly sixteen hundred years, during which the doctrine had slumbered, it may be said to have again been discovered, or resuscitated and embellished, by those improvements which may be conceded to have sprung up.

Nor is the division of diseases into *Functional* and *Organic*, by any means obscurely taught by Galen. By merely a change of terms, we find the same ideas, that are now enunciated. And if, as Shakspeare says, "a rose, by any other name would smell as sweet,"—it would be difficult to say, why the doctrines of Galen should be less acceptable to us, under his primitive nomenclature, than as now set forth to the public, as novel, under a mask of new-fangled names and explanatory elucidations.

I cannot forbear to repeat, what Galen himself perpetually enforces, that the *fluctuation of names*, has always retarded the pursuit of knowledge; and that it has been, *is now*, and ever will be, the principal means adopted by every dexterous plagiarist, to mystify an otherwise well-known subject; and by giving it to the world in a new dress, an aspect of novelty, it is palmed upon ignorance or apathy, as the production of genius and research, such as previously had no existence. This nomenclatural fluctuation was well known to Galen; and whilst it is wofully deplored by him as a source of infinite evil, he fails not to castigate it by those sarcastic remarks he often indulges in.^a

Although in several places, Galen seems to incline to the doctrine of the *unity of disease*, yet the prior claim to it by Hippocrates must be admitted, if there is any force in words.—"Morborum omnium *unum et idem modus est, locus antem differentiam facit.*"—Lib. de Flatibus.—Or, as an annotator (Fracassini, opusc: Pathol. Leipsic, 1758, ch. 18, p. 92,) on this part has it: "Cum humanum corpus liquidis ac solidis, nempe vasis ipsa liquida continentibus, constet, et utraque in statu sano æquabili ac proportionato motu

^a It might well be demanded of these incessant coiners of new terms, "by what authority" they do this? by which almost every science is kept in a constant fluctuation, if not absolutely retarded.—Let any one compare the changes of nomenclature for the last fifty years, in Medicine, in Botany, in Mineralogy, in Chemistry!—and then ask, "Cui bono?"

moveantur, vasa scilicet oscillatio quo dilatantur ac contrahuntur; liquida vero progressivo ac circulari, quotiescumque horum motuum interruptionis, vel perturbationis *causa*, *in qua morbus consistit, ex uno in alium locum transferatur*, essentia morbi *commutatur, ac altero exsurgente, alter sœpe recedit*; si vero per quodecumque organorum secretiorum materiæ trajiciundæ aptorum eliminetur, omnino extinguitur morbus.”—Whatever may be thought of the explanation here given, there seems no room to doubt, that here is to be found a complete exposition of the “Unity of Disease.”

These preliminary remarks are, however, sufficiently extended. In confining myself to the simplest outline, I shall take the liberty of making occasional observations, in order to direct attention to some particular point, in a more especial manner; and shall introduce but rarely, the appropriate quotations, on which those observations may be founded, as well as those on which I should rest my claims to the attention of the Profession, for Galen and his works.

EDITOR.

THE WORKS OF GALEN.

THE writings of Galen consist of nearly seven hundred books or treatises, of which several are lost, and they constitute a mass of materials that can scarcely be appreciated, except by direct reference to them. Originally written in the language of Grecian, they have been translated into Latin by different persons; and these have passed through numerous editions, the principal and best of which may be considered to be those that have been published by the Juntas at Veniee, and by Frobinius at Basil. Besides two different Greek editions, I possess in the Latin, the third of 1556; the sixth of 1586, and the ninth of 1609, all Veniee copies; and the Basil edition of 1549,—from which last I have chiefly formed the following epitome. The editors of the Latin copies stated, have divided the writings differently from the Grecian. They have, however, carefully collected, not only those admitted to be from Galen, and complete, but likewise such as are spurious and imperfect.^a

The writings of Galen in the Latin editions, have been principally divided into seven classes, embracing all the range of medical science, as will be comprehended by a concise exposition of the plan pursued. These classes are preceded by the PROLEGOMENA, or introductory books, denominated LIBRI ISAGOGICI.^b They will be found in some measure to form an epitome of the whole, giving some general ideas to the reader of what may be expected in those that follow.

^a I have lately added to my collection the edition by Kühn, in 20 vols. 8vo., containing both the Greek and Latin texts, and which is infinitely more convenient for reference than the ponderous folio.

^b Εἰσαγωγή.—Introductio, Lexicon. Hence students, as beginners, are called by Galen, μαθηματικοί, i. c. Tyrone.—*Lib. de Pulsibus ad Tyrone.*

CLASS I.

This class embraces *Physiology*.^a—Its different books are consequently devoted to the consideration of the nature of the human body, its elements, temperaments, humours, various structure and habits, the anatomy and use or functions of the various parts, together with their respective faculties or powers; observations respecting the seminal fluid and the foetus, as necessarily connected with the subject of generation. In this class some of the most interesting works of Galen are introduced.

CLASS II.

This class embraces *Hygiene*^b—or the means of preserving health, chiefly constituted of the various so-called non-naturals; viz.: air, food, drink, sleep, wakefulness, rest and motion, repletion and abstinence; and the affections and emotions of the mind. Herein too, we find several commentaries of much value, on some of the books of Hippocrates, as for example, three, on the celebrated treatise “De Aere, Aquis, et Locis;” and on that “De Salubri Diæta.” Much is said of the powers of food; of the healthy or unhealthy state of the fluids; of the ptisan, so celebrated by the Grecian practitioners. Some mental affections are also considered; some gymnastic exercises; the influence of habits and customs, &c.; and it will be found, on the whole, a class of considerable interest.

CLASS III.

Is *Aëtiological*^c—that is, explanatory of diseases, and of their

^a Φυσιολογία.—Idem est, quod Physica, vel specialiter in medicina ea dicitur pars ministra, quæ explicat tres res secundum naturam, puta sanitatem, causas ejus, et accidentia, in rebus naturalibus corporis humani fundatas.—*Castelli Lexicon Medicum.*

^b Υγιεινή.—Vocatur methodi medicinalis pars prior, quæ tractat modum sanitatem conservandi in sanis per certas indicationes et congrua media.—*Castellus.*

^c Αἰτιολογία.—Vocatur quibusdam medicinæ pars pathologica, in qua non solum causæ morborum, sed et morbi ipsi et symptomata pertractantur.—*Castellus.*

different symptoms and causes, &c., all which are taken up in succession, and are duly considered. Some of the books of this class are commentaries on various Hippocratic writings, especially on the Epidemics, and are a valuable addition to the reader, in enabling him to comprehend them more readily.

CLASS IV.

SEMEIOTICS^a is the division of medicine that is connected with the symptoms which distinguish diseases and the parts affected, and by which, likewise, we are enabled to predict what is subsequently to happen; that is, the prognosis, derived from the attendant symptoms, as evinced by the pulse, by respiration, excretions, &c. In this class are several commentaries on Hippocrates, viz., his Prognostics and Prorrhetics. The subjects of crises and of critical days are also duly noticed; together with much interesting matter of a highly practical character, and which will amply repay the attentive perusal of these books.

CLASS V.

PHARMACY^b OR PREPARATION, ETC., OF REMEDIES.

This class embraces all that is connected with simple remedies and their preparations and substitutes; purgatives, antidotes, compounding of medicines, weights, and measures. The class is of considerable interest, as giving probably the best history we possess of the various articles at that period employed in practice. We find many that have reached our own times, and which, consequently, may be deemed to have received the sanction of all the intermediate ages. Here too, we find the most particular details of the long-esteemed Theriaca, and of some other then-deemed Panaceas.

^a Σημειωτικη.—Est pars medicinae signorum omnium differentias et vires expendens.—*Castellus.*

^b Φαρμακευτικη.—Vocatur pars ministra artis medicæ, tradens descriptionem medicamentorum et rite adhibendi modum.—*Castellus.*

CLASS VI.

This, although by far the shortest of all the different classes, is yet one of the most interesting, embracing, as it does, under the title of "*de cucurbitulis, scarificationibus, hirudinibus, et phlebotomia,*" every thing connected with the evacuation of blood through their means. The importance of blood-letting is maintained in opposition to Erasistratus, who seems to have been nearly as violent an opponent to it as old Van Helmont in times nearer to our own. Galen likewise attacks, with equal severity, the followers of Erasistratus, and shows, that, whatever they might say, they either did not comprehend their master, or if they did, that they made no scruple to deceive on the subject.

CLASS VII.

THERAPEUTICS.^a

This class, which in its different books, is more or less diffusely considered, contains, as may be understood from the title, every thing appertaining to the practice of the profession, such as diet in acute and other diseases; remedies for each disease, &c.; the principles and practice of surgery, embracing the treatment of fractures and luxations, the description of bandages, &c., (*fasciarum et laqueorum,*) and of the different apparatus. We find also several commentaries on different books of Hippocrates, which serve greatly in their elucidation.

CLASS EXTRAORDINARY.

The above class closes the regular writings attributed chiefly to Galen. The present one is formed of those that are probably his also; but which are more of an aphoristic character. They are, however, of great interest, containing, as they do, commentaries on the Hippocratic aphorisms, as also an explanation of many obsolete words that are found in that author.

^a Θεραπευτικη.—*Pars medicinæ curatoria;*—methodus medendi.—*Castellus.*

Superadded to this extra-class we have a variety of those *spurious* writings that have been attributed to Galen. Whether spurious or not, many of them abound in interest, and deserve to be known. They amount to nearly forty distinct essays or tracts, and they are followed by numerous FRAGMENTS, appertaining to different parts of medicine, which have been considered as derived from Galen; and which, although mere fragments, possess considerable interest.

In estimating the above as a mere table of contents, we may venture to state, that the writings of this great man will, without difficulty, arrange themselves under the following heads,—and amongst them, scarcely will there be found wanting a single subject, that in any way appertains to medicine.

1. General or introductory.
2. Such as appertain to Anatomy.
3. - " " Physiology.
4. " " Hygiene— including the practice of Physic and Surgery.
5. " " Materia Medica et Alimentaria.
6. " " Philosophy and Metaphysics.
7. " " Miscellaneous subjects.

Can it be possible that such a writer can be devoid of merit, and his works undeserving of examination in the present day, when it is remembered, that for more than one thousand years they maintained a supremacy, that has never been exceeded, perhaps not even equalled!

I now proceed to present a concise notice of all the different works that are to be found in the above-mentioned classes.

PROLEGOMENA,

VEL GALENI LIBRI ISAGOGICI.

THE INTRODUCTORY TREATISES OF GALEN.

UNDER the above distinctive title, we have sixteen books or treatises of an introductory character; but which, in interest, are scarcely surpassed by any of those that are to be found in the succeeding divisions. We give, in a connected view, the respective title of each one.

1. Galeni, *Oratio suasoria ad Artes.*
2. *Si quis optimus Medicus est, cundem esse Philosophus.*
3. *De Sophismatis in Verbo contingentibus.*
4. *Quod Qualitates incorporeæ sint.*
5. *De libris propriis Galeni.*
6. *De ordine librorum suorum.*
7. *De Sectis.*
8. *De optima Secta.*
9. *De optimo docendi genere.*
10. *De Subfiguratione Empirica.*
11. *Sermo adversus Empiricos Medicos.*
12. *De Constitutione Artis Medicæ.*
13. *Finitiones Medicæ.*
14. *Introductio, vel Medicus.*
15. *Quomodo morbum simulantes sint deprehendendi.*
16. *Ars Medicinalis.*

I. ORATIO SUASORIA AD ARTES.

AN ORATION IN FAVOUR OF THE ARTS AND SCIENCES.

(EIGHT CHAPTERS.)

In this first book of the introductory division of the works of Galen, we have a topic of much interest presented for consideration. Galen sets off by showing that man alone, of all the animal creation, is endowed with reason, by which he is qualified for the pursuit of every art and science;^a that consequently, the improvement of the mind is of infinitely more importance than that of the body, or than an increase of wealth; and therefore that it is disgraceful to neglect those sciences for the mere pursuit of gain. This leads him naturally to a description of Fortune, whose inconstancy is pointed out, and exemplified by several conspicuous and familiar instances; such as Croesus, Priam, Dionysius, Caesar, and others; and he deduces from various circumstances, the superiority of striving to improve in the beneficial arts, to that of toiling in the mere pursuit of riches; strengthening his remarks by quoting the opinions of Diogenes and Demosthenes and others on the subject. He furthermore points out the folly of those who lay great stress on their nobility, aiding his own, by the remarks of Themistocles and Anacharsis.—Even the elegance of the body, and of furniture and dress, &c., is considered by him of little importance, unless it be at the same time united with a well-adorned mind.^b He cautions all to whom his remarks

^a Brutes, however, he concedes that they possess somewhat of the like in common with us, some in a greater, others in a less degree—but all, with few exceptions, are deficient in art; and what these enact, man imitates—as spiders, bees, &c. From these and other enumerated causes, although reason is not wanting to other animals, yet man alone, as superior to them, is said to be endowed with it.

^b Here he inserts a story of Diogenes, who received an invitation to dine with one whose house was splendidly furnished, in the highest order and taste, and nothing therein wanting. Diogenes, hawking, and as if about to spit, looked in all directions, and finding nothing adapted thereto, spat right in the face of the master. He, indignant, asked why he did so? Because (said D.) I saw nothing so dirty and filthy in all your house. For the walls were covered with pictures, the floors of the most precious tessellated character;—and ranged with the various images of gods, and other ornamental figures. Now (adds Galen), since we are connected with the gods by the use of reason, so are we with brutes, inasmuch as we are mortal; it is therefore more expedient to attend to the mind and its improvement, than to the body and its appendages, &c., by which we are on a par with the brutes alone.

apply, by no means to misapprehend him when he speaks of study or of the arts; none of which are of importance, unless they benefit society; and he supports his views, by giving some details and particulars relative to the care bestowed in the gymnastic trainings of the athletæ, in preparing for their duties of merely a corporeal character. He considers the nature of the arts as being twofold; the one is noble, from its connexion with the gifts of the mind; the other is ignoble or inferior, being dependent on corporeal labour alone; the first receives the name of *liberal*; the other is called *mechanical*. Then, as might be anticipated, he places medicine at the head of the first division, from its being superior to every other mental pursuit that classes such among the liberal arts.

II. SI QUIS OPTIMUS MEDICUS EST, EUNDEM ESSE PHILOSOPHUS.

A GOOD PHYSICIAN MUST ALSO BE A PHILOSOPHER.

In this book Galen endeavours to prove that, which the title amply implies, viz., how greatly the medical man is improved by an inter-communion with learned men, and by a knowledge of philosophy; and it is of further interest, by the insight it affords of much of the philosophy of that period.

III. DE SOPHISMATIS IN VERBO CONTINGENTIBUS.

OF VERBAL SOPHISTRY.

(FOUR CHAPTERS.)

Here, he takes notice of the sophisms in conversation, giving various examples of them. It is an ingenious and amusing treatise, but is not very particularly connected with medicine. It serves to demonstrate, nevertheless, the magnitude of a mind, which seems to have embraced the whole circle of science as then pursued, both at Rome, and elsewhere.

IV. QUOD QUALITATES INCORPOREÆ SINT.

WHETHER THE QUALITIES OF BODIES ARE INCORPOREAL.

(NINE CHAPTERS.)

In this metaphysical tract, the question is considered as to the propriety of the Stoics, in denominating the qualities and other accidents of bodies *corporeal*. Galen denies it, and gives a definition of a body.

V. DE LIBRIS PROPRIIS GALENI.

OF THE APPROPRIATE WRITINGS OF GALEN.

(EIGHTEEN CHAPTERS.)

This book is of importance, inasmuch as it enables us, (at least to a certain extent,) to establish the writings that are his, and to point out those that are erroneously ascribed to him. A preface explains the circumstance leading to his writing it. He then proceeds to mention the works he had written on his first arrival at Rome;—next, those that were written by him and given afterwards to his friends, when he left that city. He then speaks of his anatomical writings, and adverts to twenty books on anatomy by Marinus, which he had epitomized. After this, he mentions his books on Diagnostics, Therapeutics, and Prognostics; his commentaries on Hippocrates, on Erasistratus, Asclepiades, the Empirics, and the Methodists; and of those that pertain to demonstration, or which are proper and common in the arts. Lastly, he notices such of his works as belong to Moral Philosophy, to the Platonic, Aristotelian, Stoic, and Epicurean systems; and of those that were common to grammar and rhetoric.

VI. DE ORDINE LIBRORUM SUORUM.

OF THE ORDER IN WHICH HIS WRITINGS ARE TO BE PLACED.

The title sufficiently explains the purport of this book.

VII. DE SECTIS.

OF DIFFERENT SECTS IN MEDICINE.

This book gives an interesting account, and one, probably, more accurate than is elsewhere to be found, of the different sects in medicine. From this, every writer on the subject, from the days of Galen to the present period, seems deeply to have quaffed, either directly, or as copyists, without any, or but trifling acknowledgment. No one, whilst reading the lofty pretensions and explanations of hypotheses assumed to be of modern origin; or in hearing the same detailed in learned lucubrations, ex cathedra, would suppose that the subject had ever, previously, received the slightest elucidation! Happily for these conceited and oracular exponents, Galen preceded them by ten or more centuries; and from his extensive hives, those drones have stolen the honey, if any is to be found in their asserted claims. It is but just to pay our homage in return, and rendering to Cæsar the things that are his, confess his superiority with a “*detur dignissimo.*”

This book embodies much matter that is of a character peculiarly interesting to those who may desire to explore the discrepancies of former sectarians, and to investigate by what means the *same remedies* were alike employed in the practice of them all, although it was founded on principles so different! Notice has also been taken as to what has, by turns, received the opposition of them all. The Methodists receive a due share of attention, both as to their defence, and to the attacks made upon them by the Empirics and Rationalists.

VIII. GALENI, DE OPTIMA SECTA.

OF THE BEST SECT.

This is an important and interesting book, consisting of no less than fifty-one chapters, in which the pretensions of the different sects in medicine are duly canvassed. Galen sets off with the proposition that every medical precept, and every general precept, should be founded in truth as its primary recommendation; then,

that it should be useful, and lastly, conformable to established principles. By these alone can a sound precept be properly judged of, and that, if deficient in either, it should not be tolerated. The whole of this book seems to base its remarks on these propositions, and an infinite variety of highly valuable matter is spread over the whole treatise. He advertises to the difficulties that spring up in considering and judging of precepts assumed from mere appearances, or which are assumed from the authority of others as having been previously demonstrated. He points to the cautions essential in such investigations, and strengthens his views by numerous cases, either actual or supposititious. By these propositions he enters into his inquiry as to the character, &c., of the three principal sects, viz., the Rationalist, the Empiric, and the Methodic; by which his judgment may be enlightened as to his selection of the best. This he fully does, and points out their respective advantages or defects, their discrepancies, and the imperfection of many of their remarks. In short, it is a valuable criticism, which may be very advantageously consulted by every medical man, who desires sincerely to arrive at truth in his researches, and not be led away by the empty and frivolous hypotheses that swell the publications and lectures of the last fifty years.

IX. DE OPTIMO DOCENDI GENERE.

OF THE BEST MODE OF EDUCATION.

This book is of a *general* character in respect to education, and is deserving attention, if merely as affording the views of a man most deeply impressed with, and who appears to have thought much, upon the subject.

X. DE SUBFIGURATIONE EMPIRICA.

AN EXPOSITION OF THE EMPIRIC SECT.

This may be regarded as a compendious history of the sect of the Empirics. As to their origin, they themselves derive it from Hippocrates; but Galen considers them as springing from the

Sceptics of the more ancient philosophers. The foundation of their art is said to be that of experience. What that consists of is considered, and an explanation given of some terms connected with it: such as *αυτοφια*, *εμπειρια*, &c. Galen adverts to the division made of the art by some of them, into two parts; by others into three, and four, and even five parts. Herophilus's definition of medicine is stated, and the difference is pointed out between Empiricism and Dogmatism. The whole book is replete with interest, at least to those who desire to investigate the origin and diversity of the various doctrines of those distant times.

XI. SERMO ADVERSUS EMPIRICOS MEDICOS.

In the Venice edition of Galen's works is a short essay which does not appear in the Basil edition of Frobinius, entitled "A Discourse delivered in opposition to the Empiric Physicians." It is of little or no importance, and why introduced at all would be difficult to say, especially in this part of Galen's works;—for, even in the Venice edition, it is called "Fragmentum quoddam exiguum et mendosum." Its title gives its intent.

XII. DE CONSTITUTIONE ARTIS MEDICÆ.

OF THE ART OF MEDICINE.

A considerable number of Galen's writings appear as letters, if we may so express it, addressed to different individuals, probably his disciples; and, at times, apparently under fictitious names: thus the present book is addressed in its prefatory remarks, to Patrophilus, which may, or may not be a real one. By some, the book has been divided into two parts, the first, consisting of remarks on such particulars as lead to a knowledge of bodies, either simple or compound. The second, of a notice of remedies, or those instruments of pharmacy and of aliment, in any way employed by the physician.

Galen commences by assigning his reasons for writing the book, and strongly exhorts to the pursuit of useful arts, declaiming at the same time against the ignorance of the age and of its increase.

He points out the arts as being of a fourfold character: 1. Contemplative; 2. Practical, or Active; 3. Effective, poetically; that is, in creating that which had no previous existence, or in correcting that which did exist. Of this description he affirms medicine to be. Lastly; 4. Acquisitive, or Accumulative, as in the various arts of hunting, fishing, &c. He then proceeds to a more particular consideration of medicine as a factitious art, and explains how it is so; its parts, and actions;—states the essence of each part to consist in its conformation, magnitude, number, sympathy, and use, with much other speculative, yet interesting matter, diversified with that of a medical character. He then remarks on the nature of remedies, their discovery; the mode of attainment of the nature of diseases, and of the part affected, especially if internal; speaks of their causes, symptoms, variety, prognosis, and divination, &c; of the selection of remedies, prevention of disease, and of convalescence.

XIII. FINITIONES MEDICÆ.

MEDICAL DEFINITIONS.

This is useful by directing attention to the importance of definitions. It adverts to physicians, anterior to the time of Hippocrates, as having written but little, and defined nothing. Hippocrates was the first to collect these scattered fragments, and add to them his own. Many after him pursued the same plan, though without any kind of order, but merely spread at random through their works, such as Herophilus, Apollonius, and others. We are now presented with a definition, of what a definition is;—then follow, definitions of a science, art, sect, medicine,—and its respective sects, &c. Man is defined, his elements, organs, humours, nature, age, respiration, sanguification, pulse, motion, senses, health, and sickness. To this, succeed that of fever and its varieties, and that of various other diseases, as of the head and other parts. He speaks of medicine as being divided into two parts, contemplative and active, that is into theory and practice. The affections of the uterus, its discharges; the hair and its diseases, of which nine varieties are enumerated, one, under the title of rhopalosis, (i. e.

"velut in baculos coagmentatio,") appears to me to be the plica, or nearly allied to it. Fractures of the skull follow; diseases of the eyes and other organs of sense; the semen and its formation,—in which is agitated the question of the female seed;—that of the foetus, and its nourishment;—and also of monsters; of seven and eight month children, and of uterine polypi, whose excision is recommended when large. Hemorrhage;—surgery and its parts, are noticed. This book, is in fact, in many respects a very useful one; it enables us, in case of difficulty, to look into the *original* meaning of words; and if not practically important, it is interesting throughout, if only on this score; a good translation of it might be useful, under this consideration.

XIV. INTRODUCTIO VEL MEDICUS.

INTRODUCTION TO MEDICINE, OR THE PHYSICIAN.

This book has by some been ascribed to Herodotus, and this seems the opinion of the editor of the Junta edition. In either case, it is of great antiquity, and tends to fix the doctrines of the times. The Venice edition divides this book into nineteen chapters; that of Frobinius, into thirty. Why so, is not explained, nor is it probably of any consequence.* The whole is of sufficient interest to command attention, whoever be its author. A preface to it adverts to the manner in which medicine was discovered, and a detail is given of many of the nursery tales, and original fables on this point. Esculapius is reputed as its inventor; and the Asclepiades, (his successors,) especially Hippocrates, are mentioned as having first taught the principles of rational medicine. The author proceeds next to treat of the principles of medicine, which he regards as threefold, viz., inventive, constitutive, and traditionary or interpretative. He next mentions the three principal sects, viz., the Logicians or Rationalists, the Empirics, and Methodists, with remarks on each of them, and some account of their respective leaders. Of the Rational sect, he considers Hippocrates to be the author and the chief; then Diocles, Praxagoras, Herophilus, Calcedonius, Erasistratus, Mnesitheus, Asclepiades, and Prusias. Of the Empirics, Philinus

* Such variations in the divisions are very frequent in the two editions.

stands foremost, as being the first who separated from the former; then Serapion, the two Apollonii, father and son; Antiochenes, Menodotus, and Sextus. Of the Methodists, Themison led the way, quitting the phalanx of the Rationalists, and followed by Thessalus, Mnaseas, Dionysius, Proclus, and Antipater. Some differed from all the preceding, and by their seceding from them gave rise to various minor sects, as the Synthetic, Eclectic, &c. An inquiry is then entered into, whether medicine is an art; and the opinions of the different sects, on the subject, are pointed out. Next we are presented with an enumeration of the parts or divisions, and the definition of medicine. Its division is into five parts, viz.: 1. The contemplation or consideration of natural things, constituting physiology. 2. A consideration of the affections, and of a knowledge of their causes, giving rise to pathology and ætiology. 3. The rationale of preserving health, or hygiene. 4. Of the observance of signs or symptoms, or semeiotics. 5. Of the mode of cure, or therapeutics. After some remarks on each of these in particular, the author considers the propriety, or necessity, of this quintuple division; then takes a view concisely of the human elements, as laid down by Hippocrates and other philosophers; some of whom enumerate four, viz., fire, air, earth, and water. Some reckon only three, a humid, dry, and aerial element, (answering to the continentia, contenta, and impetum facientia, of later writers;) the first consisting of the solids, as bones, nerves, arteries, veins, &c. The second are the fluids, that are conveyed by vessels to every part of the body. The third consist of spirits, considered by the ancients as twofold, animal and natural. Erasistratus considered three species of vessels, arteries, veins, and nerves, (omitting humours and spirits,) as the beginning, and the elements of the whole body: and Athenæus maintained, that fire, air, water, and earth, were not themselves the four primary elements; but he had great respect to their qualities, of hot, cold, dry, and moist. These and many other views of ancient philosophy respecting the elements, are noticed by Galen, which need not be here mentioned. This part is succeeded by the names of the external parts of the body, their division and etymologies; the internal parts and etymologies in like manner; and here we find various parts called by names altogether different from those to which those names are now applied. Thus stomachus, implied the œsophagus, and not the organ of digestion, as now. An enumeration of others is here unnecessary, but it

is pretty fully detailed by Galen. The fluids are next adverted to, and some functions and diseases. Six species of intermittents are mentioned. Diseases are divided into febrile and non-febrile, acute and chronic; and their mode of treatment is concisely noticed. Then, a concise description of acute diseases and their treatment is given; next, of the chronic in like manner. Remedial measures are then referred to, as being internal or external. The internal are divided under twelve genera, deduced either from the affection itself or from the seat of the disease. The external are placed under eleven divisions. All this is followed up by a long chapter on the diseases of the eyes; these, by a notice of various cutaneous affections; and the remainder of the book embraces surgery and its various indications, &c., fractures, luxations, &c. This book, though replete with matter, is however very concise; and is yet deserving of attention.

XV. QUOMODO MORBUM SIMULANTES SINT DEPREHENDENDI.

HOW TO DETECT THE SIMULATION OF DISEASES.

This is called a *libellus*; but is not shorter than many, dignified by the title of *Liber*. It would seem that in former times, the march of intellect was fully competent as at present, to direct the mind to evil; and it would admit of much reflection, before a just estimate could be drawn as to the comparative superiority of vice or virtue of that distant period, over that of present times. In this production, Galen acquaints us with the simulation of diseases, and points out the means of detection. Tumours, inflammation, spitting of blood, extreme pain and delirium, &c., all become tributary to fraudulent intentions. A case is given of feigned colic; another of a swelled knee, excited by artificial means, in a servant desirous of avoiding out-of-door work. Some instruction may be derived from this treatise, at this period.

XVI. ARS MEDICINALIS.

OF THE ART OF MEDICINE.

This book is divided into one hundred chapters, containing much interesting and important matter, although of infinite diversity.

Some prefatory remarks are made on the triple doctrines, or modes of inquiry, as to what medicine is, &c., and replies are given to such inquiries. It is said to be the knowledge of that art or science, that teaches what is healthy, what induces disease, and of the causes and accompanying symptoms. The body is said to be the recipient; causes act and operate upon it; symptoms indicate, both the state of health, and of disease. All this is more particularly noticed under each respective head, of the healthy, unhealthy, and negative or neutral state; of healthy and unhealthy symptoms, and, of such as indicate the highest health. The difference of parts, is then considered, either as original, or derivative; thus, the brain, the heart, liver, testes, are regarded as original; whilst the nerves and spinal marrow are derived from the brain; arteries from the heart, veins from the liver, and the seminal vessels from the testes, &c., and from these, as from a centre, what respectively concerns each, is treated of; as of the signs connected with the brain, arising from its magnitude, &c., of reason, memory, and the various senses, and their organs. So of the heart and other parts, their different signs or symptoms, indicating approaching or actual disease; the various modes, or modified changes of the system; solution of continuity; most usual curative indications; obstruction as productive of disease, either in number, location, or in force, &c., and with this, the *Libri Isagogici* terminate.

C L A S S I.

P H Y S I O L O G Y, A N A T O M Y, E T C.

THIS class contains twenty-eight books, and embraces an account of every thing connected with the human body, from its first formation of elementary matter; together with much physiological inquiry as to respiration, the pulse, muscular motion, generation, &c., all highly interesting, and containing the germs of many of the theories, or rather hypotheses of the present period.

The First Class consists of those works of Galen, that may be considered as chiefly belonging to Physiology; wherein is to be found abundant matter for speculation, as well as much of a practical nature. Here are nearly thirty distinct tracts, some consisting of several books or chapters; and in point of interest, scarcely yielding to any writings downwards to the present time. Sterne says, "I pity the man who can travel from Dan to Beersheba, and cry, 'tis all barren;—and so it is: and so is all the world to him who will not cultivate the fruits it offers."—(Sentimental Journey.) And in like manner, I would say, that whoever could read this class of Galen's writings, without feeling his whole soul pressing forward, *sympathetically*, to pay his respectful homage to the greatest ornament of the medical profession, must be incapable of appreciating truth and merit, because appearing in an ancient dress; whilst he receives with avidity, the plagiarisms and dicta of our schools; unconscious, that what is *praiseworthy* therein, is mostly derived from ancient authority, which their teachers profess to despise! whilst what is the reverse, is generally of "domestic manufacture!"—ED.

INDEX OF THE VARIOUS BOOKS OF THIS FIRST CLASS.

1. Galeni, De Elementis, Lib. 2.
 2. De Temperamentis, Lib. 3.
 3. De Natura humana.
 4. De Atrabile.
 5. De optima nostri Corporis constitutione.
 6. De bona habitudine.
 7. De Ossibus.
 8. De Musculorum dissectione.
 9. De Nervorum dissectione.
 10. De Venarum Arteriarumque dissectione.
 11. An sanguis in arteriis natura contineatur.
 12. De Anatomicis administrationibus, Lib. 9.
 13. De utilitate respirationis.
 14. De Causis respirationis.
 15. De usu Partium, Lib. 17.
 16. De dissectione Vulvæ.
 17. De instrumento odoratu.
 18. De Pulsuum usu.
 19. De Hippocratis et Platonis decretis, Lib. 9.
 20. De naturalibus facultatibus, Lib. 3.
 21. De motu musculorum, Lib. 2.
 22. De motu thoracis et pulmonis.
 23. Quod animi vires Corporis temperaturas sequuntur.
 24. De formatione fœtuum.
 25. An omnes particulæ animalis quod fætatur, fiunt simul.
 26. An animal sit, id, quod in Utero est.
 27. De Semine, Lib. 2.
 28. De septimestri partu.
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I. GALENI, DE ELEMENTIS, LIBRI DUO.

OF THE ELEMENTS.

The first book is taken up with considering the nature of an element. It is regarded as being scarcely cognizable to the senses,

in consequence of its minuteness, but rather, appreciable by reason. Inquiry is made as to the number of elements, if one, or more; and attempts are made to prove that *one alone* is insufficient. This, although the belief of many, is refuted by reasons deduced from various considerations, as well as from the discrepancy of those who maintained the opinion; and the conclusion is drawn, that the idea is ridiculous, whether maintained by philosophers or physicians, that there is but a single element, either of man, or of the universe; for even they who most warmly contend for this opinion, can come to no agreement as to what this element is; and the author criticises them accordingly; more particularly Melissus. As chiefly speculative, this book, as well as the second on the same subject, is perhaps, of little absolute importance, further, than as they afford us the first views of philosophers and of medical men, on several particulars; from which, as a foundation, various hypotheses sprang up, and fructified, or decayed, in due proportion to the ingenuity of their respective proprietors. As a matter of curiosity, more than of real importance, it however is deserving of a full translation.

It is translated into Latin, from the Greek, by N. Leonicenus (Basil Ed.), and by Victor Trincavellius (Venice Ed.)

II. GALENI, DE TEMPERAMENTIS, LIBRI TRES.

OF TEMPERAMENTS.

THOM. LINACER, TRANSLATOR.

Hypothetical as are these three books, they are abundantly interesting and entertaining. The subject commences, by showing why it deserved investigation. Its division by different persons, some into two, others into four temperaments, together with the omissions of the older writers, are referred to. Some remarks relating to spring and autumn follow, and animadversions on the errors of nomenclature among the ancients; the right signification of names in connexion with temperament, together with the different accommodation of the same name, and the number and distinction of the temperaments, are fully considered.

The second book begins with a brief repetition of the preceding, and then notices the temperament of different ages, and explains them,

together with the contrary arguments of many, on these particulars; it enters into the consideration of the temperaments of different parts, as evinced to the senses and reason; and by various qualities, such as thickness, tenuity, roughness, smoothness, &c.

In the third book the temperaments, or degrees of medicines, are considered, and the means by which any article becomes possessed of power. The difference of substances received into the body, assimilation of particles, spontaneous combustion, with a digression to the combustion of the Roman fleet by Archimedes with specula, all are considered; and also aliment, in its variety, and as differing from medicines. These last are divided under four orders, and are treated of, together with the difference produced in them from mixture, or variety of administration, viz., whether applied externally, or internally taken. Notice is taken of the *harmless* nature of the poison of the viper, or of a rabid animal, when *internally* received, and its opposite tendency if externally applied. Experimental experience of the knowledge of remedies is insisted on, and much variety of particular subjects connected with this, is interspersed; together with a concise abstract of the whole treatise, which concludes the book.

III. GALENI, IN LIBRUM HIPPOCRATIS, DE NATURA HUMANA, COMMENTARIA DUO.

TWO COMMENTARIES OF GALEN ON THE BOOKS OF HIPPOCRATES,
ENTITLED, "OF THE NATURE OF MAN."

H. C. CAMPENSIS, TRANSLATOR.

These two commentaries seem to be merely an appendage to the preceding books on the elements of bodies. They are comments on that work of Hippocrates, translated above, *De Natura Humana*, and by Haller and others, *De Natura Hominis*. Galen considers all, beyond that which his first commentary embraces, as spurious, and not coming from the pen of Hippocrates. He ascribes it to Polybius, his son-in-law. They are, nevertheless, closely connected, and are not devoid of interest. They advert chiefly to the four elements of nature, and to four in the human body, as influencing health and disease; and they give the general opinions,

(and the diversity also,) of physicians, as to what man consists of, viz.: of blood, bile, &c. We here find some remarks on the blood-vessels, in which some of the errors of that period, are intermingled with truths of later date; and adequate, if duly weighed with other parts, to assure us of a conviction of a circulation, even in yet more remote times, although its route was imperfectly comprehended.—Galen correctly observes, that our judgment is not always to be captivated by demonstration, but that reason is to have fair play; and he points out the error of some of those assumed demonstrations: such as, of four pair of vessels proceeding from the head; which, so far from being the case, as asserted by some, not any of the best anatomists had ever advanced. Much might be here adduced in order to aid our estimate of the extent to which the views of a circulation were really carried.

IV. GALENI, DE ATRA BILE, LIBELLUS.

OF THE ATRABILIS, OR BLACK BILE.

B. SYLVANEUS, TRANSLATOR.

This may be regarded as a treatise of some importance, in so far as it affords a view of the opinions of the ancients respecting the nature of this presumed peculiar principle of the body, the atrabilis, or black bile, as contra-distinguished from the yellow or natural bile, and as the supposed and abundant source of disease. After some censures on the writings of Plistonius, Praxagoras, and Philotimus, on the subject of atrabilis, and praises of Hippocrates and Rufus for their statements; he adverts to the humours, and to their necessity in the body, among which is atrabilis. He rebukes the Erasistratians, Asclepiadeans, and Methodists, some of whom ventured to say, that any information as to the humours was useless in medicine.^a He sets off, in speaking of the humours, with the blood; and notices the difference of colour between that of the arteries and veins; its coagulation out of the body, and in the body,

^a Here we see the first dogmas of *exclusive Solidism*! A more absurd doctrine never found a place in medical science, with, perhaps, the exception of one founded on it in a great measure, that of sympathy, pushed to the extreme that it has been in the present day!

as in the belly, intestines, bladder, lungs, windpipe and other parts: he mentions the healthy and unhealthy appearance of it, as to its colour and consistence; and states that it is *sometimes like tar or pitch* ("liquidæ pici similis," p. 154, Bas. ed.) He considers the arterial and venous blood as being the same, and therefore entitled to one appellation; and proceeds to the notice of some other humours, pointing out their difference, &c., from the blood, and dwells particularly on the atrabilis, which is precisely expressed by our English word *melancholy*, i. e., $\mu\varepsilon\lambda\alpha\varsigma\chi\circ\lambda\eta$, or black bile. He next adverts to several diseases assumed to be produced by its presence, &c. Other particulars are mentioned, and receive an explanation, different, perhaps, from that now given, but probably not more satisfactory; such for instance as the occasional injury sustained by curing hemorrhoids, &c., and other chronic complaints, and varicose ulcers of the leg, &c. All the humours are considered as being contained in the blood, (in *venis*, *arteriisque*,) and to be the source of health, when in due proportion, otherwise, as leading to disease, if this proportion is altered, either generally or locally. This change is often apparent in the modified appearance of the blood itself. The causes that augment or diminish the atrabilis are mentioned. He then opposes Erasistratus in his opinion as to the use of the spleen, and maintains that some of his views would lead to the belief that all kinds of evacuation, by bleeding, purging, &c., were equally beneficial at all times, and hence, that the daily observations of physicians in these particulars, are altogether useless. Much praise is bestowed on Hippocrates; and reference is made to Melampus, who treated affections arising from atrabilis, three hundred years before Erasistratus, who has said nothing, or but little, about it. Considering this humour to be contained in the blood, some remarks follow, which, although founded on an erroneous basis, yet they go to accredit a belief in a circulation, for, without such a supposition, even the erroneous foundation is itself devoid of sense.* A full persuasion of a circulation here, and elsewhere, seems unqualified: the *qua via* is not established by him, and is of no importance; it is in part apparently here, and throughout his writings. Its full perfection is not yet determined. Galen has done his part and full proportion towards it.—He terminates this book by referring to his own experience as to the

* Bas. ed. p. 163.

importance and necessity of the atrabilis to the system, (longa experientia mihi certo cognita, compertaque sunt,) and although our present *theories* discard this humour, *practically*, it is admitted on many occasions.

V. GALENI, DE OPTIMA CORPORIS CONSTITUTIONE.

OF THE BEST BODILY CONSTITUTION.

F. BALAMIO, TRANSLATOR.

In what this best constitution consists, is well laid down by Galen, viz., in an harmonious temperament of all the parts of the body, as well as in their proper situation, size, figure, number, and connexion. Health is stated to consist in that sound and wholesome state, in which all the actions of nature are correctly performed. What these are, are then more fully explained; and the opposite, or ill state of the body, is incidentally brought into view.

VI. GALENI, DE BONA HABITUDINE, LIBER.

OF A GOOD CONSTITUTION OR HABIT OF BODY.

SAME TRANSLATOR.

This book seems a necessary continuation of the preceding. Galen commences by stating what he means by *habit*, viz.: that it is a permanent and durable affection, whether that be good or bad; the latter may be such, either simply, or comparatively; but the former is simply so, in the best constitution. Such was the case with Milo, Hercules, Achilles, &c., differing from that of the athletæ, as is explained, and comparisons drawn between them. The athletæ, from their immoderate diet, or increased circulation (*sanguine nimium aucto*), are sometimes suffocated, or rupture a vessel in the lungs or liver. A case is detailed from Hippocrates, of the sudden loss of speech from vascular repletion.

VII. GALENI, DE OSSIBUS, LIBER.

OF THE BONES.

SAME TRANSLATOR.

This book, addressed to beginners (ad tyrones) affirms the absolute necessity to the physician, of being acquainted with the natural connexion of the bones. Galen traces their nature, uses, differences, and parts; their twofold mode of union, and the subordinate species, &c. Some remarks indicate his observations to have been made on the human body (*humani corporis ossium, invicem cohærentium universa compactio sceletos appellatur*), and not of brutes only. In a succession of chapters, he follows up a brief description of the bones of every part of the body, in a sufficient manner for the purpose of beginners; remarking at the conclusion, that the few rudiments of osteology thus laid down, he thinks adequate to the wants of a tyro; that the junction of all the bones, constitutes a skeleton, and, that as for sundry small bones, such as the sesamoid, it is not requisite to notice them here. He nowhere speaks as though his osteology was derived from brutes; and, such is the importance he attaches to the subject, the mind is forcibly impressed that his observations are derived from man, chiefly.

VIII. GALENI, DE MUSCULORUM DISSECTIONE.

OF MUSCULAR DISSECTION.

A. GAGALDINUS, TRANSLATOR.

This book is introduced into the Venice edition of Galen's works, but seems wanting in that of Basil. It appears, however, to have an important connexion with several of the succeeding books, which treat of dissection of the nerves, arteries, and veins, as well as with the preceding treatise; completing thereby the brief view of these parts; and thus preparing us for a more compendious work succeeding to them, "De Anatomicis administrationibus," of which,

most unfortunately, several books are lost. I introduce it here, as following the order in the Venice copy, and principally to afford the outline of its proemium, or preface. It commences by saying, that no one had written on the subject of muscular dissection without error; but that Marinus is the most accurate of such writers. Yet that, as in one book, he could not detail every thing, therefore, the works of Pelops, Lycus, and Ælian, should be consulted. Pelops (3d book of the Institut. of Hippoc.) dissected the muscles, as well as all the other parts of the body. Lycus composed a large book on the same subject; and Ælian, in a compend that he formed of the anatomical writings of his father, together with many other particulars, also wrote on muscular anatomy. The works of Lycus, owing to much prolix interpretation, and intermixture of logical questions with those arising out of dissection, besides much that relates to diseases, were scarcely connected with muscular dissection. Ælian and Pelops noticed carefully the objects presented to them, and which Galen was therefore the less induced to describe (*quod et ego nihil secius nunc facere decrevi*), since he had, in two commentaries, elsewhere treated on muscular motion, wherein all that was useful in these particulars, is noticed. Exclusive of which, every thing that relates to the best mode of dissection, not of the muscles only, but of every other part, is detailed in the anatomical tracts; hence he deemed it useless to write expressly on the subject, saving, that he thought fit to state whatever was discovered in his own dissections, and collect into one book all that the authors above-mentioned might have omitted, or otherwise incorrectly noticed. Besides, adds Galen, “numerous friends required me to communicate, together with my own, such particulars as they themselves had observed in their own private dissections.” He has given us merely the heads of what is demonstrated in other books, and those simply as helps to the memory.

The above explains sufficiently the character of the present book, which proceeds, in thirty-five chapters, to give a concise notice of the muscles, beginning with the platysma myoides, and other muscles of the head and neck, and proceeding downwards to the feet.

IX. GALENI, DE NERVORUM DISSECTIONE, AD TYRONES.

OF THE DISSECTION OF THE NERVES.

SAME TRANSLATOR, VEN.—ANT. FORTOLOVERSUS, BASIL.

In this book, the nerves are described, as being the organs of sense and motion, arising partly from the brain, and in part from the spinal marrow. Notice is taken of the anterior ventricles of the brain, and of the optic and other nerves up to the seventh pair, with their subdivisions, distributions, and inter-communications (*qui inter se conjungantur*), and of the discordant opinions of anatomists with respect to them; with an explanation of the causes of their ignorance of the subject. The close connexion of the nerve with the carotid arteries is mentioned, and enables him in another place (*De Decretis Hipp. et Plat.*) to explain some erroneous experiments on those arteries, leading to their incorrect denomination; after which the nerves of the spine and loins are mentioned.

X. GALENI, DE VENARUM, ARTERIARUMQUE DISSECTIONE.

OF THE DISSECTION OF THE VEINS AND ARTERIES.

ANT. FORTOLO, TRANSLATOR.

This book is addressed by Galen, to his beloved Antisthenes; and is a compend, requested by him on the subject, to refresh his memory as to what he has observed in the dissection of monkeys (*simiω*);—but he states, that a more exact account is contained in his books of anatomy, not of the above parts only, but of all others. In order that Antisthenes may the more readily comprehend him, he desires him, in imagination, to look at the trunk of a tree; its lower part terminating in numerous roots, the upper, in many branches and twigs, as affording an idea of the blood-vessels; and to which they have been likened by Hippocrates and other celebrated anatomists, for facilitating their teaching. Thus, adds Galen, the veins that are spread over the belly and intestines, respond to the

roots of the tree; whilst those termed hepatic and cavae, (jecorarium, tum cavam,) are, as it were, the *trunk* of all the veins distributed throughout the body. For a like reason, the arteries, having their origin in the heart, are in part, spread through the lungs, and may be regarded as the root, in their short series of distribution. Pursuing this train of ideas, he goes on to point out the distribution of the veins that proceed from the portæ of the liver, to the intestines, spleen, stomach, &c.,—and then those of the vena cava; mentions its conjunction with the axillary vein, and its ramifications down to the hand; the division of this vein, and of those veins going to the anterior part of the thorax, both internally and externally; and from the cava adjacent to the clavicle, &c. Of the external and internal jugulars, &c.; all of which is, he says, more fully stated in his anatomical books. He proceeds to those below the diaphragm, and to the divisions of the descending cava; the minute and capillary branches in the kidneys, testes, spine, &c.; the deltoid divarication of the cava in the loins, and its further subdivisions. He then mentions in like manner the arteries and their subdivisions, and adverts to such veins as are found unaccompanied by arteries, and of the latter, such as have no accompanying veins.

XI. AN SANGUIS IN ARTERIIS NATURA CONTINEATUR.

IS BLOOD NATURALLY CONTAINED IN THE ARTERIES?

M. ROTA, TRANSLATOR.

This book may be regarded as closely connected with the preceding one. That blood is naturally contained in the arteries is a proposition fully considered, and maintained by Galen, in opposition to Erasistratus and others. That they do contain it, he affirms from the fact, that it flows therefrom when they are wounded; it must, therefore, either exist there, or flow into them from some other source. Now, if they contained air, and the blood came from some other part, then the air should issue first,—which is not the case: a demonstration, says Galen, sufficient for those, who like him, are slaves to no sect; and who are capable of distinguishing true from false reasoning. But, as all physicians are not of that

description, he deemed it right to oppose them ; since the followers of Erasistratus contradicted him, and asserted that his deductions were false. The dispute seemed to be, whether air alone is naturally contained in the arteries, or blood only, or both together. His opponents appear to have been somewhat divided among themselves as to their views, and equally so, as to where the air or spirit came from. Galen pursues them regularly in their explanations, points out the absurdities and difficulties of their opinions, and proposes a query for Erasistratus himself to resolve, as to what would result from a wound of an artery in the arm. In this quotation, one part is particularly deserving of attention, “ *Ab ea vero quæ descendit (the descending artery from the heart) aliae (arteriæ) quæcunque in reliquum corpus diffunduntur ; manifestum est hasce quoque omnes ad extremas usque ipsarum partes vacuas reddi oportere.* Cum primum vero ad ultimas arteriarum partes vacuitas pervenerit, è venis in arteria, adapertis ipsarum ostiolis, quod solum contingit ubi totus spiritus exierit, sanguis transit,” &c.—“ *Atque ita sanguis spiritum sequens, ab arteria brachii susceptus in vulnus feretur, sicque universus sanguis, quisquis in toto corpore fuerit, ad acus punctoram conflict,—atqui hoc nimium etiam verest.* Videmus enim *ab una quavis arteria (modo capacitatis alicujus sit) in fluxum supprias, universum è toto corpore sanguinem erumpere.*”

From this, as well as from numerous other parts, it plainly appears that a passage, or circulation of the blood from the veins into the arteries is fully asserted, although the route is not particularly pointed out. The fact of its adoption seems absolute, from the necessity insisted on, of arresting the flow of blood from its local point of discharge, in order to prevent its total and complete evacuation. The admirers of Harvey, in giving him the merit of the *full discovery* of the circulation, will do well to ponder on this part of Galen's writings ; and *honestly estimate what proportion* of that alleged discovery should be awarded to his great predecessor.

Pursuing his objections to the views of Erasistratus, and his derision of the ignorance of his followers, as either forgetting or misunderstanding what their master says of the mesenteric arteries, (Bas. ed. p. 219,) some of the remarks made, would seem to indicate an acquaintance with, or at least a sight of the lacteals, which were mistaken for arteries. Galen affirms that nature does nothing in vain ; and he draws an analogy from the stomachs of oxen, all varying, yet tending to one and the same end, towards which each

one has its own peculiar office. So with the arteries and veins; blood is contained in each, dissimilar in constitution, for some specific object, as he elsewhere (*aliis in libris*) explains. That blood is there, he demonstrates by laying bare an artery, and then tying it in two places; on opening the intervening part, nothing but blood is to be found. He notices the ignorance of the Erasistratians as to Dialectics; and sarcastically laughs at them (Bas. ed. 222). He adverts to other difficulties, &c., and explains how the arteries are filled, maintaining the power of the heart in the distension of the arteries, and referring its further consideration to another place, (*De Decretis Hipp. et Plat.*) He next adverts to an experiment which deserves our especial notice, *inasmuch as it forestalls* what has been repeated since by Harvey, and by others near to our own time, by persons who *seem not always to have known that it originated* with this great master of our science; or if so, they have given it as their own without any notice of Galen.^a

A full translation of this book would be useful.

XII. GALENI, DE ANATOMICIS ADMINISTRATIONIBUS.

ANATOMICAL INVESTIGATIONS, IN NINE BOOKS.

J. ANDERNACH, TRANSLATOR.

Bas. Ed., 226 to 394.

Of these most interesting books of Galen we have already stated that part of the ninth, all of the tenth, eleventh, twelfth, thirteenth, fourteenth, and fifteenth, are lost; and as we shall see shortly, a sixteenth also.—An hiatus, maxime deplendus!

^a “Quibus si unum etiam addidero, quod è corporum dissectione colligimus, finem dicendi faciam; est autem id quod dicimus, ejusmodi; arteriam unam è magnis et conspicuis quampiam nudabis, primoque pelle remota ipsam ab adjacenti suppositoq: corpore tardi separare non graveris, quoad funiculum circumdare valeas: deinde secundum longitudinem arteriam incide, *calamumque et concavum et pervium in foramen intrude, vel æneam aliquam fistulam, quæ et vulnus obturetur, et sanguis exilire non possit; quoadusque sic se arteriam habere conspicias, ipsam totam pulsare videbis. Cum primum vero obductum laqueum contrahens, arteriæ tunicas calamo obstrinxeris non amplius arteriam ultra laqueum palpitate vidcabis,*” &c.

BOOK I.

Galen begins by stating his reasons for writing on the subject of anatomy. He informs us that he had previously written on it, at the period of his return from Greece to Rome, in the beginning of the reign of Antoninus,^a and who was then ruling. He states why he resumed the subject; one reason he assigns, was the intreaty of Flavius Boethus, a particular friend, and a great lover of anatomy, (*anatomicæ speculationis amore flagrat, quam mortalium qui vixerunt unquam, ullus alias, &c.,*) to whom he gave the copy in his possession on his departure from Rome, together with some other works. This copy he could not recover, on the demise of Boethus; and it would seem that he lost another, by a destructive fire at Rome.^b Being now again urgently intreated by his friends, he was compelled to resume his pen;—and herein, we see a full display of the benefit of printing! Had Galen not written this third copy, we should now have been utterly unable to appreciate the anatomical merits of this wonderful man! He offers another reason, viz., that the work would be greatly improved, from various circumstances. He makes reference to anatomical books by Hippocrates and Erasistratus, besides commentaries on some, on living dissections (*præter illos de vivis resecandis, item de mortuis, &c.,*)—and informs us that he had composed a large work (*ingens volumen*) on the use of particular parts, in seventeen books, which he sent to Boethus; and notices three commentaries of his

^a Antoninus was born A. D. 121, and reigned from 161 to 180, dying at fifty-nine years.

^b Reference is elsewhere made, by Galen, (*de Compos. Medic. per genera,*) to this same event; and Justus Lipsius notices the occurrence as follows, in his treatise "de Magnitudine Romana," Lib. 3, chap. 6, p. 139, 3d ed.: Plantin. Antuerpiæ, 1605, 4to. It is of the celebrated Temple of Peace he speaks—which was larger than the Capitol itself—and in it the most choicest and richest deposits were placed, the spoils of a conquered world—such as the golden vessels of the Jewish Temple, &c. &c.

"Quod magis impressiusque resero, ut tristius damnum cognoscatur, quod factum est Templi hujus ineendio sub Commodo. Tunc enim, ut Herodianus refert, levi terræ motu prævio, sive ictu fulminis, sive igne è terra exspirante, subito et improvisè totum conflagravit, itemque Porticus, et totus ejus ambitus," &c. "Inter adjecta autem ve circumjecta, periit et bibliotheca quæ in ambitu ejus templi erat."

own, on the motion of the thorax and lungs, composed by him in his youth. He appears to have met with difficulties on the death of his friend, which, with other circumstances, impelled him to the steps he pursued. He adds, that he had shown Boethus many dissections, at which were always present Eudemus the peripatetic, and Alexander of Damascus, now (says he) holding at Athens, the public profession of that sect;—and hence, continues he, in order to oblige Boethus, I was at length induced to compose these principles of anatomy.

In the second chapter of this book, he enters more immediately into his subject. He says that the whole figure of the body is dependent on the bony fabric; and on this proposition, he proceeds to state, that, of all animals, the monkey, in its interior conformation, of muscles, arteries, nerves, &c., most resembles man, for such is the case in respect to his osteology. But how could Galen draw this analogy between man and apes, if he had not equally employed himself in the dissection of both? Yet, from this very chapter, have been drawn the principal arguments of those, who confine his anatomical researches to brutes alone! Indeed, he recommends an accurate knowledge of the bones, not from books merely, but from practice, and demonstration in the human subject.^a Should difficulties present in this, he then commends the ape for dissection, giving a caution to select a species that most resembled man. I am, therefore, fully persuaded myself, from the general tenor of the chapter, that Galen did pursue his anatomical researches on man, and recurred to brutes, only for the purpose of comparative anatomy, or in a case of need; as is further shown by the following words (p. 230): “Ossium, ut dixi, omnium natura perdiscenda est, *sive in humana, sive in simiæ corpore*, modo possis; præstaret autem *in utroque*,”—and soon after, “Præstiteret sic instructum esse, ut si quando simiæ copia non datur, aliorum animantium corpora queas incidere,” &c.^b

^a “Quoniam igitur corporis forma ossibus assimilatur, et his aliarum partium natura respondet, velim te imprimis exactam *humanorum* ossium cognitionem peritiamque indipisci, non obiter ca spectare, neque etiam ex libris solum discere,” &c., Bas. ed. p. 228. And further on: “Hoc autem sit opus tuum, hoc studium, ut non librorum modo lectura, verum sedula ctiam inspectione, fideque oculata, cuiusque ossis humani speciem accurate perdiscas,” &c.

^b What has been stated both for and against Galen's anatomy of the human subject, is given pretty fully in Le Clerc.

Galen, in the third chapter, adverts to the importance of a knowledge of the muscles, and to the neglect of the ancients in dissecting them. He mentions a prolix commentary on the subject, of five thousand verses, and notices its omissions; shows the high value of their acquaintance to the surgeon in particular, from the frequent occurrence of deep-seated abscesses and ulcers among them, and from other assigned reasons; and he affirms, that he who is best acquainted with them, will cut when necessary, with more self-possession. All this, taken in connexion, impels me the more strongly to believe, that dissection was then far from being confined to brutes; but that, at least in his hands, it was intimately associated with human anatomy. It may, perhaps, strengthen this opinion, to add, that in this part, as well as elsewhere, Galen refers to the ignorance of many in this respect. Certainly, says he, we shall grievously offend all those who have neglected anatomy; nor is it at all surprising that such should be the case with many; since, whatever they may say in behalf of it, it is a fact, that they would not put themselves out of the way in its pursuit. He gives one instance in a member of his own family, (probably a student,) who, on first taking up the subject of dissection, and skinning a monkey for the purpose, considered it as a degradation—but, from Galen's account, he soon became partial to it; as will be the case inevitably with all, who, after the first impressions of disgust have subsided, pursue it diligently, and with a sincere desire for improvement.

In the fourth chapter, he thinks it expedient to explain his reasons for opposing the ancient anatomists, by pointing out their numerous contradictions; and the great discordance in their disputes respecting muscles having several heads and one tendon, and of others having only one head, and several tendons. All this is now, of but small importance, further, than as it tends to prove, that, even before his time, anatomy was in all probability as extensively pursued as in the present day, comparative, as well as human. Having disposed of these preliminary observations, Galen now proceeds to the consideration of the muscles and tendons of the arms and hands; on which he lays great stress, greater indeed than on those of other parts; inasmuch as he ascribes the vast superiority of man to brutes, chiefly to the wonderful construction and adaptation of those parts in him, and to their being peculiar to man alone. He is very minute in this examination and description, and probably, an accurate examination and a comparison of these parts,

by a competent anatomist, both in man and in the monkey, might determine whether the description given by Galen, is derived from dissections of man alone, or of both.

BOOK II.

This second book of Galen's anatomy, is even of superior interest to the preceding, since it fully and conclusively evidences the great extension of anatomical research among the ancients; and which we cannot question, without placing a seal upon almost the only writer whose works have escaped the ravages of time, and which are worthy of consideration. He begins by explaining the paucity of ancient anatomical writers, and if words have any meaning, we have in his statement the strongest reason to believe, that anatomy was infinitely more extended then, than it is at present! So far from being confined to the dissecting-room of the physician or surgeon, it seems to have constituted a part of regular instruction under the parental roof, even from childhood! Monkeys must have been as plenty as mushrooms, if such universal dissections had to depend on them alone. Let us hear his account of the matter. In the first chapter of this book, he says, that "it was altogether useless for the ancients to write commentaries on this subject, inasmuch as it was pursued at home from childhood (*a pueritia*), by reading and writing, and by the dissection of dead bodies (*cadaverum*); and this, not among physicians only, but also by philosophers. A memory thus early exercised, was not to be readily obliterated. In process of time, however, it seems to have become customary to extend this instruction to strangers, as well as to children, (*non liberis modo, sed alienis etiam artem communicare honestum esse consuerant,*) who consequently were no longer exercised in actual dissections; and its early exercise in youth, being thus abolished, the knowledge of anatomy was of a more superficial character." Galen then proceeds to show how things went on from bad to worse, and so limited in operation, that commentaries on the subject became necessary, in order to preserve what was known.

It does not appear, however, that such commentaries were wanting, even anterior to this period; for we find, in fact, that Galen refers to books on this subject; he mentions one of Diocles,

as the most ancient that had reached them ; and that after him, the writings of some of the elder, and many of the younger physicians had come to hand, ("post hunc alii quidam veterum medicorum, neque pauci ex junioribus, quorum prius mentio facta est," &c.,) in which anatomy was so intermingled with other branches of medical science, such as diagnostics, prognostics, therapeutics, &c., that it was comparatively useless. He points out an example of this in Hippocrates, and adds, that "as there is danger of such works being lost, either from the negligence of the age as to acquiring information, or from the discontinuance in the instruction of youth, I think it expedient to write on the subject myself (merito commentarios scribimus); more especially, since some persons invidiously withhold their own information from others." The above, and other remarks of a like nature, sufficiently explain, I apprehend, the character and standing of anatomy, both in the time of Galen, and that which preceded. Its importance is still further enhanced by Galen, in pointing out its close connexion with surgery, as in the case of wounds, the extraction of darts, excision of bones—luxations, compound fractures, opening of fistulæ, of sinuses, abscesses, and the like; adding, that without a knowledge of the situation of a principal nerve, muscle, artery, or vein, a surgeon would prove himself the author of death, rather than the preserver of life ! He then states what he considers best to be known, practically, and as of far more importance than mere speculation, which, although of interest to the mere philosopher, is so to the physician in a degree infinitely inferior.

It may not be improper, here to inquire into the causes which led to the opinion of Galen being unacquainted with human anatomy, and that his dissections were limited to the brute creation, and principally to that of monkeys. In this inquiry we are reluctantly led to tarnish the name of a man, long venerated and esteemed as among the earliest and best anatomists, and who has even been considered by many as the father of this important foundation of the science of medicine ; I mean *Vesalius* ! It is to him chiefly, that this derogation to the claims of Galen is owing ; others have only followed in his footsteps, from placing unbounded reliance on his good faith ; and from ignorance, I apprehend, of the writings of Galen themselves ; for certainly, this illustrious man has not wanted strenuous advocates in his behalf, among those who evidently had made those writings the subject of study and reflection.

Fabricius (J. A., in his *Elenchus Medicorum Veterum*, article Galenus. *Bibliotheca Græca*, vol. xiii. p. 165), speaking of some of the writers of the life of Galen, &c., adverts to J. Woweranus, Th. Reinesius, and Caspar Hoffmannus,—who, “non sine causa dissentiant a *Vesalio et Amato*, qui Galenum secuisse humana corpora negant,” &c., although they admitted his dissection of brutes. Now, in order to strengthen this dissent of the above-named writers to Vesalius, it is necessary to adduce facts that have never been denied, that I know of; facts, derived from some of his contemporaries and associates, and others of later date.

C. N. Jenty, in an historical compend, prefixed to his anatomical lectures (3 vols. London, 1757), thus speaks upon the subject, after stating that Vesalius was born at Brussels in 1514, and died in 1564, at the age of fifty; and, that at the time Vesalius appeared, anatomists were so much blindfolded with the authority of Galen, that to have contradicted him had been looked upon as heresy: that Vesalius ventured to expose the mistakes, and correct the errors of Galen, both in physic and anatomy: which led to the censures of some distinguished authors, who charged him “with ignorance, want of honour, vainglory, and plagiarism.” To confirm this, he presents to the reader (p. 94), an extract (translated) from *Piccolhominus*, whom he calls *an author of considerable note*. As I possess the work of Piccolhominus^a (*Prælectiones Anatomicæ*, fol. Romæ, 1586), I prefer to give it in his own original words, for Jenty omits a part, of some consequence to the full comprehension of the merited castigation of Vesalius. It will be perceived, that, (referring to his work, p. 207,) he is speaking of the foetal heart, and lays claim for Galen, to certain parts that have been delivered by Vesalius as discoveries of his own; referring to the sixth book, *De Usu Partium*, cap. 20, 21, and ch. 6, of fifteenth book, in proof of Vesalius's dishonest conduct. His words are as follows,—after stating that Vesalius “in magno illo de re anatomica volumine” had not mentioned these particulars from Galen. “Qua ab eo prætermissa, duo perspicuè indicantur; alterum, se in fætibus dissecandi segnem et ignarum fuisse, cum hanc neque invenerit neque prodiderit; alterum, se libros illos Galeni quos modo commemoravi, nunquam legisse. Nec minus mirari subit Fallopius, qui passim Vesalium *divinum* appellat! An

^a By the inscription around the portrait of Piccolhominus, he died at the age of sixty; so that he was nearly contemporary with Vesalius.

divinitatis nomen meruerit quòd rei anatomicæ, omniumque corporis humani partium, fuerit inventor primus et observator?" (The above is omitted by Jenty.) "Si mihi aliquando per otium licebit, *luculenter commenstrabo, quæcumque bona scribuntur a Vesalio in illo volume, omnia ex Hippocrate, Aristotele, Galeno, aliisque antiquioribus esse transcripta, horum virorum, nulla prorsus facta mentione; Quæcunque verò falsa, ab eodem scribuntur, quæquam plurima sunt, ex suo furibundo marte prodidisse.*" And soon after, he adds, "Ex duobus itaque illis Galeni libris, et locis, in quibus admonet, horum vasorum coitionem in fœtu, nonnulla, veluti problemata eruam, quò res obscurissima, tractatur dilucidè et maximè perspicuè." A sentence is added here in Jenty's translation, omitted above, viz., "and though he has secretly stole many things from Galen, yet he never mentions his name, unless it be with a view to find fault with him!"

These are serious charges, we must admit, yet they do not rest on the assertions of Piccolhominius alone,—for Jenty thus proceeds: "The censure of Caius is still more remarkable. We both lodged, says he, in the same quarters at Padua, at the time when Vesalius wrote and prepared his book 'De Corpora Humana Fabrica.' One Aldinus Junta, a Venetian printer, employed him to correct the anatomical works of Galen, both Greek and Latin; and for that purpose, several emendations were sent him; but he *rendered Galen's text more corrupt than it was before, with no other view than that he might have somewhat to find fault with:*" and though Fallopius owns him to be the father of anatomy, yet he carps at his opinion almost every where.—Columbus talks thus of him: "I cannot but be surprised that he, who on all occasions lashes and chastises Galen for his having described apes and brutes, instead of men, should yet, himself, be so ridiculous, as to describe the larynx, tongue, and eyes of oxen, and not of men; without so much as ever giving a caution with regard to it. He also ascribed muscles to the epiglottis, which are only found in brutes!" Eustachius has also observed of him, that "he described and delineated a dog's kidney, instead of a man's." Arantius styles him the common master of anatomists, but accuses him of having delineated the pudenda of brutes, on account of the scarcity of the bodies of women; whereby it happened that Valverda, and those who immediately followed him, taking things upon trust, split upon the same rock. Johannes B. Carcan Leon speaks of him thus: "It is surprising that Vesalius, whilst he accuses Galen, the chief of

physicians and anatomists, of so many blunders and errors, should yet himself, be so justly liable to censure in the same respect; and, what is still worse, by these accusations, he seems widely to have mistaken Galen's meaning, ascribing to him things he never so much as dreamed of; and affirming, that he denied those things that he insisted on in the most distinct and explicit manner; and whilst he so often wonders at, and finds fault with Galen, he himself deserves to be wondered at, and found fault with."

I repeat, then, that these particulars respecting Vesalius, are deserving of the strongest reprobation; and yet Galen's character as an anatomist, has been settled by such an ungenerous conduct. Whatever may be the real standard of Vesalius's attainments, no one, after reading the above statements of those, whose names are well known in our anatomical researches, will venture to derogate from Galen's high standard, from the authority of his calumniator, who, in attempting to depress and depreciate him, vainly strove to elevate himself; and merits the contempt of every honourable member of the profession of medicine.

In the third chapter of this second book, we find much to interest, much to instruct us. Galen here enters into some details of the omissions and negligence of preceding anatomists respecting the muscles, nerves, arteries, and veins; and notices the ignorance of many, as to these particulars, even in his time. He adds that such knowledge is so absolutely essential to the medical man, that even the Empirics (the sect), who have written largely against Anatomy, have never dared to condemn it; but, whilst confessing it to be the most useful and important of any of the branches of medicine, they add, that it is attainable by the frequent inspection of wounds! He is wroth that any one should presume to think that a bare inspection of wounds can make an anatomist; and he pursues his remarks with much and well-seasoned sarcastic asperity, concluding that it is scarcely worth while to dispute with such people. He exhorts beginners to attend first to that which is most useful; amongst which he reckons the nerves, the arteries, and veins of such parts as are most likely to come under notice, rather than those deep-seated parts that are less under our control. He lays great stress on this, and tells us he does so, from the fact that he saw around him many who considered themselves very highly accomplished, although altogether ignorant in these particulars. He proceeds, in the subsequent chapters, to speak of the muscles of the thigh, leg,

&c.,—and makes a remark that I think adds strength to the impression I have advocated, of his dissections being human, and not limited to brutes; viz., when speaking of the foot of the monkey, he mentions it as being very different from that of man, and repeats the same as to the hands and fingers, which he would scarcely venture to assert without a due acquaintance with each. In the last chapter, some observations occur in opposition to Erasistratus, on the subject of the nails.

BOOK III.

BAS. ED. 267.

This is an important book, and is connected with the nerves, the veins, and arteries of the hand and foot. Galen commences it with animadverting on those persons who make their studies to consist in sophistical discussions, rather than in the faithful and steady pursuit of anatomy. He points continually to the necessity of acquiring a knowledge of the external parts, and to the errors of judgment, and the unhappy results of practice, which an ignorance thereof induces. The extreme neglect he had witnessed in these particulars led him to the greater attention; and he strongly urges all who dissect, to pay early attention to the anatomy of the arteries, the veins, and nerves. We continually, says Galen, meet with physicians who know accurately how many membranes belong to the heart, or muscles to the tongue, with other things of like character; but who are altogether ignorant of the structure of the external parts, and of very much that they ought besides to have known. He gives a case or two in point; and in a succession of chapters, he notices the nerves proceeding from the spine to the arm, &c., the passage of the axillary vessels, the nerves of the thigh, leg, and foot, and their vessels. In chap. ix. he reiterates his views as to the diligence required in investigating the nerves and blood-vessels, and this, from considerations unsurpassed by any that could probably now be advanced by the first surgeons of this period. He here likewise gives a prominent instance of the gross ignorance, and consequent rashness, of a surgeon, who, in some affection of the arm, inadvertently employing the scalpel, divided both the nerve and vessels of the part! Alarmed at the great effusion of blood, but expecting

nothing more, the vessels were tied ("funibus vasis quæ amputata erant, circumdatis," p. 284); immediately the patient discovered that he could not move his hand, and that sensation in many parts of the limb was entirely destroyed; on which he exclaimed to the physician, "Wretch, thou hast cut a nerve!" (*ενευροποιησας*). So that, says Galen, by one single cut a whole limb was rendered useless. Again he refers to the general resemblance between man and the monkey, and commends a frequent recurrence to the latter. He speaks of a book (unfortunately lost) wherein he has treated on the danger of blood-letting; which book, probably, from the mode of expression respecting it, might have enabled us more fully to have appreciated the peculiar subjects of his anatomy ("ut nunc omittam quæ in sanguinis detractione mala designant, ignorantes quæ observanda sint, in *singulis cubiti venis* : de quibus etiam *in libro de mortuorum consectione tractatum est.*") The whole chapter is interesting, whilst the whole book, I think, sufficiently establishes the exercise of anatomy by Galen, as being on the human subject principally, although that of animals was not neglected; and that the assertions of Vesalius and others, are not to be at all relied on, when employed in disparagement of this great man.

BOOKS IV., V.

BAS. ED. 290.

These two books continue a description of the muscles, viz., of the face, head, neck and scapula, thorax, abdomen, loins and spine, &c., embracing much interesting detail as to the order he had adopted for his anatomical books, &c., and in the first chapter, terms are employed in relation to the monkey, which show that he, at least, knew well the *difference* of its anatomy from that of man, ("simiam vero ridiculam hominis simulationem existere demonstravimus: ac ob id hominis quidem modo graditur; sed in *ipsis principalioribus partibus* manca est," &c.); of which he mentions sufficient proof. He moreover animadverts on the dissections of the physicians of his day, as being of parts the least important; and he esteems it his duty to impress this upon the minds of young men, and to urge them to a more useful line of conduct. This first chapter is, indeed, a kind of summary of the preceding books, and

of those that succeed. Some reference is made here to books apparently lost, and which I have already adverted to, as mentioned by the editor of Galen. These books are from the fifth chapter of the ninth book, all the tenth, eleventh, twelfth, thirteenth, fourteenth, and fifteenth books, and in the first chapter, fourth book, he speaks of a “*decimus sextus illius operis liber, agit de arteriis, venis et nervis,*” in which, he tells us, he has explained what is generally and commonly known respecting them. This must be considered as a great loss, for it would in all probability have enabled us more accurately to appreciate his anatomical skill, and the chief objects of his dissections; and also to estimate more fully his knowledge and views of a circulation of the blood. In the sixth chapter of the fifth book, he makes a slight reference to a singular case, which being more fully detailed in the seventh book, I shall there revert to it. He remarks on the ignorance of the older anatomists respecting the use of the intercostal muscles, notices the diaphragm (*phrenes, vel septum transversum*), and speaks of it as if it was formed of two muscles, an idea that has been entertained by later writers.^a

B O O K V I.

The subject changes in this book; and those organs are taken up which receive and distribute nourishment, and subserve the excretions, &c. The approximation of the monkey to man is again touched on, and observations are occasionally interspersed, that approximate very closely to the present views on *Phrenology*, (“*nulum itaque miraculum est cujusque animantis internam compositionem ex figura exteriorum clare conspecta prænoscere.*” Bas. edit. p. 332.) Indeed, the whole book is in a measure replete with it, together with much other ingenious and instructive matter; all tending to prove that Galen fully deserved the high standing he attained; and must excite our astonishment that worth like his should be now so completely forgotten or underrated, instead of causing him still to occupy the foremost rank, which was awarded formerly, and continued uninterruptedly for more than ten centuries! It might not be amiss at present, for every member of the Profession carefully to peruse these interesting books, and then with candour (if

^a Among others, by Swedenborg, in his *Regnum Animale*.

self-love would permit it), contemplate his own attainments, and judge of them by Galen's standard, instead of estimating Galen by his own dimensions! Perhaps it might lead to the conviction, even though that self-love might receive thereby a deep wound, that "all the talents" have not been limited to the present period of the world, even with the aid of the superior facilities of attaining information which the improvements of philosophy and of education are supposed to afford!

Galen considers the organs of nourishment to be of three kinds, viz.: 1. For reception, digestion, and transmission of food. 2. Receptacula, for excrementitious matters; and 3. Of such as subserve the discharge of those matters. This view of the subject leads to a digression on the difference of stomachs, as connected with the different food of animals; ruminant and non-ruminant animals are noticed; the number of stomachs in the former, and the intention of that singular formation. He then treats of the peritoneum, omentum, mesentery, its arteries and veins; the coats of the stomach and intestines; the variety of the liver in man, and some animals; the spleen, the vessels, and gall-ducts connected with the liver; the kidneys and urinary passages; the various sphincter muscles in different parts; in all of which, the position seems strengthened as to his dissections being human. He tells us, (chap. xiii. p. 346,) that a useless dispute had been sustained by anatomists, respecting the name of the *ureter*, and if it were more appropriate to call it artery or vein—and then speaks more particularly of the sphincters, their situation and uses.

BOOK VII.

In this book Galen proceeds to treat of the heart, the lungs, and arteries, as seen, both in the dead, and in the living subject. He tells us the principal organs of breathing (*spiritus*) are three; the lungs, the heart, and the thorax. He takes notice of the twofold kind of artery, viz.: the one arising from the left ventricle, spreading throughout the body, and pulsating in unison with the heart; the other, called the *aspera arteria*, the upper part of which has the name of *larynx*, whilst below, it ramifies by numerous branches

through the lungs;—then follows an account of the pleura and pericardium, and a comparison is drawn between the former and the peritoneum; he proceeds to speak of the heart and arteries, and of the different opinions respecting the vessels of the lungs, and of the pulse.^a I give a short quotation in a note, which, to many, I doubt not, will be interesting, as would much more of the same nature, in connexion with the subject of the circulation, which has so unadvisedly been *entirely* ascribed to Harvey. I do not wonder these books have never received an *English* translation! National pride would be shocked at the trappings which would inevitably fall from the mantle with which he has been invested, and find their original location in that of Galen!

Galen here takes notice of the *non-pulsation* of the vessels in the lungs;—a circumstance I do not recollect to have met with elsewhere. He further remarks, that it had been conjectured that these vessels *are continued into the left ventricle*; a conjecture, adds he, *not solely* probable, but, which seems certain, from the knowledge we have of its functions;—I believe this is the intent of his observation, which is connected with the above consideration of the pulsation or non-pulsation in the lungs. A complete translation of this book would be very desirable, since so much of it will be found to be intimately associated with the subject of the circulation, treating as it does of the heart and its valves, &c., and assuredly forestalling much of Harvey's assumed discoveries. The largest elephant, and the smallest bird, that breathe, (continues Galen,) have a similarly constructed heart and lungs. And in explaining some of the differences between an artery and a vein, (p. 353,) he adds: “Quales igitur toto corpore existunt arteriae, tale vas ex dextro cordis sinu procedens, in totum pulmonem serie diffunditur. Quales autem venae, tale ex sinistro: ut ex tribus vasis pulmonem intertexentibus, quod à sinistro cordis ventriculo pro-

^a “Quemadmodum pulsans ipsum viscus, cor omnes appellant; sic etiam vasa singula pulsantia, arterias nuncupant. Alias autem omnes arterias, quotquot toto insunt corpore, sensu pulsantes dignoscere nullius est negotii, et omnium ipsarum cuni *majore* arteria continuitas, idem hoc indicat. Verum in pulmone pulsantes sensu admodum evidenter deprehendere nemo potest; verum inde, quod *sinistro* ventriculo sint continuæ, conjecturam aliquis fecerit. Et si quidam non conjecturam solum, vel probabilem spcm, sed certam functionis ipsarum scientiam habere arbitrantur, non tamen eodem modo utrique, quoniam ne ab eisdem quidem opinionibus omnino auspicantur,” &c. &c.—(Frob. 351;—Ven. chap. iv.)

fieiscitur, *arteria venosa* nuncupetur, quod à dextro, *arteriosa vena*,” &c.

In the thirteenth chapter, Galen reports the case I adverted to in the fifth book, as being here more fully detailed. It is one of *singular* interest, not only in point of curiosity, but because it really is singular, as being, I believe, the only case of its kind recorded in the Fasti of medicine. It is a case, which, by proving his unrivalled anatomical and surgical skill, must, I think, for ever set at rest any doubts as to his dissections having been of the human subject. No one since has had the opportunity of *exactly* following in his bold and successful attempt.^a It is to this effect:—

The son of an actor received an injury on the sternum at some of the gymnastic games of the circus. It was not attended to, and he was supposed to have got well. About four months after, an abscess appeared, the part was incised, and speedily cicatrized. Inflammation again succeeded, and suppuration ensued; again an incision was made, but the part would not heal. At length, a consultation was proposed, to which Galen was invited. On examining the part it was sphacelated, the bone was affected, and even a pulsation of the heart was obvious. No one dared to remove the diseased bone. At length, Galen, without, however, promising a cure, undertook to remove it, at the same time being uncertain of the state of the parts beneath. He accordingly cut away the diseased bone; and the vertex of the pericardium being also in a putrescent state, was likewise removed, thereby leaving the heart entirely bare. In due time the boy recovered perfectly; which, says Galen, could not have happened, if no one had been bold enough to remove the diseased bone, and which no one would have attempted, unless well versed in anatomy, (“*nisi in administrationibus anatomicis præ-exercitatus.*”—Another case, related in the same chapter, de-

* *A heart outside of the chest.*—The Baltimore Sun contains the following account of the birth of a living child, with its heart outside of the chest, which was noticed in our Baltimore letter yesterday. The heart is entirely outside of the body, and destitute of any pericardium; thus even without this natural protection it is protruded from the external surface of the chest, which at that point bears a mark resembling a cicatrix, as if the flesh had been opened, the heart pulled out, and the wound suffered to grow up again. Each pulsation, of course, can be distinctly observed, and the whole natural action of this delicate organ is made visible to the immediate investigation of the eye. This remarkable phenomenon in the history of human nature is an absolute and indisputable fact, however unlikely it is to meet with credibility on the part of the public.—*Ledger*, June, 1846.

monstrates clearly, I think, the employment of ligatures to restrain or arrest hemorrhage. It is of a person who had a portion of putrid flesh removed from an abscess of the arm, by an individual, who from ignorance divided a large artery. The immense discharge of blood so disconcerted him, that, it being deep-seated, he could scarcely secure it, (*vix laqueo ipsam possit intercipere.*) The danger, however, being arrested from this source, death ensued from gangrene of the artery at the ligature, which extended itself in every direction.—In the first case above narrated, Galen stands unrivalled. The only one at all resembling it, is one mentioned by Harvey, in which the heart was laid bare through the effect of disease, and in which art had no share. The case of removal of the ribs, related by Richerand, is in many particulars different, although it evinces great boldness and decision in him. Its event, at any rate, was unfavourable; and Galen's case continues as an immortal trophy to his well-established fame. I would here demand, whether such an operation on the living body, can be reasonably ascribed to anatomical skill derived from the dissection of brutes alone? "If this is admitted, I would say, that it adds another laurel to his crown; whilst, at the same time, it diminishes the importance of human anatomy!"

After these interesting details, Galen proceeds to state, what is to be seen in the thorax, on dissecting a living animal. This is a curious chapter, and in several places, we find expressions and sentences, bearing strongly on the doctrine of a general circulation. We find the pulsation of both sides of the heart particularly adverted to; and even the ultimate motion of the auricles, at lengthened intervals, continued after that of the ventricles had altogether ceased! In the conclusion of this book, Galen again renewes his censures against the neglect of anatomy, and ridicules the followers of Erasistratus, who promised to demonstrate and show that the arteries were void of blood. A bet of one thousand drachmas seems to have been proffered, and to have even been deposited by one of the parties. Galen gives a most laughable description of the ensuing dissection, and appears to have enjoyed greatly its failure, in every respect of what was promised. He adds another anecdote with no less humour, of an old man of seventy, (*senex quidam septuagenarius,*) who also promised to show the artery empty. A comic account is given of the affair, and the deceptions practised in its progress are explained. He

ends by saying that such is the audacity of some, who most rashly affirm as facts, *what they never witnessed!* This remark might, without much difficulty, be verified in the present, as well as in the time of Galen! and that, in every department of medical science.

From some part of this chapter, there is reason to believe that Galen, or some of his contemporaries, had a view of the *lacteals*; and that they were mistaken for the mesenteric arteries. (*Initio, igitur aiunt, simulac mesenterium denudatum fuerit, arterias aëri similes apparere, postea lacte repleta conspici.*) He opposes the idea of the arteries being filled with air, and adds, that the very circumstance that is subsequently mentioned of their being filled with milk, sufficiently disproves it. The vessels thus seen, whether by himself or others, must undoubtedly have been the lacteals, as seems indeed to be proved from the very character of the experiment that precedes the statement, and to which reference is made.

BOOK VIII.

The subject of the thorax is here continued; its structure and boundaries—the ribs, clavicle, and muscles; the diaphragm, regarded as the governor or ruler of the motion of the thorax, and as aiding in the function of respiration. The motion of the ribs is considered and explained, and some ancient errors are pointed out. The division of the intercostal muscles, and the symptoms that follow, whether the incision be on one, or on both sides. He notices the dividing the nerves, by which the action of the intercostals is destroyed, and the voice is lost; dividing the spinal marrow in different parts, and of the affection of distant parts thereby produced. He notices and opposes some opinions of Erasistratus; and every circumstance throughout, evinces the indefatigable pursuit of anatomy by Galen; here, chiefly, on (living) animals as the subjects of his experiments, on numerous and highly interesting points. Assuredly we may be allowed to maintain, that no one so fully convinced of the importance of anatomy as he was, could dissect so long, and so accurately, and limit his dissections to brutes alone! The proposition seems to be so unreasonable, that I conceive it to be untenable, and submit the subject to the verdict of the best anatomists of the present day. In the last chapter of

this book, he speaks of experiments made on animals, by death from different causes, as drowning, strangling, division of the spinal marrow and large vessels, &c.; some of which, and the results have been since his time repeated, without any reference to his priority. I have wondered much, in my progress through the works of this great writer, where he found time to write, to pursue his researches, and to practise! What an illustrious example does he every where afford to the Profession! How few, alas, will follow in his footsteps!

BOOK IX.

This book commences with a few remarks on the propriety or utility of dissecting *living* animals, in order to comprehend the functions of the different parts; the dissection of the *dead* body pointing out other particulars, but not embracing this.

Imperfect as this book is, after the fifth chapter, as before stated, it yet gives the anatomy of the brain, speaks of its membranes, their vessels and their route; the choroid plexus, ventricles, and many other parts. Whether his descriptions are derived from human, or chiefly from comparative anatomy, such respect has still been paid to him in this department, that the names of most of the parts, as assigned or approved of by him, are continued to the present day. The portion of the book that is lost, would probably have shed greater light on the subject; its loss is a subject of deep regret; yet how much greater that which is felt from the loss of the six or seven books in continuation, can be appreciated only by him, who carefully investigates those writings which we happily possess.^a

^a "Discovery of the six missing books of Galen's principal anatomical work.—We have the following from a learned and much-esteemed correspondent. We beg to direct the particular attention of the Sydenham Society to the discovery.—*Lond. Med. Gazette*, Dec. 1844, p. 329.

"A very interesting and valuable discovery has lately been made at Oxford, which it seems right to lay before our medical brethren, though we are almost afraid that its importance will be better understood and more justly appreciated in France and Germany than in Great Britain. (! !) It is well known that Galen's principal anatomical work, called Περὶ Αγαθομάκτην Εγκεφροστεῶν,—De Administrationibus Anatomicis,—consisted originally of fifteen books, of which only eight and part of the ninth have come

XIII. GALENI, DE UTERI DISSECTIONE.

OF THE DISSECTION OF THE UTERUS.

J. CORNARIO, TRANSLATOR.

BAS. ED., p. 395.

This book treats, in twelve chapters, of the dissection of the uterus. It points out its situation, size, figure, its cornua, and the

down to us. The contents of each book are mentioned by himself, (*De Libris Propriis*, cap. 3, tom. xix. pp. 24, 25, ed. Kühn,) from which account, it appears that the last six treated of the eyes, tongue, œsophagus, larynx, os hyoides, the nerves belonging to these parts, the arteries, the veins, the nerves arising from the brain, those arising from the spinal marrow, and the organs of generation: so that Galen's account of several of the most important parts of the body, is contained in the lost books. In Ackerman's *Historia Literaria*, prefixed to Kühn's edition of Galen, (p. lxxxiv.), we find the following notice: 'E Golii arabico codice libros xi. usque ad xv. editurum se promiserat Thomas Bartholinus, *De Libris legendis*, Dissert. iii. p. 75 (p. 58, ed 1711). Erant Galeni De Administ. Anatomi. libri sex postremi cum adnotationibus Jacobi Golii in *Bibliotheca Narcissi, Archiepiscopi Dublinensis*, n. 1787.' No further information on the subject could Ackerman, (who was a most diligent and accurate inquirer,) obtain; nor apparently could Kühn himself, who, in the last volume of his edition of Galen, corrects some errors and supplies some omissions. In turning over the pages of a very different work, J. G. Wenrich's Dissertation, 'De Auctorum Græcorum Versionibus et Commentariis Syriacis, Arabicis, Armeniacis, Persicisque,' (Lips. 1842, 8vo.) we noticed that two copies of the Arabic translation were said (p. 245) to exist in the Bodleian Library at Oxford, one consisting of fifteen books, the other only of the last six. Upon referring to Uri's catalogue of the oriental manuscripts of the Bodleian, (p. 135,) we found that the latter manuscript was said to be in the handwriting of Golius himself; that it had belonged at one time to Narcissus Marsh, Archbishop of Dublin, and was, therefore, probably the very MS. spoken of by Ackerman; and the actual examination of the two MSS. in question has shown us that the modern one was copied from the other, the pages of the original being marked in the margin of the transcript. The original MS. is written on oriental paper, and by an oriental scribe, and contains the complete work of Galen in fifteen books. It was bought at Constantinople for forty-eight florins, (rather a large price,) but by whom is uncertain, nor is any thing else known of its history, except that it once belonged to the Archbishop of Dublin, though it does not appear in the list of his MSS. contained in the Catalogus Librorum MSS. Angliae et Hiberniae, printed in 1697. It appears to have been seen and used by Golius, (a celebrated Arabic scholar at Leyden), who must have known that the Greek copies of the work contained only nine books, and accordingly copied the remaining six with a view to publication. He did not, however, transcribe the remainder of the ninth book, which is wanting in the Greek

sinuses in multiparient animals, but which are not found in women; states the uses of the cornua; and proceeds to consider the connexion, union, dependence, and nourishment of the uterus, by veins and arteries, whose intertexture is adverted to. Here is to be found a tribute to the merits of Herophilus. The coats of the uterus are stated to be two, an external, simple and nervous; and an internal, which is double and vascular. Its neck is then treated of, as being muscular and cartilaginous, and although constricted in common, yet, in partu, it is capable of a most wonderful dilatability. Its coats are noticed, and their varied thickness or tenuity under different states, and periods of life. The female testes (ovaria), and their difference from the male;—their coats, and vessels, extending to the neck of the bladder, and unknown to prior anatomists. The changes which take place in the uterus during pregnancy, from the presence of the foetus, membranes, &c: these membranes are the chorion, the amnion, and allantoid. Reasons are assigned for the greater facility of conception, just before, or after menstruation. The vascular adherence of the chorion to the uterus; what those vessels are; their existence asserted, although denied by some. The vessels thus distributed through the chorion, at length unite in two trunks, an arterial and venous, each of which is double, and go to constitute the umbilicus, having the allantoid between them. The fluid of the allantoid is said to be yellow, and small in amount; that contained in the amnion is considerable in quantity and whiter.

copies, and which is about twice as long as the portion hitherto known in Europe. The MS. was either given as a present by Golius, or bequeathed as a legacy at his death in 1667, to Thomas Bartholinus the elder, Professor of Anatomy at Copenhagen, and was in his possession in the year 1672, when he wrote his work *De Libris Legendis*. Probably after his death, in 1680, it came into the hands of Narcissus Marsh, Archbishop of Dublin, and appears in the catalogue quoted above. From him it came, either by gift or legacy, to the Bodleian Library at Oxford, where it still remains, together with the original MS. from which it was transcribed. It should be added, that, (as far as we are aware,) no other copy of the Arabic translation is to be found in any European library; nor do any of the old Latin translations contain the last six books of the treatise."

XIV. GALENI, DE INSTRUMENTO ODORATUS.

OF THE ORGAN OF SMELL.

L. BELISARIUS, TRANSLATOR.

BAS. ED., p. 403.

Smell, says Galen, signifies not only the immediate perception of odour, but also that power or faculty whence the sense of smell emanates. The nose is not the instrument, but merely the channel of smell; the instrument or organ itself, is somewhere beyond the nose. He then adverts to the openings of the nose or nostrils, and to the different parts within them; some having a connexion with the fauces, and with respiration; others extending to the brain, and by which that organ is enabled to evacuate its humours; the internal lining of the nose, and its nerves are noticed; the nerves, through which the sense of smell is effected, are pretty large and soft, as is the case with those of the eyes, tongue, ears, and mouth of the stomach; but those connected with the *touch*, are, on the contrary, small and firmer, and are distributed throughout the skin over the body; this sense is, therefore, less acute. These ideas are followed by further remarks on the other senses. Smelling, we are told, does not depend on the air only, as in hearing, nor on moisture only, as in taste, but on both united. Parts of the nose are bony, and are covered with a membrane, proving that neither of these are the instrument of smell; for bone is altogether void of sensibility, and the membranes have not nerves sufficient alone for the purpose; neither have they any affinity to the substance or matter of odour, for no smell is perceptible, unless the air is drawn in: the covering of the palate, fauces, or windpipe is not the instrument; for if we hold the nose, and thus compress the nostrils, no smell is perceived on inspiration. The air, we are told by Galen, is attracted to the brain, either by the motions induced by respiration, or, perhaps, by some proper motion of the brain itself; by which the air follows as the brain contracts itself, and is expelled on its expansion. He gives us some cases of imperfect smell, in which pepper mixed with oil being forcibly snuffed up, a biting sensation was felt in the brain (I presume resembling that which all have experienced by too large a portion of mustard with food, and which is instantly removed by

snuffing up the odorant emanation of a piece of bread); from whence he concludes the sense of smell to be seated in the anterior ventricles, and not in the membrane of the nose; in which he opposes the opinions of Aristotle, whose particular views on the subject are largely considered. This is followed by an explanation of the utility of *sternutatories* in some diseases of the brain, as lethargy, &c., founded on the principles which he advocates; and, if these be admitted, his superstructure is admirably erected upon them.

XV. GALENI, DE USU PARTIUM CORPORIS HUMANI.

OF THE USES OF THE DIFFERENT PARTS OF THE HUMAN BODY.

IN SEVENTEEN BOOKS.

N. R. CALABRO, TRANSLATOR.

BAS. ED. p. 418.

BOOKS I., II.

These books are very interesting on many accounts, resembling in various parts those already noticed, *De Administrationibus Anatomicis*, and, like them, are well deserving of an accurate translation into English. The mere *exposé* here given, affords a very meagre and imperfect outline of their contents; scarcely, indeed, can it be regarded as a table of contents.

It has been before mentioned, that Galen considered the *hand* of man, from its peculiarity of structure, as the chief source of his great superiority over every other animal, both as to the operations of the body and the mind; and he enters fully, in these two books, into their consideration; confining his observations almost exclusively thereto, and to the carpus and forearm. It is almost impossible to form a regular abstract of them, sufficiently concise for the object of this compend, and I therefore prefer omitting so mutilated an attempt altogether.^a

^a The treatise on the Hand, by Sir Charles Bell, much as it has been admired, is, in my opinion, infinitely inferior to these books of Galen on the same subject. Indeed his best parts may be regarded as abstracted from those of Galen, clothed in the language of the present age.—ED.

BOOK III.

In this book, the lower extremities are considered. Here, Galen expatiates on man's superiority, from having only two, instead of four or more legs; and ridicules, very justly, the amazing absurdity of Pindar, in his fanciful production of the Centaurs. He enters into a consideration of "why man was made a biped;" evincing, by his observations throughout, that even in an age of credulity, he possessed in perfection the *mens sana, in corpore sano*, and that he well knew how to draw the line between truth and falsehood, or fancy, if the term may be thought less offensive. He next takes notice of the *erect* character or position of man, and points to the physiological reasons of the case. He ridicules the idea of its being intended, as some affirmed (p. 447), "ut ad cœlum promptè suspiciat, et dicere possit, respicio adversus Olympum fronte intrepida,"^a—that is, for the purpose of looking towards heaven! and he archly asks, whether they who thought so, had ever seen the fish, that by the Greeks is called *ουρανοσχοπόν*, or looker towards heaven? Now, adds Galen, this fish, from its very formation, must *always* behold the heavens, but man, *only* when he throws back his head, and which an ass can perform equally well!—We must not omit here to notice the admirable piety of this pagan philosopher; it is, indeed, exemplified on every appropriate occasion, in various parts of his works; but here, more particularly, this excellent and extraordinary character, after considering the leg, and its instruments of motion, breaks out in admiration of the goodness, the wisdom, and infinite power of the Deity, as exemplified in the works of creation, and especially of man! (p. 495), a rhapsody not undeserving of translation, and of a place in some Christian publication.

BOOK IV.

Galen now engages in the consideration of the stomach, liver, and other organs appropriated for nourishment; that is, for the

^a Os homini sublime dedit: cœlumque tueri
Jussit, et erectos ad sidera tollere vultus.

Ov. METAM. i. l. 85.

digestion of food, and its conveyance to every part; together with the emunctories for the discharge of superfluities, and excrementitious portions, &c. He supports with ardour the important agency of the liver in the process of sanguification, and the whole is accompanied with much interesting matter. In the thirteenth chapter of this book, we find sundry problems respecting the veins, the arteries, and nerves of the liver, that deserve consideration; and it is well remarked, that unless the particular uses of each part are well understood, as is too commonly the case, it would be better to omit its notice altogether. A question is proposed why a double sinus was not given to the liver as well as to the heart; in the consideration of which, expressions are employed which indicate his credence of a circulation; and, so far as relates to the doctrine of hæmatosis, or formation of blood, if any there be now, of superior preponderance; that of Galen, by which this important process is ascribed to one of the largest and most surprising organs of the body, is at least equal to it; and his arguments, &c., on the subject, not inferior to any I have met with in recent publications. He notices the distinctive appearance of the blood in the liver, spleen, and lungs, treats of the intestines, the mesentery, omentum, and other parts, their construction and uses, and in

BOOK V.

He considers the remaining organs of nutrition and excretion, the pancreas, kidneys, &c., in the same manner; states his disputes with several persons, in his books *De Facultatibus Naturalibus*; renews the subject of the mode of excretion, and treats of the diaphragm, and its uses in respiration, and as co-operating in the excretions.

BOOK VI.

The thorax, with its contents, the lungs and heart, &c., are considered in this book.

The œsophagus, called *stomachus ventriculi*, is mentioned; and we are told, that fish, having no lungs, have only the heart in the thorax, and therefore are mute; the use of the lungs being that of respiration; and that one of the uses of respiration, is “*quod in*

ipso fervet (the air) et *quasi combustum et fuliginosum est, ex ipso profundens,*" p. 554,—and which I take to imply, that something is discharged in expiration, of a noxious character, of a burned or carbonated nature;—in other words, expressing what is now familiarly spoken of, as *decarbonizing the blood*. He lays much stress on the contrivance of nature to prevent any injury to the vena cava, by means of the soft elastic parenchyma of the lungs, with other curious matter, and ventures to apply the same intention, in the formation of the thymus gland. Do we know a more certain explanation? If he is wrong, how can we convict him of error, if we cannot supply one less beset with difficulty? In successive chapters, the heart, its figure, substance, divisions, &c., is taken up; the nutrition of the lungs; the vena arteriosa, and arteria venosa, with many other important subjects, succeed; amidst which, if we cannot find strong evidences of the circulation being known to him, it is, because we will not! The junction of the arteries and veins by anastomosis, is in language too palpable to be mistaken, independently of what is dispersed in one hundred passages of his writings.^a I know not that the capillary circulation is *now* better described, or even understood, than by Galen, sixteen centuries ago; but it signifies nothing to support his claims in opposition to Harvey, who has stated *as his own*, what was long before known; and almost the whole of which was familiar to Galen. Whenever these books shall receive an English dress, that *all* may fairly and fully investigate his real claims, the award to Harvey will be reversed, and he will sink greatly from the height to which he by the British nation, to the total exclusion of Galen's claims, has been so unjustly elevated! It is no wonder that he has never received an English translation! This must be reserved for America!—I say nothing of others, his immediate predecessors and contemporaries, who have had their laurels insidiously abstracted, without acknowledgment, to form the crown that was bestowed upon him; as I am now only concerned for Galen, and have elsewhere fully treated of the whole subject.^b—On the valves of the heart, Galen has been sufficiently explicit; and this having

^a "In *toto corpore mutua est anastomosis*, atque *oscillorum apertio arteriis simul et venis*; transumuntque ex sese pariter sanguinem et spiritum per invisibilis quasdam atque angustas plane vias," &c.

^b Inquiry into the Claims of Dr. Wm. Harvey to the Discovery of the Circulation of the Blood. Philadelphia, 1834.

been admitted by Harvey, I believe no one has contested the point; how he was led to concede it, I cannot surmise, seeing that with respect to those of the veins, he has arrogated to himself, if not absolutely, yet indirectly, their discovery; and assuredly, also, has claimed that of their presumed use in the system; a use which was announced by Piccolhomini, (perhaps by others,) before Harvey even began the study of medicine! but, eheu, jam satis!—I shall merely mark below a few references to the Basil^a edition of Galen, (though all should, in fact, be read in connexion, to make the affair completely apparent), in which some idea may be formed, of the true extent to which Galen had carried his views of a circulation. Proof from these and other parts may be deduced, to satisfy every candid mind, that he knew the influence of the right side of the heart, the arterial character of the pulmonary veins, and the venous character of the pulmonary artery. He attacks Asclepiades and others, in a bitter strain of irony, respecting the vessels that go from the lungs, as to their character; and advert to the valves, the auricles, and ventricles, as to their difference of thickness, and other particulars, in several successive chapters. In the seventeenth, p. 580, in opposition to Erasistratus, he maintains, that the arteries contain blood; and again advert to their anastomoses with the veins.^b He adds, that Erasistratus taught, that inflammation could not possibly take place, except by the flowing of the blood *from the veins* into the arteries; the absurdity of which he professes to expose, even from Erasistratus himself; and as being a subject he had often considered and disputed about. A dispassionate perusal of this whole book, must, I think, incline the reader to admit the claim of Galen to a knowledge of the circulation, if even not accordant altogether with our present views; but of the truth of which, in all its parts, a doubt may be entertained. His judicious views of the general contrivance of nature cannot be overturned by the sophistry of those, who give to Harvey the *exclusive* merit of the most interesting discovery in medical science. The remaining chapters of this book, are of equal interest. They

^a Chap. ix. pp. 569, 575; chap. xii. p. 571; chap. xiii. p. 572; chap. xvii. p. 580; &c.

^b "Orificiorum arteriarum ad venas apertiones non sine causa neque frustra paravit natura, sed ut respirationis ac pulsuum utilitas non cordi soli atque arteriis, sed cum eis, venis etiam distriburetur."

treat of the lungs and of the heart, &c., in the foetal state, together with their functions and peculiarities.²

B O O K V I I.

This book continues the subject of the thorax, lungs, and trachea, the construction of the larynx, its muscles, cartilages, nerves, &c., the os hyoides, diaphragm, &c.; and, as being located on the thorax, he makes a digression to the mammae.

B O O K V I I I.

Treats of the head, the brain, the neck; which last, he notices as being uniformly present in animals having lungs, and as being equally deficient, where the lungs are wanting. The common purposes of the head; the instruments of sense; cerebral nerves; ethmoid bone; meninges; pericranium; cerebellum; ventricles, &c., are all noticed, and sundry criticisms are made on Praxagoras and other philosophers, for their respective opinions.

B O O K I X.

In this book, the subject of the brain is continued; its arteries, veins, and nerves; its different channels of purgation; the cavernous structure of the cranium; plexus retiforme, and its convolutions as compared with that of the testicle. The mode of entrance of the cerebral vessels is described, and their variation from common distribution; the distinction of hard and soft nerves, and their appropriation to motion or to sense; cranial sutures, squamose bones, &c.

² What, *really and truly*, did Harvey discover and demonstrate as exclusively his own? Surely his admirers and advocates, can immediately place their finger thereto, or they have read him to little purpose! And I challenge them to the direct proof of any part belonging to him. I fear, however, they may have exhausted their praise and adulation on Harvey—and looked over his writings, whilst they have grossly overlooked the immortal pages of Galen! The full translation of this sixth book alone, would appear adequate to every unprejudiced reader to strip the laurels from the brow of Harvey.

BOOK X.

The organ of vision is here considered, its parts described, and an hypothesis on the subject of vision, quite as likely to be correct as those now advanced ; at least, as well sustained, and certainly not less interesting, when regarded as the speculation of nearly twenty centuries past.

BOOK XI.

The remaining parts of the head are here considered ; those of the face also, the muscles, teeth, and their variety in different animals ; the tongue, pharynx, ears, nose, &c. One chapter, the thirteenth, is chiefly occupied with a consideration of the beauty of the parts, as superadded to their utility ; which last is, however, admitted to be superior, inasmuch as it is the primary scope and intention of the whole construction. He then treats of the hair and beard, and attempts an explanation of the exemption of women from the last-named ; also, why the eyebrows and lashes always continue of the same length ; and much other curious matter, which no one but Galen would have deemed worthy of attention. That pagan philosophy did *not alone* occupy his mind is obvious, for, (p. 718,) we here find him adverting to *the writings of Moses*, in reference to some particulars respecting the hair, &c., from which he dissents ; although he considers the opinions of Moses to be superior to those of Epicurus, yet maintaining that neither should be followed implicitly. He takes notice of the difference of the skin of different parts ; also the motions of certain parts, as of the alæ nasi, &c., and gives some remarks on the bones ; and he terminates the book with the following observation, to which every reader will assent, “ *Nam ita demum naturam maxime admiraberis, si omnia ejus opera perlustraris.* ”

BOOK XII.

This book is occupied with the parts common to the neck and head, and its spinal connexions ; muscles, ligaments, cartilages,

nerves, &c. The vertebræ, spinal marrow, &c., with reasons for, and problems respecting, the difference of size, form, &c., of the vertebræ and parts of the back, with various other matter.

BOOK XIII.

The subject is continued, and is replete with interest, both to the speculative and practical anatomist. The nerves of the vertebræ and neck; of the thorax, and those of the lower extremities. The meningeal coverings of the dorsal medulla. Of the scapula and other parts, with their difference in man and animals or quadrupeds; of the humeral and other articulations, and ending with observations on the wonderful address of nature in all these.

BOOK XIV.

A new subject, of great interest, here breaks in upon us; viz., the importance of the continued life of animals, through the process of *generation*, resembling in some measure, by such perpetual succession, a species of immortality. To this end, an appropriate set of organs, differing in the sexes of all animals, is provided. In the details hereof, much ingenious speculation and anatomical research are conspicuous. So far as this last respects the dissection of the uterus, it would seem to be principally of that of animals; and hence, several wrong deductions as to the human uterus, appear to be drawn from facts that are strictly correct of the former. The wonderful character and the connexion of the uterus and mammæ are pointed out; the superiority of man, the concurrence of the seminal fluids of both sexes, the production of males or females, the order of the formation of the foetal parts, the testes, and the surprising distribution of their vessels, all are taken up, and duly considered;—and continued in

BOOK XV.

Which enters more fully into the character, formation, and structure of the foetus, and its different parts; its coats, vessels, humours;

followed by an inquiry into the reason of its immense liver; and all interspersed with numerous curious physiological questions, viz.; as to the greater strength of the veins in early life, and the more gradual, but progressive augmentation of that of arteries and nerves; why the foetal lungs are red; the close adhesion of the os uteri in pregnancy, &c., all serving to prove, that Galen was as inquisitive in physiology, as he was observant in practice, and that nothing escaped his penetrating observation and inquiry.

BOOK XVI.

This book goes far, I think, both directly, and by implication, in support of the opinion of Galen being acquainted with, and even of having taught, the fact of a circulation. Such continual implications cannot be ascribed to accident alone; but must be placed to the result of well-founded opinions, arising out of facts, isolated perhaps, but strongly supporting one another and the common doctrines to which they may have given origin. The book is taken up with a general consideration of the common distribution of the arteries and veins throughout the body. The artery, vein, and nerve, Galen calls the *common instruments* of the whole body, (*de communibus totius corporis instrumentis, arteria, vena et nervo prius quidem dum partes exponeremus, verba saepe fecimus,*" &c., ch. i. in initio,) and he repeats, that the great artery arises from the heart, the vein from the liver, and the spinal marrow and nerves from the brain. Now, since, (says he,) they require to be exhibited over the whole body, attend to me whilst I demonstrate the justice of the division. This is his object in the successive chapters of the book, wherein he enters more at large into the origin of the vessels and nerves. He then points out the insertion of the nerves, and notices several in particular, such as, of the voice, the viscera, and intestines, the neck, scapula, and head; the recurrent, those of the thorax, extremities, and of some of the muscles. Then follows the distribution of the great artery, or aorta, its rise, and progress through the body. Nature, says he, curiously derives the arteries that supply the testes and the mammae from a distance, and gives a reason for this. After this, he proceeds to the ascending branch of the aorta, speaks of the carotids, and notices the insensibility of the arteries and veins, with some other peculiarities respecting them. Some veins

are found without corresponding arteries. The artery arising from the left ventricle is the root of all the arteries in the body. The great equality of the distribution of the vessels by nature, and the community of use of the arteries and veins is explicitly stated.^a If the books mentioned as being lost, (*De Anatomicis Administrationibus* should ever be recovered (of which, however, no possible hope remains), I doubt not, that a full elucidation would be found of the interesting subject of the circulation, so as to satisfy every reasonable mind, that Harvey has been adorned unjustly, from the wardrobe of Galen!^b

BOOK XVII.

This last book is rather more speculative than the others. It consists of views respecting the proportions which the different parts of the body bear to each other, and to the universe at large; and it contains a kind of recapitulation of the preceding books, points out their utility, and gives numerous references to many of the older poets and writers. Upon the whole, there is a considerable degree of resemblance between these books, and those previously noticed "*De Anatomicis Administrationibus*." They tend mutually to support, and often to explain, apparent deficiencies. That they are well deserving of an English translation, no one who has perused, or even inspected them cursorily, could, I think, for an instant hesitate to admit. Even these imperfect outlines, I hope, will tend to forward such an end; or at least, to induce some younger member of the Profession to give an epitome, or a more extensive view than I have been able to afford. A more acceptable present, I cannot believe could be given to the medical community.

^a P. 841. "Diximus etiam et de vasis quæ ad mammae et testes ferantur, dum eomuniter et de venis et arteriis ageremus, que utraque communem usum haberent. Pari modo et eum de arteriis ageremus, de venis diximus quæ ad manus perveniunt, quod communis utrarumque sit ratio," &c.

^b This was written before it was known that a discovery had been made of these lost books, as stated in the note at p. 519; and as I have as yet seen no further evidence of the truth of this, I feel no disposition to expunge it.

XVI. GALENI, DE UTILITATE RESPIRATIONIS LIB.

OF THE UTILITY OF RESPIRATION.

J. CORNARIO, TRANSLATOR.

Galen proposes a question at the beginning of this book, which it might be well for each one to reflect on,—and candidly say, whether he can better reply to it, than Galen did sixteen centuries ago.

“Quænam est utilitas respirationis?”

Reader, pause here; and recall to mind the various physiological explanations of this wonderful function, since the period of the illustrious man who asks an answer to his question! Examine them well, and say whether you cannot find in Galen a groundwork of them all.

Wherein, he asks, does the utility of respiration depend? He replies, “unquestionably, it is of no common character; we cannot exist for an instant without it; consequently, it does not pertain to any one individual action, but must be connected with life itself: of its high importance, all indeed are convinced. It is even superior to the functions of the stomach or the brain, whose actions are greatly influenced by it.” He then gives a concise statement of the opinions of his predecessors on this head, viz., of Asclepiades, Praxagoras, Philistion, Diocles, Hippocrates, and Erasistratus. His own seems to be, that it is intended for the preservation and regulation of the innate heat, (*caloris insiti*,) and for affording the animal spirit abounding in the brain. Here, he advances a proposition founded on fact, but erroneous in the deduction from it, at least, to a certain extent, for it is not altogether fallacious. It depended on the imperfect chemical knowledge of that period, (and almost indeed up to the present time,) of the composition of the atmosphere, then regarded as a simple element.

His proposition is, that the use, or benefit of respiration, or rather of the air in inspiration, depends, not upon its actual substance, but rather on *some quality* connected with it, (“*utrum substantia aeris qui per inspirationem advenit, indigemus, an qualitate, an utriusque?*,”) p. 852; and he thinks he proves it by the fact, that suffocation will ensue, when the lungs are filled with air, as readily as if we did

not breathe at all. The theory he adopts, viz., that the air was inspired, with the intention of *ventilating* the blood, and of *cooling* it, as some maintained; is quite as well advocated, and with as much ingenuity, as any of the present day respecting this important function. Nay, by a mere trifling alteration of the terms employed, we shall find it differs but little from that now generally adopted. Instead of ventilation, let us employ that of decarbonization of the blood, and consider animal heat as depending on the decomposition of the air inspired. It would indeed seem that Galen actually had an indistinct notion of this very particular, judging from the expressions made use of: "Quando quidem igitur ut ex aere quid adtrahat cor, thoracem id permettere necesse est, permittit autem cum dimensionem transmutat, transmutat autem inspirantibus nobis aut expirantibus, et tunc sanè cor transsumet." Much, however, must be gratuitous in the suppositions we may make, or be gathered by implication, and a collation and comparison of different passages, rather than by an immediate or direct appeal to an individual part. If in law, it is true, that circumstantial evidence is often of more importance than positive, why should not the same principle obtain in medicine and its branches? Science changes its theoretic speculations, just as the philosophy of the day may render it necessary; and different explanations will consequently be assigned to the same acknowledged fact at different times. This is sufficiently obvious, if we compare the physiological views of the present day, with those of only half a century preceding! If *then* asked to explain the difference of colour between arterial and venous blood, the reply would have been, that the *former* was oxygenated, or oxygen was absorbed in the process of respiration; and now, the answer to the same question is, that the venous blood is decarbonized. Now, it need not be said, that neither of these views, nor some others, on the same subject, are universally admitted to be correct, to the reversal of all the others. Nor can it be affirmed, that other views may not arise, from the changes or improvements in philosophy, that will put to flight all our previous hypotheses. What then, with all our boasted superiority, especially in chemical research, are we, in our physiology, as to this important function, in advance of Galen, devoid as he was of the light of science! If we cannot perceive the present doctrines, modified by new terms, to be merely scintillations from his forge; at least we shall find arguments as ingenious, and perhaps facts as numerous, as are to be noticed in our

own affirmed, more enlightened publications! at all events, as a physiological curiosity of so ancient a date, a good translation would be acceptable to the Profession, as a just tribute to the memory of a man, who is second to none in the whole train of medical observers!^a

XVII. GALENI, DE CAUSIS RESPIRATIONIS LIBER.

OF THE CAUSES OF RESPIRATION.

J. CORNARIO, TRANSLATOR.

BAS. ED. p. 865.

The causes of respiration, are in this book stated by Galen to be threefold, (*tres sint in genere respirationis causæ, facultas voluntaria, instrumenta voluntati subservientia, et ad hæc utilitas ipsa*); that is, the faculty or power itself, the organs subserving thereto, and the end, or utility of the function. His statement of the multiform and variety of the instruments employed in the process, is concise and graphic. Some convey the air through appropriate channels, to others fitted for its reception; others are operative in the motion of every essential part; whilst the importance of the spinal nerves is not omitted, as being absolutely essential to the perfection of the process. Much incidental matter is introduced, of great interest; and the whole may be regarded as an appendix to the preceding book.

^a It was not until the year 1776, that Dr. Priestley, in the sixty-sixth volume of the London Philosophical Transactions, attempted an explanation of what took place in the process of respiration, by affirming the discharge of phlogiston, at that time a ruling principle in chemistry. In the following year, Lavoisier read, at the sitting of the Royal Academy of Sciences of Paris, his views of the decomposition of the air in the lungs, to the following effect, viz.: "that it appears that our lungs *absorb* precisely that portion of atmospheric air, which combines with the metals in calcination; the residue of that air thus decomposed, has different properties, and though always elastic, it can no longer subserve the purpose of respiration." Seventy years are scarcely passed, and we now no longer admit of phlogiston, nor of the absorption of the air by the lungs. The use of respiration is now considered as being essential to the conversion of the carbon of the venous blood into carbonic acid gas, by which abstraction, the venous is restored to its arterial character:—and this effect, mutato nomine, is precisely the explanation given by Galen more than fifteen hundred years ago.

XVIII. GALENI, DE PULSUUM USU LIBER.

OF THE USE OF THE PULSE.

T. LINACER, TRANSLATOR.

BAS. ED. p. 867.

The intent of this book seems to be, to show that the use of the pulse is that of preserving the innate heat, and of conveying the animal spirits to every part. Now, although the language employed may give a different aspect to our present views on this subject, and that of the circulation, yet I apprehend the doctrine of a circulation is adequately sustained. The influence of ventilating the blood and of cooling it, as has been previously noticed, is here adverted to, and the *abstraction* of something noxious from it, seems clearly expressed. In fact, except in name, we can almost exclaim, *Mutato nomine, de te narratur*; for this abstraction of noxious matter, is the present decarbonization of the vital fluid.

Physicians and philosophers alike concluded, p. 867, that respiration and the pulse both tended to one end, or subserved the same intention. Of this, Galen affords proof, as well as that the heat of each part is maintained by the pulse. He mentions the fact, that on opening the ventricles of the heart of an animal, especially the left one, if the finger is immediately introduced, the heat is there felt to be greater, and continues longer than in other parts. He advances several reasons, and some experiments, to prove that the heat flowed from the heart—such as tying the vessels; and he thinks both arteries and veins are engaged in this (p. 870); and from all he says, he deduces the connexion between the pulse and respiration, and speaks without ambiguity of the union of the arteries and veins. If in this book, the *candid* inquirer cannot find sufficient proof of a circulation being well known to Galen, even if it be not exactly explained and elucidated, as in the present day; and that, moreover, scarcely one fact or proof is adduced by Harvey, that is not equally asserted by Galen; I must confess that I have greatly misunderstood the tenor and intent of all his pages, which go to prove that his *actions* depended upon such a knowledge and belief; as well as from his necessary conviction of the absolute necessity of such a

function to every part of the system, (see p. 872,) in which is to be found, that man is included in the question there considered, and by which he is led to the following conclusion, “*et cum semper vacatas cum arteriis venas deprehendissemus, veram esse sententiam de communibus arteriarum et venarum osculis, et communi de una in alteram per ea transitu, nobis persuasimus,*” &c. This junction of the arteries and the veins, seems to have been a prevailing doctrine, equally, as that the arteries derive their power from the heart, and communicate with every part of the body. This communication between the arteries and the veins, is not so luminously explained by Harvey; for it was never understood by him, and he died in uncertainty, whether that communication was *direct*, by anastomosis, (as sustained by Galen, and as proved by microscopic observations,) or *indirect*, by an intermediate effusion from the one, and an absorption by the other; yet Harvey is regarded as the *full* discoverer of the circulation, and all his predecessors are alike consigned to oblivion, nay, in many cases, to contempt and obloquy! A *complete translation* of the works of Galen would effectually prove the frauds that have been perpetrated, to support the honour of the British nation, which would be tarnished by the abstraction of those laurels that have been so unjustly awarded to a man considered as the glory of their country!

XIX. GALENI, DE SUBSTANTIA FACULTATUM NATURALIUM, LIBELLUS.

OF THE SUBSISTENCE OF NATURAL FACULTIES.

BAS. ED. p. 877.

The author adverts to the various and contradictory statements given by auditors of what they hear, and refers to Plato as having been thus made to contradict himself; of which, instances are given with respect to his views of an *Anima Mundi*, and which is more fully noticed in the treatise *De Placitis Hipp. et Platonis*.

Plants are said to want a principle of motion and of sensation, although it is not uniformly maintained. They are called cold, and animals warm, but this, not absolutely, but relatively; as is indeed also the power ascribed to plants, and which is attributed to

nature, rather than to a soul (*anima*). Reference is made to these views in relation to ethics, inasmuch as respects the certainty, probability, or doubtful character of what is asserted, &c. All admit of a soul, but from being ignorant of its essence, it has been called a power or faculty. The disputes on this point are adverted to, and hence Galen is led to state only what to him appears probable; and which, though not absolutely necessary either to medicine or ethics, is yet an ornament to them. He proceeds to point out, that all bodies consist of four elements mixed and united together; but whether such mixture pervades the essence of bodies, or their qualities only, he professes not to know. Some ideas are thrown out with respect to temperaments and their variations; and it is denied that a knowledge of the essence of the soul is necessary to medicine or to ethics.^a He notices the attraction of the *natural faculties* to familiar objects, and their repulsion of strange ones, without being themselves possessed of sense or recognition. To the natural soul is granted only a notion or idea, that tends to pleasure or to pain; and as to sensible objects, only of that which relates to nourishment; hence it attracts that only which can subserve this intention, and be elaborated through its powers, all which is more extensively pursued; but the inutility of the subject to medicine and to ethics, is again affirmed.

XX. GALENI, DE HIPPOCRATIS ET PLATONIS DECRETIS, (DOGMATIBUS, BAS.) LIBRI NOVEM.

OF THE DOGMAS, OR OPINIONS OF HIPPOCRATES AND PLATO.

IN NINE BOOKS.

J. CORNARIO, TRANSLATOR.

BAS. ED. p. 880.

The ensuing nine books are not less deserving of notice than

^a "Holy Scripture containeth *all things* necessary to salvation; so that whatsoever is not *read* therein, nor may be *proved* thereby, is *not to be required* of any man, that it should be believed as an article of the faith, or be thought necessary or requisite to salvation."—Sixth Art. of Religion of the Protestant Episcopal Church.

Apply this to the subject of the *soul*. Can its character as to materiality or imma-

their associates. They consist chiefly of criticisms and reviews of the opinions of preceding writers on a variety of subjects ; of Aristotle, Erasistratus, Praxagoras, Chrysippus, the Stoicks, and Peripatetics. Much is interspersed of metaphysics, which serves to elucidate many opinions of philosophers respecting the mind, whose seat, according to some, was the heart.

BOOK I.

The four first chapters of this book appear to be lost, as it begins abruptly, with, apparently, an account of the same case that is noticed in the seventh *De Anat. Administ.* It is here introduced, to prove, in opposition to Erasistratus, and his followers, that the cavities of the heart in the living animal are filled with blood, and not with air. By turning to the case in the place referred to, the particulars will be brought to recollection. The sternum being removed, and part of the putrefied pericardium, the heart became conspicuous, as if in an animal dissected for the purpose. The patient recovered, which Galen regards as by no means extraordinary, since the affection was attended by no worse consequences than are daily observed in contusions and other injuries of the thorax ; the removal of the pericardium could not be the source of any great danger ("tunica cordi obsita proprium aliquod insigne periculum affert"), as Herophilus and many other physicians have before stated. Occasional notice is given to the blood-vessels (p. 884), indirectly bearing on the circulation ; and he here opposes an opinion of Erasistratus, that the arteries terminated in nerves ; proving its error, by tracing the progress of the different arteries. Among these, he mentions the carotids, (*χαρωτίδες* seu soporariæ, ex *χαρός*, sopor,) and points out the error of the name as arising from ignorance in the successors of Hippocrates (p. 885). "Cor cerebro tria vasorum genera connectunt, ex iis inquam quæ toti corpori communia habentur ; venæ, arteriæ, nervi. Venæ quæ jugulares appellantur, arteriæquæ carotides, quasi tu soporarias dicas," &c.

teriality be established by any thing we read in the Bible ? If not, may not that question be investigated, or either side adopted, without giving offence, or at all influencing salvation ? It is a subject that is not determined by Revelation, and not likely to be elucidated in this state of existence.

He shows the source of the error, from the experiment on which it was founded. In it, the nerve was tied up with the artery, the animal was thereby rendered comatose, which was ascribed *solely* to the ligature of the artery. However, (adds Galen, setting thereby a noble example to all who are perpetually changing names of long continuance, and even if faulty, perfectly understood,) however, the artery has so long retained the name, that I will not deprive it of it, and as at present fixed, so let it remain, (and thus it has remained to the present time, an evidence of the superior judgment of this great man.) In other parts he has taken up the subject of names, and reprehends the folly of many of them, derived from etymology and supposition. In the ninth chapter of this book we find several pertinent remarks on the subject.

B O O K III.

This book is an intermixture of metaphysical and physiological investigation as to the seat of the soul or rational mind, in which those who are fond of such inquiries will find much to interest them. Throughout, expressions appear, which to me, nothing short of a full belief of a circulation would at all justify; the whole sixth chapter is of this description. He states the difference of cutting the three species of vessels, (the nerves being then considered as tubular,) viz., the immediate death, from the immoderate effusion of blood, by dividing the jugular veins or carotid arteries, unless prevented by tying them up; but by tying or cutting the nerve, or by compressing it, the animal merely lost his voice.

B O O K S III., IV., V.

These three books are nearly of the same character as the preceding. Many quotations are given from Homer and Hesiod, as advanced by Chrysippus to sustain his opinions. They are opposed by Galen, and we must here contend for Galen's prior claim to the doctrines of phrenology, although since slumbering through many centuries before their late resuscitation by Gall and Spurzheim, (p. 982.) “Neque in una tantum animæ parte, neque in una facultate et judicia et affectus existere, ut Chrysippus sentit, sed plures esse,

diversusque tum facultates, tum partes." The whole of the fifth book is, indeed, metaphysical and phrenological, wherein the nature and importance of education are considered, as giving character to man. Few phrenologists can be found, who could not readily and essentially strengthen their opinions by those of Galen.

B O O K V I.

This is an important book, and one which, if duly translated, would greatly aid in enabling us to judge of Galen's real estimate and views as to the circulation. A favourite opinion is here enlarged on, viz., the important rank of the liver in the animal economy; perhaps it is nowhere so fully and strongly insisted on, as in this book, which appears almost to have been written with the intent of proving, by reason and experiment, or dissection, that this viscus is the source of the veins, and of hæmatosis, and also of concupiscence (*animæ concupisibilis*). Many passages seem adequate to establish the knowledge and views of a circulation,—and a vindication is presented for Hippocrates against the erroneous opinions attributed to him of four pair of vessels arising from the head. His own opinion or hypothesis of the hepatic origin of the veins, is very ingeniously sustained by reasons principally derived from Hippocrates (p. 1010, Bas. ed. refers to his treatise, *De Humoribus*). In considering the liver as the great organ of hæmatosis, he draws a distinction to this effect,—that a procreative faculty or power exists in it of forming blood, and that it is, as it were, the feeder or nourisher of that faculty. It seems that a belief was entertained by some, that the *power* of forming the blood was derived from the veins of the heart, and the *materials* from the liver. All this speculation, ingenious to the full as any on the same subject at the present day, must nevertheless be admitted to be very much of a mystification. Much close attention is required to comprehend it, if, indeed, it will not receive a different meaning, in conformity to the previous impressions of the reader's mind! He contends, however, that the heart is not the commencing organ of the formation of the blood, but of the arteries only, and that this is conspicuous even in the fœtus, in which he opposes Erasistratus, who maintained the heart to be the beginning of both arteries and veins. He opposes Praxagoras and others, who considered the pulsation of the arteries to

depend solely on themselves, and he considers it proved, as he states it, from the pulsation ceasing when the artery is divided. The idea of a circulation was certainly common amongst philosophers, although differently explained by them, long before the time of Galen: even Plato suggests it in a manner no way obscure. “Cor vero qui simul et venarum fons est, et etiam *sanguinis qui in omnia membra vehementer circumferatur*, in satellitis apparatorisque sedem ac domicilium constituerunt,” &c. (Bas. ed. p. 1026, c.)

BOOK VII.

This book, in maintaining the origin of the nerves from the brain, and explaining how sense and motion thence arise, falls again into metaphysical disquisitions and criticisms, on the opinions of others. Some phrenology is scattered throughout its pages, and his ideas are given as to the nature and structure of the nerves. He contends that sensation and motion may be maintained, even when the ventricles of the brain are wounded. There appears also an attempt to locate the mind. A nervous fluid is spoken of, and the difference of the optic from other nerves is pointed out. The humours of the eye, and the sense of smell, are treated of, and the opinions of Plato, Aristotle, and others, on these and other subjects, are discussed and opposed. He treats of the spinal marrow, its structure and power, and he affirms that Erasistratus in his old age was acquainted with the true origin of the nerves, but that Aristotle never was.

BOOK VIII.

After a slight recapitulation of the preceding seven books, this proceeds to consider the opinions of Hippocrates and Plato on the subject of the four elements, and of the formation of bodies from them. It then treats of respiration, and of the receptacles for food and drink. From a deficiency or excess of those four elements, it was commonly supposed that disease occurred. In admitting of four humours, their influence in health and disease is upheld, and their modification by season, age, and other causes, is pointed out. Some of the differences of opinion between Hippocrates and Plato

are noticed, together with many errors of Erasistratus; on which, however, Galen correctly remarks, that they are by no means deserving of contempt, for that all that may be erroneous, is far from being contemptible; dogmas are uncertain, and arguments that may be satisfactory to many, may yet be inconclusive to others, and such arguments are never wanting in support of our opinions. Among other points considered, he adverts to an opinion maintained by some of the ancients, that fluids, in drinking, passed into the lungs, which he denies, and refutes in the last chapter. (See Hippoc. in $\pi\epsilon\rho\chi\alpha\rho\delta\imath\eta\varsigma$.)

BOOK IX.

This, the last of these books, is not less interesting than its predecessors. In some respects, it is even more so, as will be admitted, when it is stated to be an attempt to point out the best method of distinguishing truth from error. Here, the opinions of Hippocrates and Plato on the subject are compared, and the necessity of uniformity is pointed out; and consequently the great importance of such comparisons as to the similarity or dissimilarity of subjects, if you desire not to be deceived;—as with respect to the face and countenance of the sick, and all those other parts from which our judgments may be deduced; and he quotes largely from both writers. He also discusses the *intention* of the physician in his practice, and takes notice of the great dissimilarity amongst the members of the Profession in this respect. All, he tells us, propose to oppose disease; but some are actuated therein by humanity, some by ambition, avarice, and so forth. (p. 1090.) In an edition of Brown's Elements, by Beddoes, some years ago, we have in his preface a somewhat analogous generalization of physicians, which he drew up from the medical characters of Great Britain of his day. It is probable he was led to it by the example of Galen; nor is it improbable that the same might not be done in every large city in all parts of the world! The importance of method in investigating and in dividing diseases, is noticed; and the diversity of practice arising from this, is exemplified in pleurisy; some employing bloodletting, others purgatives, fomentations both wet and dry, &c., and equally diversifying their drinks and ptisans, &c.

Dissensions among physicians are injurious, says Galen; therein

differing from contrary opinions among artisans, in which opposition tends to improvement. He notices the reasons of such philosophic differences, and proposes sundry queries of utility to, or injurious to physicians and philosophers. Here we may perhaps discover a counterpart in the profession of our own times, in the picture he has drawn of men, who, in opposition to common opinion, most obstinately persist in their own, and *feign* to believe them implicitly (p. 1100, A., &c.), whilst others, denying the opinions of their opponents, *falsify in the most unblushing manner!* Had Galen lived in our times, he would not have wanted an ample harvest for his keen and caustic pen.

In considering, in a subsequent part of this book, the providence of a Supreme Being, as exemplified in the structure of the body, he hints at the folly of those who suppose it to be the work of chance; and in a manner both brief and comprehensive he replies thereto, in proof of its extreme absurdity, by recapitulating its wonderful structure, the number of its parts, the uniformity of infinitely numerous beings, the congruity and adaptation of every part, whether single or double, in organization; all proving a divine Architect, and the utter impossibility that a blind chance could have had any influence in the formation of the universe. He again quotes largely from Plato's Timæus, on the subject of the mind or soul and its faculties, and thus concludes the last of these most interesting commentaries on the Decreta of Hippocrates and Plato. Much unquestionably is speculative and metaphysical; but is it the less interesting from conveying to us the philosophy of the ancients as to the mind and its operations? Are the metaphysical dogmas of the present day so absolutely certain as to be universally admitted? If shadows, clouds, and darkness envelope the metaphysical principles of former times, not less discrepancy of opinion and wild speculation as to mind and its operations will be found in the eighteenth and nineteenth century! A comparison of both would possibly lead to the admission, that the opinions of Hippocrates, Plato, Aristotle, Galen, and such like philosophers, of twenty centuries' standing, are as likely to be correct, as the many-headed monsters of the present period.

XXI. GALENI, DE FACULTATIBUS NATURALIBUS, LIBRI TRES.

OF THE NATURAL FACULTIES, IN THREE BOOKS.

T. LINACRE, TRANSLATOR.

BAS. ED. p. 1113.

The faculties (powers) are of three kinds, natural, vital, and animal. The first seems principally connected with the liver, and is distributed by the veins to every part; the second is connected with the heart, and through the arteries, with all the body; and the third with the brain, and through the nerves with the whole system. Galen here notices the difference of plants and animals, in the possession by the latter of sense and motion. He considers the difference of simple nature and the soul; sense and voluntary motion being the result of this last, whilst augmentation and increase, are the result of the former. It is the soul that governs; and in order to prevent misrepresentation, he defines the words he uses, and notices some of the opinions of the sophists respecting certain natural changes, such as that of food into blood, &c.; he considers that a certain faculty or power exists in different parts, by which those parts are enabled to induce certain changes. He notices four qualities in matter, two of which, *hot* and *cold*, are active, and two, *moist* and *dry*, are passive. By the operations of nature, we find three actions or faculties awakened, viz., a generative or productive, an augmentative or inductive of growth,—and one of nutrition; all of which, with other interesting subjects, he separately considers. He opposes the opinion of Asclepiades in relation to a direct passage of drinks to the bladder, and relates an experiment to refute it, viz., that of tying the ureters, and thus examining, from absolute observation, the real mode of transmission, (p. 1125.)

In giving an explanation of the ureters, (p. 1118,) considerable light is thrown upon the ancient views of different tubes in the body; which, although intended for different purposes, had, nevertheless, the *common* appellation of *phlebs*, or vein, given to them. He tells us the ureters are not arteries, since they neither pulsate, nor do they consist of two coats; neither are they veins, since they

contain no blood, nor do their coats resemble those of veins; and still less do they resemble nerves; and yet, adds he, every part of the body necessarily consists of an artery, vein, and nerve, or is composed of them. A considerable part of this book involves the consideration of *attraction*, as explanatory of many of the propositions assumed; such as with respect to the secretion of urine, &c.; and he introduces Epicurus's explanation of the magnetic attraction of iron, together with his disputes against Asclepiades on this subject, (p. 1128.) This seems a favourite subject, as he strongly opposes both Erasistratus and Asclepiades. In one part, his language is of a strong character, asserting, that in regard to the attraction of the kidneys, Erasistratus was a dissembler, but that Asclepiades was an absolute liar: "itaque Erasistratus dissimulavit, Asclepiades mentitus est," (p. 1135.) The primary, nay, the exclusive superiority of the arteries, veins, and nerves, in the opinion of the ancients, is here well exemplified: "Si namque ex singulis eorum instrumentorum, venas, nervos, et arterias exemeris, reliquum corpus, quatenus sensu animadverti licet, simplex elementareque est," &c., (p. 1118.) And elsewhere he says, that if we desire to comprehend the universal powers or faculties of nature, every individual organ must be carefully considered.

This book is deserving of attention in a variety of particulars; and few will read it, I imagine, without admiration and gratification. The same may be said of the second and third books, in which, with the author's own opinions on the subject of nutrition, &c., we find, in his opposition to many of the philosophical tenets of contemporaries and others, much of the physiology and speculative views of the then existing and preceding ages. The importance of the *humours* or fluids may be considered as having always stood prominent in the estimation of the ancients, since they, or some of them, counted up no less than ten different kinds, besides the blood, (p. 1159.)

The third book treats rather more particularly of the retentive and expulsive powers, as the preceding did of the attractive. The necessity of such powers is demonstrated in the stomach and uterus, and also in the urinary and gall-bladder; all tending to a general proposition, that there are four faculties or powers in nature, viz.: of appetency, attraction, retention, and expulsion. Towards the close of this third book, Galen explains his reasons for writing them; and they differ but little from those which might now, with great propriety, be

advocated by every *honourable member* of the Profession, viz., to oppose that sophistry, which, under the revered name of science, extends its baneful influence to the younger and ingenuous student, before he can possibly form a correct decision as to the doctrines that are promulgated by his teachers ; and by which he becomes bound in fetters, from whose embrace he scarcely ever can effect an escape. This particular chapter (ix. p. 1170,) is one of such importance to truth in our researches, that it is well deserving of general extension in our medical schools !—A chapter of some interest (twelfth) is given, as to the means of exciting the expulsive powers to act. In it, the distention of the uterus, bladder, &c., is considered, and a variety of causes are stated, as inducing abortion. The same channels, it is said, are employed by nature, both for attraction and repulsion, though at different times ; thus, the œsophagus, in swallowing food, and in the reverse case of nausea and vomiting ; the gall-bladder, filled by regurgitation, and emptied by the same duct. The os uteri, regarded as the passage by which the semen reaches its destination, and that of the expulsion of its foetal incumbrance.

Several passages in this book, are strongly illustrative of Galen's knowledge of a circulation, and of the strict and necessary communion between the arteries and the veins (see chap. xiii. p. 1180) : “Si enim multis amplisque arteriis præcisis, jugulare per eas animal velis ; invenies ejus venas æque atque arterias vacuatas ; quod sanè nunquam fieret, nisi inter se haberent altera in alteram ora reclusa,”—and soon after, speaking of the pulmonary artery, he says of the blood that passes into it, “manifestum est, quod in sinistrum sinum transmittitur.” The whole chapter deserves transcribing ; and if translated, would, with numerous parts of his writings, greatly surprise the reader, to find that in almost every part, the wonderful Greek had preceded, and pointed out fully, the path, which has so incorrectly tended to establish the undeserved claim of Harvey to the discovery of the circulation of the blood ! whilst the undoubted rights of Galen have been trampled under foot, to the disgrace of our profession, and the false honour claimed for him by the British nation !

XXII. GALENI, DE MOTU MUSCULORUM, LIBRI DUO.

OF MUSCULAR MOTION.

IN TWO BOOKS.

N. LEONICENO, TRANSLATOR.

BAS. ED. p. 1182.

These two books on muscular motion are, to say the least of them, equal to any of the lectures delivered on the subject to the London College, under the name of the Croonian Lecture. Indeed, if we take into consideration the remote period at which they were written, perhaps more praise might be claimed for Galen in their behalf. Their general contents can alone be noticed. They present a pretty full statement of every thing that is connected with the subject of which they treat. Commencing with an explanation of a muscle as the instrument of voluntary motion, it considers the action, number, and mode of movement, with the difficulty of comprehending it; its difference from tendon, ligament, nerve, &c.; explains the nature of these, their origin, connexion, &c.; notices the spinal marrow, and its difference from the marrow of the bones; the communication of the brain and spinal marrow with the muscles, through the medium of the nerves; and the result of their division, or injury from any cause, on motion and sensation, &c. The extreme vascularity of the muscles is said to resemble a well-irrigated spot; this vascularity depends on its arteries and veins, which, originating in the heart and liver, are widely distributed through the body of the muscle;—the difference of tendon from nerve and ligament; its mode of insertion in the bone; what muscles (as of the tongue) have no tendon; the dissimilarity of the heart from the common muscles; some muscles, (as of the mouth, &c.,) have no connexion with bone; the œsophagus, &c., the muscles of the rectum, the diaphragm, and other parts, considered; their peculiar actions, as distinct from others accidental to them;—reference is made to the various peculiarities of muscles, and to their fourfold action, viz., of contraction, relaxation or extension, and variation as to these, or permanent tension; which leads to the consideration of the character

of swimming, flying, &c., and to the nature of tetanus; reasons assigned why, when a muscle is cut through, and it contracts most powerfully, yet the part to which it is attached is not moved by it; equality of power in opposite muscles, with remarks on Hippocrates' writings respecting the muscles. In the second book, the high character assigned by Galen to the upper extremities, leads him to a minute detail as to the various muscles of those parts, and to some views as to the exact character of the bones of the arm; the motions of extension and flexion, of pronation and supination, &c.; of the quiescence of muscles in sleep, drunkenness, fatigue, &c.; the best position for sleeping; sleeping whilst walking, of which he gives an instance in his own person; the almost constant tonic action of the temporal muscles; guardianship of the muscles of excretory organs during sleep, &c., except from some causes, as ineptitude, phrenitis, &c.; and he condemns those who assert the soul to be quiescent in sleep, since they can feel, and speak, &c., yet all their actions are not natural. Of voluntary, involuntary, and mixed motions; singular case of delirium during thirteen days, relieved and cured by a sudden hemorrhage from the nose, followed by sweat, and having no recollection of his previous state. Galen's remarks thereon, and analogous cases;—important character of muscles in relation to the retention or expulsion of excrement; in the operations of respiration and the voice, &c.; explanation of expiration and inspiration; diaphragm and other muscles subserving respiration, &c. Many other particulars are noticed, which this scanty outline can scarcely afford a notice of; yet it is probably, adequate to show the high estimate of the subject in the mind of Galen; and that, although much is *here* unnoticed, he himself has omitted nothing, that directly, or by implication, has connexion with it.

XXIII. GALENI, DE MOTU THORACIS ET PULMONIS, FRAGMENTUM.

OF THE MOTION OF THE THORAX AND LUNGS.

BAS. ED. p. 1216.

This short treatise, called a fragment, is stated to be found only in ancient translations, and is not in the Greek copies; does not

constitute a part of the Venice editions. What is here given, is from the Basil edition, but without the translator's name. Its purpose is to prove, that naturally, the lungs are devoid of motion, but depend for it on the action of the thorax. The want of connexion of the lungs with the thorax, in which they are loosely suspended, is stated; and this is assigned as a principal cause of the difficulty in affording an explanation; although it is certain, that no motion in them takes place, unless simultaneously with that of the thorax. Galen, however, if the treatise is his, endeavours manfully to meet the difficulty, and solves the problem in a manner not very dissimilar from that which is at present maintained, although perhaps not quite so philosophically illustrated and expressed. (p. 1216.) This great man had not reached the absurdity of his successors in talking familiarly of the *horror vacuae* of nature; but confining himself to the simple fact of water rising in a tube, if the air be drawn out of it, he shows that the lungs, following the enlargement of the thorax, the air passes down into them, and is expelled on its contraction; from whence he concludes that the thorax is the prime mover of the lungs. Now, as he has elsewhere demonstrated the action of the intercostals and diaphragm to be the cause of motion in the thorax, so the chain of events is fully established by him, if even we should be disposed to disclaim his hypothesis, but which is too closely linked with his data to be easily rejected.

XXIV. GALENI, QUOD ANIMI MORES CORPORIS TEMPERATURAS SEQUANTUR.

THAT THE QUALITIES OF THE MIND DEPEND ON THE TEMPERAMENT OF
THE BODY.

B. SYLVANEUS, TRANSLATOR.

BAS. ED., p. 1218.

This is a very interesting book at the present period, from its metaphysical and phrenological tendency in various parts. From experience, not once or twice, but frequently, (*sapius*), he assures us he had found it to be true, that the powers of the mind (*animæ*

facultates) are closely connected with the temperament (*χρασίς*) of the body : nor was this opinion confined to himself, but was sustained by teachers and philosophers after careful inquiry. The affections of infancy indicate great diversity both of mind and body in them : some are timid, some stupid, some generous, others avaricious,—some are impudent and others modest, with many other varieties. Of these species he notices three, as among the most excellent faculties, according to Plato, and yet they appear to act differently in different subjects; from whence Plato seems to have imagined three species or varieties of soul, located, the one in the liver, another in the heart, and a third in the brain. On these defects of Plato, in his consideration of the soul, Galen animadverts ; as also on the opinions of Aristotle, the Stoicks, and others as to the substance of the soul and its immortality, who appear to have ascribed much to certain qualities of heat, cold, humidity, and dryness, &c., and which leads Galen to ask if dryness is a cause of prudence, and humidity of madness ; and to inquire into the peculiar temperament of the body, the heart and liver, and of other points sustained by the philosophers. The influence of the temperament (*χρασίς*) of the body in inducing mental affections is considered, and the mind is affirmed to be injured by bodily diseases, such as vitiated humours, or a depraved state from any causes,—“*Nemo enim sponte malus est,*” (says he in the progress of his observations, p. 1225,) “*sed ob corporis pravum habitum, rudemq: educationem fit malus.*” Such even was Plato’s opinion, and it seems to be acceded to fully by Galen. He agrees with Aristotle, that different faculties of the mind are influenced by the temperament of the blood ; and that the character (*animæ temperatura*) may be learned from the physiognomy, as derived from the forehead, eyebrows, palpebræ, eyes, and ears ; and he proves from Hippocrates, that a diversity of customs, studies, and arts, have their source in the variety of climates and seasons. The meaning of the ancients respecting the term *vein* as applied to arteries, is adverted to, and he explains that of the pulse, as distinctive of the arterial character, and how used by different persons. After some metaphysical enlargements on the subject of virtue, he considers seemingly the questions of necessity and free will, (p. 1233,) and of the attending difficulties of each ; also of a threefold cause of punishment, and inculcates the suppression of vice, by education, study, and discipline. He wonders at the Stoicks for thinking all men to be born

equally disposed to virtue; but he admits that they become perverted and depraved by their associations. This, says he, could not have been the case with the first man, who had no predecessors; and he seems thus to incline to the doctrine of *original sin*; yet he lays great stress on discipline, diet, and medicine, in restraining its consequences, which he admits could scarcely be depended on, if that doctrine, (*de infantium corruptione*) were altogether true.

I know not whether I have entirely succeeded in comprehending his views; but I am sure that phrenologists will here find abundant matter for reflection as to that science, as well as of physiognomy, in the days of Galen; whilst the moralist and metaphysician will not be disappointed on the interesting topics of the origin of virtue and of vice.

XXV. GALENI, DE FŒTUUM FORMATIONE LIBER.

OF THE FœTAL FORMATION.

J. CORNARIO, TRANSLATOR.

BAS. ED., 1237.

Galen begins this book by stating, that from neglect of anatomical research, both physicians and philosophers had erred in their doctrines, and differed from each other in their views of the fœtal formation, and had derived their opinions from an accidental abortion. He tells us that Hippocrates was the first who, founding his remarks on experience, wrote correctly on the subject. Much of what is here given, is necessarily speculative; yet not less probable than the hypotheses of the past and present times, on the mysterious subject of generation, &c. Galen proceeds to treat of the vessels, the membranes, the urachus, and other parts; of the formation of the fœtal skin; of the formation and substance of the liver, which he considers to be anterior to the heart; of the nourishment and growth of the fœtus. He adverts to the common application of the word *vein* by the ancients, to both arteries and veins; and he assures us that in a fœtus of thirty days, the liver, heart, and brain, were distinctly to be seen. The dissection of living animals is

considered useful; and the close and essential connexion of respiration with the motion of the heart, and with life, is particularly insisted on. The sources by which respiration is impeded are stated, such as suffocation from hanging, drowning, inflammation of the fauces, &c., in which last may be discovered many analogies to the circumstances of croup. The extensive distribution of veins over the body; the mutual aid afforded by the brain, and heart, and liver; the importance of which last viscera he considers as every where apparent. On its account he deems the urinary and gall-bladders to have been made, and ingeniously speculates on this point. Explains the use of the double porta to the liver; speaks of the heart, its formation, and its two ventricles; the blood in the left one being hotter than in the right; the inferior temperature of animals not possessed of red blood. Blood is contained in the arteries, though denied by Erasistratus; in many places expressions occur, that bear apparently on his views relative to a circulation, (p. 1243, &c.) This whole book is full of interest, the latter part especially, wherein he speculates on the formative power (*causa formatrix*—*nitus formativus* of modern times) of the foetus; the wisdom and art evinced in its construction, its numerous muscles and bones &c.,—all tending to the infinite power and extent of motion, and of the ends thereby proposed to be attained. He notices, moreover, the beauty and adaptation in the construction of every other part;—the intentions of each part, he says, would, if fully investigated, amount to thousands; adequate, if properly appreciated, alone, to demonstrate omnipotence and infinite wisdom in its construction; and he concludes with a remark that conveys a direct and positive assertion of a circulation, if words have any meaning! “*Hoc igitur solum de causa animalia ipsa formante, ut possibile me pronunciare puto, nempe, artem et sapientiam ipsam existere maximam. Quemadmodum et hoc quod post formationem corporis, ipsum universum corpus per omnem vitam tribus principiis motuum gubernetur; eo quod ex cerebro est, per nervos et musculos; quod ex corde, per arterias; et quod ex hepate, per venas.*” The remainder of the book indicates the existing state of knowledge as to the soul; by which it would appear, that materialism and immaterialism, then, as now, had their respective partisans; and it may be safely presumed that the dogmas on this mysterious topic were equally unsatisfactory, as are those of present philosophers! “*Ex quibus autem prin-*

cipiis hæc fiant, hactenus non fui ausus palam confessa opinione pronunciare, velut in multis operibus indicavi, et præsertim in eo quo de animæ speciebus tracto, de animæ substantia nullatenus sententiam ferre confisus sum. Neque enim hactenus reperi ullum aliquem, qui mathematicis et liniaribus demonstrationibus uteretur ad adstruendum, *num omnino incorporea sit anima, aut corporea,* aut prorsus sempiterna, aut corruptilis et interitura, quemadmodum in tractatione de animæ speciebus explicavi.”—I cannot help adding a few words, when he is noticing the order of the progressive formation of the fœtus from the seminal fluid, as first calling into play the vessels which go to form the viscera, of which the heart and liver may be regarded as the foundation of the house, or keel of the ship, and as preparatory to its immediate connexion with the uterus, and progressing in addition and increase of parts: “Nequaquam igitur ab aliorum opificio natura animalium formatrix desistet, sed *et venas et arterias semper findens ad adnascendum his alia viscera propellat,* quemadmodum et hepar et cor adnasci dictum est, una cum hoc quod et figuram decentem, et positionem, et quæcunque alia hujusmodi partes habere convenit, debito modo operatur.”

XXVI. GALENI DE SEMINE, LIBRI DUO.

OF THE SEMEN, IN TWO BOOKS.

J. CORNARIO, TRANSLATOR.

BAS. ED. 1255.

These books, speculative in a high degree, are yet of great interest, both anatomically and physiologically, and which it would be impossible fully to elucidate in the short compass assigned to this abstract. They contain the opinions of his predecessors, Hippocrates, Aristotle, and others, which he combats or maintains, as they agree with his own. The inquiring and independent mind of Galen, is perhaps no where so well depicted as by himself, in the very commencement of the book, in the consideration of the question, “*num intus maneat semen eis quæ sunt concepturæ, an excernatur?*” In replying to this, he tells us the investigation of it may be effected in

three ways:—first, and most certainly, by a measure which he says he often had pursued with respect to mares, dogs, asses, cows, goats, and sheep; this was by observing, whether after coition, they retained, or discharged the semen. He was told by those well skilled in these affairs (*eiusmodi rerum peritis*), that they had carefully remarked that when conception was to ensue, the semen was always retained. But, says Galen, “ although I confess the fault, and may be reprehended for it, for throughout my life I have adhered to it, I never confided in what others said, unless I was satisfied of the same by my own experience, so far as it was in my power.” Hence, although in the above case, all seemed uniformly to agree, yet he was not satisfied until, with his usual incredulity, he had himself made the experiment, and thereby was convinced of the truth.—Another mode, was by close inquiry of females, and his curiosity was amply satisfied, as to the fact being the same with them as with brutes. The third mode was by consulting the works of all who had written on the subject, and the same opinion was sustained by them.

The progress of foetation is followed up, and he sustains the idea of the female seed, whose conjunction with that of the male, is essential to the formation of the foetus, but which idea seems to have been pretty sharply contested. An explanation of the formation of its different parts is attempted, fully equal to any of present notoriety. His chief stress seems to be that of explaining the formation of the heart, the liver, brain, spinal marrow, aorta, and vena cava; and he speaks of four periods in the foetal progress, viz., 1, as a semi-formal matter; 2, a fleshy-form; 3, the distinctive though obscure formation of the limbs; and, 4, their full perfection. In each of these periods, the rise of parts is respectively noticed; as ossification, pellicular covering, &c., and some views are given as to the origin of the semen from the blood. The testes and convolution of their vessels; the results of castration, and various other particulars are noticed in order; with the influence of the semen on the animal economy.

In the second book, he treats more particularly of the female testes: and opposition is made to some opinions of preceding writers. In insisting on the existence of a female seed, and speculating on the resemblance of children to their parents, he lays much stress on this, and affirms that unless possessed of testes and a seminal fluid, the venereal appetite would not be excited in females; he proposes sundry difficult questions, as requiring an answer from those maintaining an opposite opinion; refers to the eggs laid sometimes by

hens, and those of fish, without the male co-operation;—the similitude of sex, is also mentioned, in a curious and interesting display of the general difference between the outline and appearance of the male and female, among all classes of animals; by which they are at once discriminated, even at a distance, and before observing the more immediately distinctive criteria of the genital organs; and that even when they materially differ among themselves.—The semen being supposed by many to be derived from every part of the body, it would seem that it was imagined that the different parts in conception, were constituted from that part of the semen derived from its counterpart; and hence, that the parts peculiar to either sex were derived from that alone to which it belonged. A comparison is drawn between the sexual organs, and they are presumed to be nearly the same in both, differing chiefly in the location assigned to them by nature, viz., externally in the male, and internally in the female sex: their nourishment from the same arteries and veins, is insisted on, and the similar origin of their nerves.—The variety of operation, in the works of nature as displayed in animal life, is well delineated. The above is perhaps sufficient to excite to a desire of further investigation of the treatise at large; and it well deserves it. Galen must always be his own and best commentator, for it is uniformly seen (and here particularly,) that although his opinions were the predominant doctrines for so many centuries, yet that he never depended on those of others, when able to verify them himself,—asserting in the seventh aphorism of the sixth Epidemics, that it is a tyranny for any person being constrained to accede to any opinion, without the clearest demonstration of its truth;—and the same is repeated in the seventeenth aphorism of the same book.

XXVII. AN OMNES PARTICULÆ ANIMALIS QUOD IN UTERO EST, SIMUL FIUNT.

WHETHER ALL THE PARTS OF AN ANIMAL ARE SIMULTANEOUSLY
CONSTITUTED?

REGIO, TRANSLATOR.

BAS. ED. p. 1303.

This book, consisting of a single chapter, is said not to be in the

Greek copy. Be it as it may, it is a curious little essay, that in the subject-matter has frequently been discussed since the time of Galen, and yet probably not more accurately, or with greater interest. It is simply an inquiry whether all the parts in the foetal state are formed conjointly, or in due succession.* The conclusion adopted by Galen is, that they *are not* all constituted at its first formation, for the best reason, that nature does not want them; but that as she does nothing in vain, so she goes on progressively with her charge; and, as the architect, in building a house or ship, begins with the foundation or keel, and makes his additions as the various parts are required, so does nature call up the organs to complete the whole, in the direct order in which they are necessary.

XXVIII. AN ANIMAL SIT ID, QUOD IN UTERO EST.

IF WHAT IS FORMED IN THE WOMB, IS AN ANIMAL.

H. LIMAN, TRANSLATOR.

BAS. ED. 1304.

This is stated as being falsely attributed to Galen, and to be the production of some “Iatrophist.” For the reasons assigned, this may probably be the case; and yet, as affording us acquaintance with many speculative notions of the philosophers of Rome, it may be esteemed a choice morsel of curious inquiry, of which much may be said on both sides. It is unnecessary to dwell upon it here; the nature of the inquiry is explained by the title. I shall merely add, that the writer, whoever he be, seems to think the object in question is an animal, and that it is possessed of a soul and of reason; maintaining his opinions promptly, forcibly, and with apparent good faith. He terminates the book with the following apostrophe to the foetus itself, which the translator treats as ridiculous;—whether meant so by the writer, is problematical! “*Sed jam ad foetum ipsum, tanquam animal id, ut nihil ipsi quo minus homo sit, desit, formatum,*

* “Thine eyes did see my substance, yet being imperfect; and in thy book were all my members written;

“Which day by day were fashioned, when as yet there was none of them.”—PSALMS cxxxix. 15, 16.

nostra vertatur oratio. Prodite quæso è sinibus nihil timentes à fœtus, neque generis demissionem, neque charissimos alienatos, neque opes auferendas. Non vos multorum calumnia, atque horum qui naturam ipsam injuria afficiunt, excludit malignitas; qua propter eos pœna vos afficietis, ut Pericles, ut Pisistratus, ut Paris, illeque Macedon Alexander, atque Hercules."

XXIX. GALENI, DE SEPTIMESTRI PARTU, LIBER.

OF THE SEVENTH-MONTH BIRTH.

J. CORNARIO, TRANSLATOR.

Much interest will be felt in this short treatise;—the subject of it is not less important now than formerly. Agreeing with Hippocrates, Galen points out the common, minimum, and maximum number of days that go to constitute a seventh-month birth. A computation of the Greek months is given, and calculations as to the days and division of the year. The years are all equal, but considerable variation appears in the months and hours. One hundred and eighty-two days is the period assigned to a seven-month birth, with some slight variation. Perhaps, under some circumstances of a medico-legal investigation, embracing this subject, reference might be usefully had to this treatise.

This terminates the *prima classis* of Galen's division. The following is of scarcely inferior interest, but will not occupy so large a space.

C L A S S I I.

H Y G I E N E.

THIS class appears to treat principally of the so-called non-naturals. The Venice (eighth) edition thus mentions it in the title page : "Materiam sanitatis conservatricem tradit; quæ circa aërem, cibum et potum, somnum et vigiliam, motum et quietem, inanitionem et repletionem, animi denique affectus versatur."

INDEX OF THE VARIOUS BOOKS OF THIS SECOND CLASS.

TRANSLATOR.

1.	Galeni Hippocratis, aëre, aquis, et locis libellus.	J. Cornario.
2.	de Alimentorum facultatibus libri tres.	- M. Gregorio.
3.	de cibis boni et mali succi liber.	- - - F. Balamio.
4.	In librum de salubri diæta Commentarius.	H. Cruserius.
5.	de attenuante diæta liber.	- - - - M. Gregorio.
6.	de Ptisana liber.	- - - - J. Politio.
7.	de parvæ pilæ exercitio liber.	- - - J. Cornario.
8.	de cognoscendis curandisque animi morbis, quas perturbationes Latini appellant, liber primus.	- - - - B. Donato.
9.	de cujusque animi peccatorum notitia atque medela, liber secundus.	- - - J. P. Crassus.
10.	de Assuetudinibus liber.	- - - - N. Regio.
11.	de sanitate tuenda, libri sex.	- - - T. Linacre.
12.	Ars tuendæ sanitatis num ad medicinalem artem spectet, an ad exercitoriam, liber.	- - - - J. P. Crassus.

I. GALENI, IN HIPPOCRATEM DE AËRE, AQUIS, ET
LOCIS.

THREE COMMENTARIES ON THE TREATISE OF AIR, WATERS, AND
LOCALITY, OF HIPPOCRATES.

BAS. ED. tom. ii. p. 6.

The Basil edition (1549), contains merely the translation into Latin, of the Greek text of this work of Hippocrates. That of Venice, (8th, 1609,) has three commentaries of Galen thereon, translated by M. Alatinus, a Jewish physician, which supplies the want of the Basil edition, and which it acknowledges by saying, "Galeni commentaria desiderantur." Having, however, pursued the order of arrangement in the edition of Basil, I have not adverted to these commentaries, farther than to notice where they may be found; and especially as I have in the abstract of Hippocrates' writings given the translation of this book of his. I merely remark, that the first commentary is on the part that treats of the variation of the air, and diversity of situations, arising from the direction of the winds in different places; the second treats of the waters, their nature, and influence on the temperaments in different bodies, and according to their respective character; and the third, the salubrity or insalubrity of different seasons; and how the *temperies* of the air and condition of the heavens influence the nature of the human body; and how it is affected by the influence of society, according to age, sex, temperament, and season, &c. A variety of other topics are incidentally treated of, some of which are of a singular character, connected with the Scythians and their habits of life, &c.

II. GALENI, DE ALIMENTORUM FACULTATIBUS, LIBRI TRES.

OF THE FACULTIES OR POWERS OF ALIMENTS.

IN THREE BOOKS.

BAS. ED. p. 22.

BOOK I.

We are told that many ancient writers had treated on the power of aliment, but differed so greatly among themselves, that a new work on the subject was demanded, founded on reason and experience, rather than on *apparent* demonstration, the great dependence of Empiricism ; and the opinions of many are freely investigated and criticised. The different effects, and facility of digesting the same kind of food by different persons, are adverted to. In successive chapters, we are presented with an account of numerous articles of food, viz., that of wheat, and the various forms of food prepared from it; barley and its preparations; oats, which is said (previous to Dr. Johnson) to be the food (*jumentorum*) of cattle, and not of man, except in cases of extreme hunger; millet, rice, beans, vetches, lupins, and many other articles, among which the seed of the poppy is enumerated, as well as flaxseed and hempseed.

BOOK II.

In no less than seventy-one chapters, we here find enumerated almost every kind of fruit, whether derived from trees or plants, of the orchard, garden, &c., that is at present known; and also vegetables of every description, there appears to have been no want of choice. Lettuce, among other modes in use, appears to have been boiled, which, says Galen, “*ego nunc, ex quo dentis mihi male habent cœpi facere.*”—There seems to have been a dispute as to the correct mode of spelling asparagus, whether so, or asphargus! I

write it in the former way, (adds Galen,) with those, whose business is to attend to health, and not to words. The danger of some of the fungi, is noticed.

BOOK III.

Animal food is considered in this book, and various articles derived from them, as eggs, milk, cheese, butter, blood, honey, &c. One chapter is devoted to wine. The animals mentioned, are the hog, the ox, &c. The flesh of hogs so much *resembles that of man*, that, independently of dogs eating the last without suspicion, it was *sometimes served up by dishonest tavern-keepers*. Castrated animals most appropriate. General rules are delivered; the female ass and the mare were employed as food. We are then presented with the particular parts employed, among which are enumerated the udder, the thymus gland, the testes, which are considered inferior to the teats or udders, especially when these last contain milk,—the testes of the bull, goat, and ram, seem, however, to have been too much even for a Roman stomach;—the brain, the liver, spleen, lungs, &c., stomach, *uterus*,^a and intestines. We have a catalogue of animals, &c., derived from the fields, woods, waters, air, &c. Milk and its various preparations; asses' milk. A great variety of fish is mentioned; shell-fish, cartilaginous, scaly, and others. Salt provisions. We have, in short, in these books, a *Materia Alimentaria*; consisting chiefly, as may be presumed, of the facts of the day; and which, devoid of the remarks of Galen, are not very interesting; yet, as affording a table of contents for the feasts of the Romans, they are not undeserving of attention.

III. GALENI, DE CIBIS BONI ET MALI SUCCI, LIBER.

OF THE GOOD OR BAD JUICES OF FOOD.

BAS. ED. p. 6.

This book will to many appear among the most interesting of the writings of Galen. Its intention seems to be chiefly that of pointing

^a “Nil melius turdo, nil vulva pulchrius ampla.”—HOR.

out the measures by which good and bad or vitiated humours are produced; in other words, how the system may be supplied with the former, and avoid the latter. In admitting a vitiated state of the humours, the claim of Galen stands pre-eminent, although the doctrine extends to the earliest records of our profession. We shall readily perceive, however, that, although the medical men during a long series of centuries, too slavishly adopted all his views, and considered any departure from them as heretical; yet he himself was the slave of no man, nor of any hypothesis of whose truth he was not fully satisfied; and in vindication of which he was always ready to give an answer to all of the faith that was in him; which is more than the majority of our medical partisans can now do! Galen, rising above the prejudices of a single sect, was truly an Eclectic; and, like the bee, quaffed honey from every flower; separating the dross from the ore, he adapted what he thus collected, in its state of refinement, to his own especial views and sentiments. Hence we find him an enlightened Solidist, in conjunction with the Humoralist; at least I think this is truly the case; for it is under the banner of this great man, that I have uniformly attempted to oppose the paltry and contracted views of either, when *exclusively* promulgated in our schools!

The chief interest of this book, nevertheless, arises in my opinion from other sources; the first of which is, the account it affords us of a mighty famine and plague in Rome, (or rather extended throughout the world,) and continuing for several years. The recurrence, from extreme necessity, to unwholesome plants and herbs, soon vitiated the fluids, and disposed the system to numerous diseases; such as various affections of the skin, ulcers, erysipelas, phlegmon, herpes, itch, and lepra, and others, accompanied with fever, affecting the intestines, &c., with dysentery, inflammation of the viscera and bladder, &c., and up to malignant diseases of the highest grade, with all their accompanying and frightful symptoms. In the beginning of these, some physicians bled their patients, and the blood, he tells us, was always bad, of a deeper and darker hue than natural, more watery and acrimonious, and the incision healing with difficulty. Many, it appears, died from eating some of the fungi, cicuta, and other noxious plants. After some further remarks, all tending to elucidate the mode by which the fluids may become affected from the diet employed, he gives a detail of his own mode of living, and of the state of his health from childhood under the

dietetic precepts of his father, whose knowledge and learning, and infinite virtues, he most piously commemorates. When, however, he reached the state of adolescence, and pursued his studies apart from his parent, with extreme assiduity both day and night, even in the dog-days, he largely lived on vegetables or fruit, and in consequence was attacked with an acute autumnal fever, for which he was bled. Changing this mode of living by his father's advice, he escaped the following (his nineteenth) year; but his father then dying, he pursued his previous mode of life, and had a return of his former complaint, which, annually, or every second year, attacked him until his twenty-eighth year, when he became apprehensive of an abscess in the liver at its connexion with the diaphragm, and discontinued all the fruits but grapes and figs, and finally overcame his complaint, and enjoyed for many years exemption from disease. He tells us he dwelt on these particulars, (and some others detailed,) from their having some connexion with the subject before him. It is unnecessary to detail the particulars of this book, which is, indeed, much of a like nature with the preceding; or, perhaps, rather a kind of commentary on every variety of food, both general and particular. There is, however, sufficient difference to render it of interest, even should the reader not coincide in all the premises of the illustrious writer. I shall only notice that the use of woman's milk in phthisis is particularly commended, and especially by actual suction of the female, as directed by Herodotus and others. A good deal is said respecting wines, in some of the last chapters; the celebrated Falernian seems to have been a sweet wine. Snow was much used in cooling wines and other liquids. He terminates the book by a list of many diseases that are induced by the influence of vitiated humours.

IV. GALENI, IN HIPPOCRATIS LIBRUM DE SALUBRI DIÆTA, COMMENTARIUS.

COMMENTARY ON HIPPOCRATES' BOOK OF A HEALTHY DIET.

BAS. ED., p. 151.

Here, under several heads, to which as texts his commentaries are appended, Galen affords information, both for public and pri-

vate life, of the appropriate diet, as connected with the variations arising from season, habits, age, sex, &c., and in which much of a useful character is to be found. It cannot, however, be readily abridged, and little is here noticed. Vomiting during the winter months is commended, and much is said on the subject, which at the present period will not be approved of:—the treatise is deservedly suspected, says Galen; some even regarding it as not being the production of Polybius, much less of Hippocrates. With such impressions, it may be considered extraordinary that Galen should have taken the trouble to comment on it. Many remarks by him, are, however, of importance.

V. GALENI, DE ATTENUANTE VICTUS RATIONE LIBER.

OF THE RATIONALE OF AN ATTENUATED DIET.

BAS. ED., p. 166.

The utility of an attenuating diet in the cure of many diseases, or at least in mitigating them, is here attempted to be explained; and different kinds and preparations of food, are here pointed out, by which the humours may be kept in a healthy state, and disease obviated or removed; as in cases of gout, dyspnœa, enlarged spleen, and scirrhouſ liver; and it is on the whole, deserving of attention in many cases of chronic affection. What proves attenuant, is partly learned from experience, and in part from reason. Many articles are here enumerated. Poppy-seed, appears to have been not an uncommon admixture to their bread and cakes. The soporiferous property of the seed of lettuce is noticed. The book is in fact, closely associated with those preceding it. Condiments and salted food are noticed, and wine and honey are not omitted.

VI. GALENI, DE PTISANA LIBER.

ON THE PTISAN, OR BARLEY-WATER.

BAS. ED., p. 181.

This book may in general be regarded as a treatise on barley-

water,²—and as this is by no means an unimportant article in the sick-room, it is not undeserving of attention. So much was it regarded in Roman practice, that Broussais is but a mere distant follower in their ranks. The ptisan was not used merely as a drink, as commonly imagined ; it formed a part of their more solid nutriment. There appears to have existed a difference of opinion as to the superiority of the *whole*, or of the shelled (pearl) barley ; the latter of which Galen seems to favour. Of its mode of preparation, of different strength to suit different circumstances ; it was prescribed with strict attention as to time and quantity ; and particular circumstances are referred to, which precluded its use.

VII. GALENI, DE EXERCITIO PER PARVAM PILAM.

OF THE GAME OF FIVES, OR TENNIS.

BAS. ED., p. 187.

This book is connected with gymnastics ; and the game treated of, which seems equivalent to our game of *fives*, would appear to have been a favourite with Galen ; and he recommends it as superior in many particulars to various other gymnastic exercises, in which more danger of injury exists. Many of them, too, are expensive, and require much time ;—this is prompt, and unexpensive ; requiring but trifling apparatus, and only a moment's warning ; and in extent it may be pursued to each one's content. It is, moreover, useful in the exertion of every part, whilst in other games, some parts are unemployed, and others overpowered with labour. The eyes and judgment are called into operation,—and other excellences are detailed, accompanied by a corresponding display of the inconveniences and hazards of various other games and exercises ; and hence he concludes that this game is preferable to all others, and more especially as being adapted to every age, and to the weak as well as to the strong ; it is devoid of danger, which is so common in the other gymnastic games and exercises. It is well deserving of the attention of physicians, who are often puzzled to direct aright the exercises of the convalescent state.

² Ptisana—a decoction of pearl barley, raisins, and liquorice.

VIII. GALENI, LIBELLUS DE COGNOSCENDIS CURANDISQUE ANIMI MORBIS, QUAS PERTURBATIONES LATINI APPELLANT.

OF THE KNOWLEDGE AND CURE OF MENTAL AFFECTIONS.

BAS. ED., p. 194.

This book is stated to point out, how every one may become acquainted with and cure the affections of the mind; and that it was composed in favour of a friend, who had asked the opinion of Galen respecting a book of Antonius, an Epicurean, having the title of "De Ephidria, proprietum affectuum,"—and in which the word ephidria, or subsidium,^a was not sufficiently explicit as to the meaning he intended to give it; a fault, he remarks, that was common to all his writings. Pursuing this train, in a kind of preface to the book, Galen tells his friend that many philosophers had written on the treatment of mental diseases, as Chrysippus, Aristotle, and Plato; and he remarks, that faults, and affections, though differing from one another, may yet be regarded under the common name of faults (peccata); adding, that although reference might be better made to the above authorities, yet, that in behalf of a friend, he was induced to take the subject in hand.

Entering on the subject, he tell us, that all commit faults even when they think themselves free from them; and he praises the saying of Æsop, that all men wear two cloaks, by means of which our own faults are concealed from view, whilst we readily see the faults of others; and he dwells on the extreme blindness exhibited to our own faults respectively,—whilst so ready to point out to others those which they possess. The whole book is one of morals, and well deserves attention; the emotions and passions of the mind are noticed, and their excess denounced; and a knowledge of oneself, as far as possible, is strongly recommended. He states the absurdities in which, in youth, his anger plunged him, and his successful endeavours to amend, which gradually improved. He relates the effects of anger which he had seen, one of which was of the Emperor Adrian, and gives some rules against the passions.

* Subsidium—aid, or help.

He compares the passion of anger, to the horse and dog; and concupiscence, intemperance, and lust, to the boar and goat; accompanying all his views with many sensible observations, praising temperance in all things; he speaks of contention, ambition, envy, &c., of the faults and depravities of youth, even by nature as well as from education, and the various ways in which exhibited; some are naturally quarrelsome, thieves, gluttons, liars, &c.,—and they differ in manners as well as in diseases, in their grades of modesty and decorum, of memory, prompt to learn, or idleness, &c.; and he dwells on the importance of a correct education, which is analogous to the culture of plants, yet not always able to overcome evils of early establishment.

In the course of this book he gives an account of his excellent father, as being “*ab omni iracundia alienum, justissimum, humanissimum;*” but his poor mother, like another Xantippe, must have sorely tried this good man’s patience; for she was, says Galen, “*adeo iracundam, ut etiam morderet interdum ancillas, semper autem èt vociferantur et contenderent cum patre, et longe quidem odiosius quam Xanthippe illa cum Socrate.*” This extreme diversity in his parents appears to have had a powerful influence on his young mind, seeing that under no circumstances was the equanimity of the father disturbed, whilst his mother was constantly suffering from the veriest trifle. At fourteen years of age he began to attend on the lessons of some of the philosophers, Stoics, and Platonists, and others; and he states his father’s causing him also to pay attention to geometry, arithmetic, architecture, and astronomy, with which he himself was well acquainted; and his beneficial advice against becoming the slave of any sect: the advice is so beautifully exhibited, that I am compelled to give it in the words of Galen, (p. 210 et seq.)^a

^a “ Ideirco inquit, oportet in tuis istis honestatis sapientiaeque præceptis, ne minimam ne quidam discrepantiam inveniri, qua ipsa à se ipsis discordent: quemadmodum veteres quoque omnes in hisce artibus servaverunt, quarum geometria, arithmeticaque principem obtinet locum. Ut igitur non procarem aut præcipitem esse oportet, ut te ipsum ab aliqua secta denomines, sed *longissimi temporis spatio et discere illas, et de illis ferre judicium,* sic omnes hominius comprobant, confitenturque etiam philosophi, magno studio quærenda esse hæc: quare nunc jam tibi ca sunt petenda æmulatione quadam, et discenda, et digna quæ a te augeantur existimanda, ut et justitiam, et modestiam, et animi magnitudinem, et prudentiam ex illis consequare. Laudant enim has virtutes cuncti, tametsi sibi ipsis consciæ sunt, nullam sc habere: dant etiam operam pro viribus ut aliis videantur et fortes et modesti, et justi et prudentes: unum illud est quod et si aliis non videantur, tamen revera esse ipsi magno studio contendunt ut

Now, says Galen, “I say, that the precepts I received from my father, I have, to this day, carefully followed; nor have I as yet allowed myself to be called by any sect, which I have studied with all diligence; unmoved by the various and daily changes in life, I remain as my father recommended, esteeming of little importance, honour, wealth, or fame.” The whole of this part deserves publicity; but I am precluded from further quotation. He proceeds to paint the folly of an insatiable desire for riches, and the happiness of moderation and content; the former, if possessed beyond due bounds, tends to many vices, such as avarice, &c., and with much useful truth, the book closes.

IX. GALENI, DE CUJUSQUE ANIMI PECCATORUM NOTITIA ATQUE MEDELA, LIBER SECUNDUS.

OF THE KNOWLEDGE AND CURE OF MENTAL AFFECTIONS: BOOK SECOND.

BAS. ED. p. 219.

This book is, to all appearance, a continuation of the preceding; and it is called the second book, in the Basil edition; but in that of Venice, it is styled, libellus. If the former is deserving of notice, not less so is this; it is equally interesting and instructive, and that in many particulars, which the titles would scarcely lead us to expect; thus, in one of the chapters the subject of the clepsydra or water-clock, by which time was counted, is introduced, in order to demonstrate some of the positions assumed in this moral and ingenious tract; and he is to be pitied who can peruse it without benefit, even though not absolutely connected with the subject of medicine, to the same extent as are most of Galen’s other writings. In the preceding book, affections of the mind are principally considered; in this, the faults or vices of the mind are taken up, and it is attempted to show how contrary they are both to judgment and to reason. In the first chapter we have the painful intelligence that, “*multo desunt in codice graco!*” Some distinction is drawn between faults and errors; and a state of doubt in regard to this, is placed by many, we are told, between virtue and vice; a good deal of the reasoning

mœroris videlicet omnis ac tristitiae expertes sint; quare huic a te rei in primis studendum est, cui omnes utique homines student, præque omnibus aliis virtutibus unum hoc quærendum.”

in this book is deduced from the views taken of certain sciences, as geometry, arithmetic, architecture, &c., on which much useful remark is bestowed. The errors arising from sectarian adhesion, or of hearing only one side of a question in philosophy or science, are pointed out, and reprobated; the contentions existing at that time on some of these, are stated, as on the subject of a vacuum, &c., the importance of demonstration,—yet liable to error, from haste and precipitation; which are always to be guarded against, and which he had sedulously adhered to, from youth upwards. The ready credence in the assertions of others, without duly weighing or investigating the subject, is a frequent source of error, and regret; this arises frequently, from an unhappy propensity to see more than others, and to attain it sooner; leading thus to ignorance rather than to truth and knowledge. Some philosophers both teach and dispute rashly, and without demonstration. Most men are ignorant in respect to subjects, doubtful or obscure; whilst our (“doxosophi,”) wiseacres, are only ignorant of those that are manifest. The disputes of the Stoicks and Epicureans on a vacuum, both between themselves, and against the Peripatetics, are noticed, and ended, he tells us, in mere probabilities; whilst they insisted on their being absolute demonstrations. We may remark that he makes an allusion to the squaring of the circle in one of his chapters (p. 222).

X. GALENI, DE CONSUETUDINE LIBER.

OF HABIT OR CUSTOM.

BAS. ED., p. 235.

The force or power of habit on the body in various particulars, both of food, and exercise of body and mind, is strongly set forth in this book; and it is declared to constitute a curative indication of high importance; at the same time that other indications may not be neglected! The testimony of Hippocrates and Erasistratus in relation to the power of habit was confirmed by most physicians. The habits relating to food, drinks, &c., are noticed. Concoction or digestion,—how, and what; diversity of power in different persons, for the same food, &c.; the variety of food required by

different animals according to their genus, &c. The difference of food in respect to its taste, and the fluids that are prepared from them. The power of habit, from external causes, as changes in the air; how influenced; from heat and cold, &c.,—exercise of body, and of mind; Hippocrates' opinion as to this; moderation in both commended. Evacuations from the body, habitual; not, however, so essential from habit, but from the necessity of preventing the accumulation of noxious matters. Some remarks incidentally introduced on the plans of education are then pursued.

XI. GALENI, DE SANITATE, LIBRI SEX.

OF THE PRESERVATION OF HEALTH.

IN SIX BOOKS.

BAS. ED., p. 246.

To detail the full intentions of these six books, would be impossible in the limits to which I am restricted. The head or argument of each book, will show its importance, and demonstrate that the whole series is deserving of the attention of medical men.

BOOK I.

This book purports to point out the reasons for striving to preserve the health, even up to old age. This constitutes an art, consisting chiefly of two parts, the one in the preserving of health, the other in opposing the powers of disease. The various circumstances by which life is sustained are adverted to, as air, and food, on which the author dwells, more especially from birth to the seventh year; giving many important directions, both as to nursing and subsequent education; strongly prohibiting the use of wine, and enforcing that of water. He continues his remarks on education during the second and third septenary, and in its connexion with health; adverts to the regularity of the discharges, as affording much to the healthy state of the organs which are employed for the purpose; the causes of retention of such discharges are noticed, and the means to be used to rectify the same. Health, we are told, is to be judged of by the natural functions; and he defines

health as consisting in that state of the constitution, wherein all its functions are freely performed without any pain or uneasiness. Milk, music, and motion are the three means or remedies in childhood. The various exercises of body and mind most appropriate at different ages. Pure water, and air, their respective signs.

BOOK II.

Here, we have pointed out the different modes and powers of exercise, friction, &c., including gymnastics. Nine kinds or varieties of friction, under three heads, of dura, mollis, mediocris; each of which is divided into pauca, multa, mediocris; with some significations of names employed. Frictions are employed as a remedy, or to preserve the body in a healthy state, or as preparatory to gymnastic exercises, and are therefore capable of much modification; and they will depend also on different circumstances, as to region, locality of the gymnasium, and the period of the year, or time of day in which employed; the various gymnastic kinds of exercise are explained, their powers and use. Muscular motion, per se, or indirectly; voluntary or involuntary; of the motion of the heart and arteries, &c., and its perpetual necessity; the variety of that of the pulse, and its causes. Motion from external sources, as from medicine, equitation; regulation of exercise to the state of the system, moderation in. General remarks and conclusion of the book, which seems to be intended to apply to the third septenary of life, viz., from fourteen to twenty-one, as the first was connected with the period from birth to fourteen years.

BOOK III.

A brief recapitulation of the two preceding books, followed by a continuation of the subject of exercise, especially of that of the gymnasium, the scope or intent of which is pointed out. The measures to be pursued in order to remove the debility of different parts, induced by various causes, are likewise considered, and are derived from diet, as well as from exercise. Frictions, dry, and with oil, in preparing for the gymnasium, are duly dwelt on; attention is bestowed as to the wind, that is respiration; the best means of

improving it, and the variety in the operation. Bathing, cold and warm, their effects. Weariness or fatigue, or rather debility, is divided into seven different kinds, which with their causes are explained, and their cure pointed out, as also the various evils incident to them.

BOOK IV.

The subject is still continued, and he enters into some explanations for his treating of the ratio medendi of many morbid affections, in a treatise on the preservation of health; which, he tells us was expressly to defend himself against the calumnies of the Sophists;—of the means of acquaintance with the vitiation of the fluids; the treatment of various forms of debility; some remarks on Erasistratus, and his opposition to blood-letting; various remedies spoken of, for various affections; amongst which, is the oil of savine: the article wine, is not forgotten.

BOOK V.

This book embraces principally the dietetics of advanced life, its diseases, cure, exercise, &c. The causes are enumerated which tend to promote obesity or thinness, and other changes in the body. The mode of living of two physicians, or grammarians, Antiochus and Telephus, is particularly noticed, who lived to a very advanced period. The nature and influence of various wines is treated of, as respects their country, colour, body, and taste;—their uses considered. Certain preparations of honey, with pepper and other articles, in old gouty, or calculous persons. The character and quality of bread, for different persons. Milk, its use and injury in different temperaments. Goat and asses' milk, and an excuse for treating on these subjects. An inquiry into the state of the bowels and urine in age, and remedies against their morbid states. The axiom is explained of “*Contraria contrariorum remedia.*”

BOOK VI.

A brief recapitulation of the preceding five books, is here given; and the author adverts to the precepts that are intended for pre-

serving health, which, owing to the great diversity of constitutions, must necessarily vary greatly. Those enjoying liberty and a sound temperament, must in this, differ much from those impelled to incessant labour, and who know not any certain time for nourishment or exercise; as well as from such as are uniformly valetudinarians. Organic variations, and numerous other circumstances, promote vast differences in all these cases. Of the use of mild vomition under certain circumstances. Various temperaments and intemperies noticed. The state of servitude considered, and its disposition to disease. All disease is affirmed to be produced, either from redundant or vitiated humours; their removal noticed on general precepts. The author adverts to the diseases arising from intemperance; promoting an accumulation of vitiated matters, and even augmenting these, by their unnatural feasts; gout, stone, and others, affecting them, or acute diseases attacking them annually or every second year, or even twice a year, with other remarks of analogous character. In the course of his books he treats of *hiera picra* and its uses, and its triple preparation. The various defluxions and means of restraining them are touched upon; and a variety of matters more or less connected with medicine, are successively brought to our view.

Much useful matter may be found spread throughout these six books; it is, however, enveloped in a mass of chaff; and yet they will compel attention when we fairly engage in their perusal.

XII. GALENI, ARS TUENDÆ SANITATIS, NUM AD MEDICINALEM ARTEM SPECTET, AN AD EXERCITATORIAM, LIBER.

THE PRESERVATION OF HEALTH, WHETHER DOES IT DEPEND ON MEDICINE OR EXERCISE ?

ADDRESSED TO THRASYBULUS.

BAS. ED., p. 402.

The occasion and reason for writing this book are afforded in a kind of preface, addressed to Thrasybulus. Who he was, we

are not told. In this book, the author states with accuracy, the respective claims of medicine, exercise, and diet, to the honour of preserving health; and he concludes that all, constitute as it were, links of one great chain, not easily to be separated; but which conjointly, constitute or form the science of medicine in its fullest extent. In the course of his remarks, he takes occasion to enter into an examination of the modes of defining medicine, which is closely and logically pursued in its different bearings; and as to the end or intention of this science, he alleges that seven arts are required in it, in relation to the human body, the scope of all being that of bodily health. In this view he enters into their consideration. Health, action, and beauty, in conjunction, form the summum bonum of the body; and what tends to this conjunction is by him traced in the particulars of the air, wakefulness and rest, sleep, motion, food, and drink; and the influence of moderation in preserving unchanged a state of health, is noticed. Some good remarks are made on the folly of investigating names, rather than things,—and an inquiry is instituted as to when dietetics and gymnastic and athletic exercises were first introduced. Much reference is made to Hippocrates, Homer, and others, and his subject terminates with an inquiry into the reason of the name of physician (*medicus*) as applied to the practitioner of medicine. The book is certainly ingenious and interesting in many particulars; and whilst evincing the profound researches of Galen on every point he treats of, yet, I think the subject has much of the mystification, that is not altogether uncommon in various parts of his writings.

This book is the concluding one, or end of those constituting the Second Class of Galen's works. We proceed now to the Third Class.

C L A S S I I I.

A E T I O L O G Y.

SIGNA quibus tum dignoscere morbos, et locos affectos, tum præscire futura possimus, docet.—Eighth Venice Edition, 1609, Title.

Complectens, cui insunt quæ de morborum ac symptomatum causis differentiisque; et reliqua hisce finitima materia per artem totam traduntur, unà cum commentariis in libros Hippocratis, de morbis vulgaribus.—Basil Edit. 1549, Title.

INDEX OF THE VARIOUS BOOKS IN THIS THIRD CLASS.

TRANSLATOR.

1. Galeni, de differentiis Morborum, &c., libri sex. First and second, - - - Leonicenus.
Third, fourth, fifth, and sixth, - Linacre.
2. de differentiis febrium, libri duo, - N. Leonicenus.
3. de inæquali intemperie liber, - - T. Linacre.
4. de Marasmo, sive Marcore liber, - J. Cornario.
5. de Comate, ex sententia Hippoc.
libellus, - - - - - A. Gagaldinus.
6. de Palpitatione, Tremore, Rigore,
et Convulsione lib. - - - - J. Guinterius.
7. de difficultate respirationis, lib. tres, J. Cornario.
8. de Plenitudine liber, - - - - V. Trincavelius.
9. de tumoribus præter naturam liber, H. Limanus.
10. de Morborum temporibus liber, - J. Andernach.

- TRANSLATOR.
- 11. Galeni, de totius morbi temporibus liber, - - J. Andernach.
 - 12. de Typis liber, - - - - - J. Andernach.
 - 13. ad eos qui de Typis scripserunt, vel de Circuitibus, liber, - - - - - J. Andernach.
 - 14. de causis procatareticis liber, - - - - N. Regio.
 - 15. in primum Hippoc. de Morb. Vulg. librum,
Comment. tres, - - - - - H. Cruserius.
 - ^a16. in secundum H. de M. vulg. lib. Comm.
secundus, novissime repertus. - - - J. B. Rasarius.
 - 17. in tertium H. de M. vulg. librum, Comm.
tres, - - - - - H. Cruserius.
 - 18. in sextum H. de M. vulg. librum, Comm.
sex, - - - - - J. P. Crassus.
 - ^a19. in librum Hip. de Humoribus, Com. tres, J. B. Rasarius.
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I. GALENI, DE DIFFERENTIIS MORBORUM ET CAUSIS, SYMPTOMATUMQUE.

OF THE DIFFERENCE AND CAUSES OF DISEASES AND SYMPTOMS.

IN SIX BOOKS.

BAS. ED. p. 6.

These books, under a number of subdivisions, treat of the differences of diseases, of their causes, of their variety of symptoms, and of the causes of those symptoms. We notice them in the order pursued in the Basil edition.

^a Numbers 16 and 19 do not appear in the Basil edition of 1549, but are introduced into the eighth Venice edition of 1609, the former number is noticed as being "novissime repertus."

BOOK I.

GALENI DE DIFFERENTIIS MORBORUM.

OF THE DIFFERENCE OF DISEASES.

This commences with propounding what is meant by disease, and what by health; what are primary and universal, and simple diseases; and, lastly, what those diseases are that are compounded of the former. It is that we may comprehend the nature of disease, that Galen first takes a concise view of its opposite, or the state of health. All men, says he, consider themselves well, when, by means of the various parts of the body, the actions essential to life are perfectly performed (*sine aliquo vitio perfungi potuerint*); and that if the operation of any part is painful (*offensa sit*), that part must be considered as in a state of disease (*ægrotare*).—If so, says he, then health is to be sought for in two things,—viz., in the natural functions of the parts, and in the structure of the organs (*fabrica instrumentorum*) by which those functions are performed. May we not be permitted here to inquire, if, in these few words, we have not a concise, yet comprehensive view of all that has been lately enlarged upon, in newfangled terms, as to organic and functional diseases? He goes on to say, with respect to disease, that it must therefore consist in “*vel operationis, vel structuræ oblaesio,*” and we may defy modern writers to define in fewer words, the objects thus brought to our notice.—To support his views, Galen is at no loss; but we cannot dwell on them. Certainly the merit of the doctrine, if any, belongs to him, but he has never been quoted as authority for it, that I know of, proh pudor!—I shall only remark, that he soon after adds, that, in order that any operation may ensue, the structure must be natural; if otherwise, it is productive of imperfect operation, or disease.

In considering the nature of the body, Galen regards it as a compound, and not, as some imagined, constituted of only one kind of matter; and he proceeds to state, that the composition and structure of the animal frame is of a triple character; viz., 1, of certain similar parts, such as arteries, veins, nerves, bones, cartilages, ligaments, membranes, flesh, &c. (Quere? What are these but the so-called *tissues* of the present day?) 2d, of various instruments or

organs, compounded of some or more of the above, as the brain, heart, lungs, liver, stomach, spleen, kidneys, the eyes, &c.;—and of 3d, the full and perfect body or animal system;—which thus is found to be constituted of the above different instruments or organs; and which, in like manner, are themselves constituted of the more simple, but similar parts, that are themselves formed by the conjunction of the primary or elementary matters. Thus, in illustration, he says, flesh, inasmuch as it is flesh, consists of the four primary elements; but, inasmuch as it constitutes a part of an organ or instrument, in its formation or magnitude, &c., a discrimination exists between them.

It would be impossible, without enlarging greatly, to pursue the views of Galen on this subject further; what is thus cursorily noticed, will, perhaps, suffice to give some slight appreciation of what is omitted; wherein he treats of the diseases incident to *similar* parts; of those incident to *organs* or instruments; of such as arise from defective formation, either natural or accidental; and of various other divisions he has thought it expedient to make. In speaking of redundancy in size, as constituting disease, he refers to an individual whose body augmented so greatly, that he could not move, adding that it was reported he was cured by Esculapius.

B O O K I I.

GALENI, DE CAUSIS MORBORUM.

ON THE CAUSES OF DISEASE.

In this book are considered, as causes of disease, heat, cold, food, both as to quantity and quality; constipation, moisture, and dryness;—of the causes of compound diseases of similar parts;—of those connected with instruments or organs in various particulars;—and of the causes of a solution of continuity, &c. In one of the chapters of this book, he strongly enforces the injury sustained by children, from the careless or injudicious manner of bandaging them by the nurse; as well as subsequently, in attempts to enlarge certain parts, by pressure on others, by which spinal distortion ensues; so that the system of corsets and stays of the present period, appears to have equally prevailed in the females of the time of Galen; and from him downwards.

BOOK III.

GALENI, DE SYMPTOMATUM DIFFERENTIIS.

OF THE DIFFERENCE OF SYMPTOMS.

Here he commences by defining or explaining some terms, which, though frequently confounded, have yet a difference, which is pointed out; and many excellent remarks are made on the change of names by authors, with the endless disputes thereby induced, and which it would not be unreasonable to ask our perpetual innovators in nomenclature carefully to peruse. “Litigando, (says he, speaking of these modifiers of well-established names, in order to uphold a favourite doctrine,) litigando enim de nominibus totam vitam conterunt. Quare ad finem artis attingere nunquam possint.” He considers in due order what a symptom is, both common, or proper;—some symptoms are referred to affections of the body; some to imperfect actions, and others to the circumstances connected with the excreta and retenta. The actions that become injured, are animal, natural, and vital; the first is subdivided under three heads; in one of which, that of sensation, Galen says something as to the five senses, and points out the symptoms arising from their diseased action. Symptoms are said to be of a fourfold nature; some are visible, some sensible to the smell, some to the taste, and some to the touch. Surely he ought to have added a fifth, that connected with hearing! Who can recognise the principal symptom of cynanche trachealis, by any better or more peculiar, than by the characteristic *sounds* of breathing or of coughing? And assuredly Galen was acquainted with this disease, as various references to the subject of angina, &c., may serve to testify. He does, indeed, say something on the subject of sound as a symptom, both as regards the voice, and of the crepitus and intestinal rumbling, &c., denoting their varieties by particular terms; which renders it the more extraordinary that he does not divide his symptoms by at least an equality of the senses.

BOOK IV.

GALENI, DE SYMPTOMATUM CAUSIS.

OF THE CAUSES OF SYMPTOMS.

This book, subdivided into three parts, is highly interesting, in following the learned author in his attempts to explain in various places the symptoms of diseases.

1. The first of these books treats of the causes of the symptoms, in the diseases of the senses of sight, hearing, smell, taste, and touch, and of the causes of pleasure and pain in each of them; and he seems to ascribe to the venereal orgasm a species of sense or sensation *sui generis*. He treats of the causes of symptoms arising from the *stomach*, appetite, hunger, thirst, &c., and in Chapter V. he dwells much on the *sympathy* between it and other parts of the system.^a He distinguishes between nerves of sense and motion, and treats of the causes of the symptoms of the affections of the brain, and of its faculties, &c., and he calls the brain in one part the “*sensoriorum sensorium*.” Some phrenological remarks may also here be noticed.

2. The second of these books embraces the investigation of the causes of the symptoms of depraved motions, in which the author treats of paralysis, convulsions, tremors, palpitation, rigor, cough, sneezing, pandiculation, itching, and many other vitiated motions. He then proceeds to consider the causes of the principal animal functions, in respect to their motions; and treats of the motions of the stomach, uterus, and other parts, both natural, and symptomatic of a diseased condition; of the causes of apoplexy, epilepsy, coma, lethargy, delirium, loss of memory, and other afflictions of the brain, &c.

3. The third book treats of the causes of the symptoms of the natural functions and faculties; of the causes of imperfect concoction in the stomach, vessels, and each particular member; of

^a Forestalling a similar doctrine of present date, though with more moderation; and which might have been perhaps duly appreciated by an acquaintance with the writings of Galen.

the symptoms connected with distribution through the system, and of its excretions; of imperfect nutrition; unnatural excretions, as of hemorrhages, vomiting, and purging, &c.; of symptoms appertaining to the urinary organs; of sweating, fluxions from the head; and of symptoms connected with the uterus; of priapism and gonorrhœa, or rather involuntary seminal discharge; together with the causes of the symptoms connected with several other parts, &c.

These last three books terminate the six books embraced in the first book of this class, *De differentiis Morborum*.

II. GALENI, DE DIFFERENTIIS FEBRIUM, LIBRI DUO.

OF THE DIFFERENCE OF FEVERS: IN TWO BOOKS.

BAS. ED. p. 113.

In this book some principles are laid down by which the differences of the various fevers may be comprehended; of their general division and the symptoms distinguishing them; the foreign causes of fever; of an ephemeral and pestilential fever; objections against those who consider fever of a putrid nature; and some analogies and differences noticed between putrefaction, in and out of the vessels;—of hectic fever and its varieties. In pointing out the principal differences of fevers, he seems to consider a preternatural heat as the essence of the disease; which heat is sometimes most extreme in the solids, at other times in the fluids, and sometimes in the spirits; according to a subdivision of Hippocrates, in some measure analogous to a theory of later times, of the continens or solids, the contenta or fluids, and the impetum facientia or spirits; the two last of which are regarded as more generally the first invaded, and if not soon resolved, the febrile disposition soon extends to the solids also. A long list of causes is given of the preternatural heat that gives origin to fever: such as fatigue, anger, &c.; external heat and cold, &c.; as also a pestilential state of the air. In the course of his remarks, he adverts to ignorance, especially of physicians, with accompanying reasons for such remarks; and divides such ignorant physicians into two genera: *the one*, confiding in *self-experience*, affirms that by reason alone, we cannot find out the nature of any thing; *the other*,

ascribing all knowledge to themselves, whilst, in fact, quite as ignorant as the others; yet always watching to catch the passing ideas of science. The hardness of the pulse in some diseases is taken notice of, in opposition to Archigenes; and many excellent observations and practical remarks abound throughout the whole book. The different forms of fever are adverted to, besides the above: intermittents, simple, continued, quotidian, tertian, quartan.—Of obstruction in the vessels.—A question seems to have been the subject of dispute, whether a fever in the blood occurred, and is considered by Galen. He says he had seen the state of rigor in quartans, without fever; and he presents to us a variety of the old names of febrile subdivisions, serving partly to illustrate the nosology of that period. The intermixture of febrile forms is pointed out; and, taking the whole of these two books into consideration, we shall be led to the conclusion, that sixteen centuries ago, the hypotheses and practical attainments as to the various particulars of fever and its symptoms, were as well cemented together, and quite as well explained and illustrated, as at the present *enlightened* period of medical science! Nor can it be doubted, I think, that a close perusal of them, will amply repay, both in pleasure and profit, all who will take the pains to examine them.

III. GALENI DE INÆQUALI INTEMPERIE LIBER.

OF AN UNEQUAL INTEMPERIES.²

BAS. ED. p. 162.

By intemperies, Galen apparently means that unseasonable or unfit state of some individual part of the body, or of the whole system, which predisposes to disease, if it be not actually disease itself. He makes four varieties of it,—simple, compound, equal, and unequal. A variety of affections are mentioned, seemingly as coming within the scope of this division. The modes of origin of this unequal intemperies are described; a concise view of his division of the body is given; and some particulars, as by what means

² Dyscrasia—*δυσκρασία*—significat intemperies; et opponitur temperamento, sive *ἕρπετος*,—est autem intemperies duplex; alia sanitatis, alia morborum, &c.—Castelli Lexicon.

inflammation arises and terminates in any part. Sundry anomalies are explained of this temperament, such as the sense of heat and cold at the same time, and of rigors not followed by fever, &c.

IV. GALENI, DE MARCORE SIVE MARASMO LIBER.

OF ATROPHY, OR MARASMUS.

BAS. ED. p. 170.

This state of the system is defined to be a corruption of the living body arising from dryness (*siccitas*). Marasmus, the Greek term, is that which is still used to signify a wasting away of the body; and has some analogy with tabes. An interesting subject it is made in the hands of Galen, who speaks of the inevitable approach of age, as one of the forms or states of marasmus; and he ridicules the folly of some Sophists who promised to make men immortal. He treats of it as affecting the whole, or a part of the body; and mentions one in his time, who wrote a book on the subject at the age of forty; he reached that of eighty, but was then so shrivelled and dried up, as to resemble the description given by Hippocrates in his Prognostics (*the facies Hippocratica*) as the precursor of death, viz., sharp nose, hollow eye, collapsed temples, cold contracted ears, with the lobes partially turned, the skin of the forehead, hard, tense, and dry;—the picture indeed of death, under the name of the Hippocratic countenance.

Galen here investigates the causes leading to old age, both in man and animals; he considers the usual comparison of life to a fire provided with fuel, and gradually becoming extinct by combustion, as altogether incorrect, although maintained by all the physicians and philosophers of the day. Equally does he oppose the idea of a similarity between the flame of fire and animal heat; and he vindicates Hippocrates from being the author of a book in which that subject is discussed. He attempts to prove the *necessity* of growing old, from the nature of the elements constituting the animal structure; and shows, that although it cannot be avoided, yet it may be hastened or anticipated. The different varieties of marasmus are in turn presented to notice, with the means of relief, from diet, bathing, drink, &c., together with much useful matter of a practical tendency, and well deserving attention.

V. GALENI, DE COMATE, LIBELLUS APUD
HIPPOCRATEM.

OF COMA.

BAS. ED., p. 183.

This is rather a commentary on the Hippocratic views of coma, as exhibited in various parts of his works, (Prorrhetics, Epidemics, &c.) He points out the opinions entertained on the subject by him, and its connexion with cataphora ; which last is considered as two-fold, viz., somnolent and wakeful, (coma vigil.) and which becomes in a measure a distinction between lethargy and phrenitis. Galen is far from agreeing to all the views of Hippocrates, and argues fairly when dissenting from him. Attention to this book may prove very useful to the physician, in some cephalic affections ; and so may likewise attention to the succeeding book.

VI. GALENI, DE TREMORE, PALPITATIONE, RIGORE,
ET CONVULSIONE LIBER.

OF TREMOR, PALPITATION, RIGOR, AND CONVULSION.

BAS. ED., p. 191.

The occasion of writing this book, appears to have been that of rectifying the error of Praxagoras, otherwise so superior in medicine and philosophy, in ascribing all the above, together with the pulse, to an affection of the arteries, differing only in degree ; and in so doing, Galen has presented us with an excellent treatise, wherein he points out the kind and variety of motion, in tremor, convulsion, rigor, and palpitation ; he notices the locality, causes, and difference of them. In that part where he treats particularly of palpitation, much stress is laid, when speaking of blood-letting, on the communion of the vessels. Adverting to the propriety of bleeding in some of these cases, which by many was much opposed, he notices the statement of Hippocrates of his daring so to do, and his reasons for so doing ; and remarks on the locality from which blood should

be drawn in certain specified cases. Some remarks are made, tending to show a difference between convulsions and tetanic affections.

VII. GALENI, DE DIFFICULTATE RESPIRATIONIS, LIBRI TRES.

OF DIFFICULT RESPIRATION.

IN THREE BOOKS.

BAS. ED., p. 214.

Few of the writings of Galen are, in my opinion, more interesting than these, or which will better repay the attention of the reader. It is impossible to do justice to them, within the compass I have allotted to myself. A full translation of them would, I think, prove acceptable to the Profession. I shall barely state, that setting off with the term of *difficultas respirandi*, he considers it to be the same with the dyspnœa of the Greeks;—the difference or variety in which, are to be learned by attending to the respiration, and thus, by comparison with that which is *natural*, judge of its existing state. This was strictly attended to by the ancients, although the latter, being as it were a unit, and the former infinite in variety, the difficulty was by no means small. The subject is largely pursued, in all its relations; its causes, natural and preternatural. Natural respiration by being either excessive or defective, becomes preternatural; the names attached to the variations, both of *inspiration* and *expiration*; of quick or slow, &c.; the mode of detecting their respective causes. Of the proportion between the pulse and respiration in health, the attention seems to have been extended in a degree of minuteness, that can scarcely be conceived of, to every particular connected with the function of respiration. The difference of respiration and of the pulse in youth and age is taken notice of; the influence of sleep on; of fever, and of other agencies, such as cold, heat, pain, internal congestions or suppurations, mental emotions, &c. The different varieties of respiration, as quick, slow, deep, irregular, &c., are all investigated; and a kind of classification seems to be attempted, in which the intimate connexion of the

function with the pulse is strongly laid down; and towards the end of the first book, the conclusion is drawn, that there are three genera of causes influencing respiration, viz., faculty or power, utility, and the essential instruments, which, separately, or conjointly, are productive of the changes, &c., which lead to its deterioration.

Continuing his observations in the second book, much reference is made to Hippocrates, as to what he remarks of the breathing, in his first and third Epidemics, in numerous cases of disease; a refutation of those who regarded respiration as involuntary, referring to his remarks in the second book, *De Motu Musculorum*. The whole book seems enthusiastic in praise of Hippocrates; and scarcely less so is the third book, wherein the other remaining books on Epidemics, ascribed to him, are referred to, and their cases considered; here, too, some inquiry is entered into, as to the authors of those writings. Not a little of the value of these books consists in the analysis thus necessarily entered into by Galen, of the writings of Hippocrates.

VIII. GALENI, DE (PLENITUDINE, VEN. ED.) MULTITUDINE LIBER.

O F P L E T H O R A .

BAS. ED., p. 302.

This book opens with a statement of the confused opinions of the medical men in Galen's time, respecting plethora.^a These various opinions he attacks, and turns the arguments of his opponents against themselves; indiscriminately urging his objections against the Rationalist and Empiric sects; against the Stoics, Herophilus, Erasistratus, and others. Partial and general plethora are noticed, and an inquiry is pursued as to whether plethora consists in the blood alone; in which many curious remarks on that fluid are to be found, as to its amount, &c., and not undeserving attention. The general indications of a plethoric state are pointed out, as redness, tension, sense of weight, pulsation, &c.

^a "Plethora, πληθερα; Lat. *plenitudo, multitudo, copia*. Accipitur communiter in foro medico pro humorum omnium abundantia; quamvis minus accurate; cum hac ratione a cacochemia non recte possit distingui. Plethora igitur proprie *sanguinis redundantiam* significat," &c.—Castelli Lexicon.

IX. GALENI, DE TUMORIBUS PRÆTER NATURAM LIBER.

OF PRÆTERNATURAL SWELLINGS.

BAS. ED., p. 330.

Explaining what he means by a preternatural tumour, or swelling of a part, or of the whole body; he states that it may be sometimes caused by an excess, of that which in itself is natural, as in a great increase or augmentation of obesity; or of the natural fluids of the cavities, &c. He, however, principally treats of them, as the product of actual disease; beginning with inflammation or plilegmon, whose symptoms are detailed and explained, with as much probability perhaps, as in the present day, its termination in abscess is noticed, and its various locations, inducing empyema, sinuous ulcers, fistulæ, &c. He then treats of atheroma and other encysted tumours; of anthrax, cancer, erysipelas, herpes, œdema, scirrhous, ecchymosis, aneurism, scabies, lepra, elephantiasis;—speaks of buboes, or swellings in the inguinal glands; of sartocele, hydrocele, and many others;—all indeed briefly,—and the whole of less importance than many others of his writings. It is not undeserving of a cursory examination, if only for the purpose of noticing the synonymes of many diseases, now differently denominated.

X. GALENI, DE MORBORUM TEMPORIBUS LIBER.

OF THE PERIODS OR STAGES OF DISEASES.

BAS. ED., p. 338.

This is an attempt to illustrate and explain the progressive periods of diseases, which he assimilates to the regular progression of the different stages of life, or age, in animals. He considers such consecutive changes in the progress of disease, as partly depending on the age of the patient; and that a doubt may be raised, whether any determinate point of time can be fixed on, as the beginning of disease. Much curious speculation is pursued in

the consideration of the subject, which is not devoid of interest. He concludes, however, in favour of a commencement; and opposes some opinions of Archigenes, and gives the views of medical men, anterior to the period of Archigenes. He then takes notice of the different periods in intermittents, and the variety of the class, interspersed with much useful observations in regard to the accession, progress, and stages of these diseases; together with practical remarks on the state of the pulse, under these various changes during the paroxysm; and he gives us a division of the paroxysm into six periods, viz., the beginning, a state of inequality intermediate between it and the third state of augmentation, or increase; the fourth is that of vigour, or full strength, or acmé; the fifth is the declension, and the sixth, the state of remission. Here he gives a digression, as to the abuse that had been made of ancient names, and the itch of coining new ones, which had led to much error and confusion; adding, that some were so prone to it, (*quidam hujusmodi ingenio refractario sunt prædicti,*) that they would not have regarded Apollo or Esculapius, if giving them advice to the contrary. He, moreover, adduces this fault, as a cause, and that a chief one, of their errors and ignorance as to the difference of diseases. He proceeds to consider the terms or names applied to the stages of an intermittent paroxysm, and affords a variety of particulars connected with fever, and with the opinion of Hippocrates on the subject. The periods or stages of fever, non-intermitting, (continued,) are next attended to, and of some of a mixed character.

XI. GALENI, DE TOTIUS MORBI TEMPORIBUS.

OF THE PERIODS OF THE ENTIRE DISEASE.

BAS. ED., p. 353.

This book, it is stated, ought not to be separated from the former, but should be considered as a part of it, and that Galen seems so to have intended it to be. Four times, or periods, are assigned to disease; the beginning, increase, acmé, and decline. These are respectively considered; the signs distinctive of each, pointed out; the variety in each under different circumstances, and other par-

ticulars. He then notices the nature of mortal diseases, their indications and periods; and the diversity induced, when, at the same time, the patient is attacked with several diseases; one generally predominating. Great stress is laid by Galen on strict attention to three principal parts of the body, viz., the brain, the heart, and the liver,^a together with the vessels that belong to them, and their respective subdivisions—pointing out the utility of this knowledge, and of the stages of disease, as greatly assisting in their cure.

XII. GALENI, DE TYPIS LIBER, VEL COMMENTARIUS.

OF THE FORM OR ORDER OF DISEASES.

BAS. ED., p. 362.

It has by some been supposed that this is not the production of Galen, inasmuch as much of what is herein delivered, is in opposition to what is to be found in his other writings.

The author sets off by stating, that many having largely treated of this subject, he thought an abbreviated and simpler statement might be useful to beginners. He proceeds to explain what the term indicates, and distinguishes it from points with which it had been frequently confounded. Many diseases, he tells us, have their types, especially fevers, with the exception of continued. The *type* is the order in which the occurrences take place. The *period* or circuit is the time employed therein. He notices the difference and division of types;—those of fevers, with their symptoms; and gives an explanation of those of double fevers, as the double quartan, tertian, and quotidian; and shows their numerous complications in a singularly curious and terminating chapter. Some have short accessions and long remissions; the opposite is the case in other instances; and this leads to a twofold division. Some occur at stated periods, some precede, and others are tardy. A *quintan* and a *septan* type are treated of;—the difference of pulse under these varieties are mentioned. A good deal of subtle distinction is made in all these particulars; yet, even admitting his divisions to be problematical, there is considerable interest in the book.

^a The lungs are equally entitled to the strictest attention, and it is extraordinary that Galen should have overlooked them here. “Aliquando dormit.”

XIII. GALENI, AD EOS QUI DE TYPIS SCRIPSERUNT LIBER.

AN ADDRESS TO THE WRITERS ON TYPES.

BAS. ED. p. 367.

This may be considered as subsidiary to the preceding book ; in it the author points out the error of those who confounded the types or order of diseases, with their period or circuit,—as well as in other respects. He gives a curious table, in which all the types of fevers are designated, in conformity with those erroneous hypotheses ; from that of the quotidian, embracing twenty-four hours, up to one called quinquegesimanus, of eleven hundred and seventy-six hours, or forty-nine days ;—which he says he formed at the request of his friends,—and points to the mistakes which such hypotheses lead to ; saying that fools only would engage in such pursuits, to the total neglect of more important subjects. The whole is sufficiently interesting to demand perusal.

XIV. GALENI, DE CAUSIS PROCATARCTICIS LIBER.*

OF PROCATARCTIC CAUSES.

BAS. ED.

Galen begins by maintaining the pre-existing causes of disease to have existence, and repels the sophistry of the older physicians. He then explains the action of such causes, by the changes they induce in the body ; of which he affords instances in point, in order to satisfy his friend Gorgias, to whom the treatise is written. We have here a proof, that however sedulous in his profession, yet that he was not inattentive to the poetic precept—

“ Neque semper arcum tendit Apollo ;”

for we find him referring to the *theatre* as proving the truth of his

* Procatarctica—προκαταρτικα—antegredior, præincipiens—est causa morborum præ-existentis, vel præ-incipiens, una cum aliis agens, unde primo morbus producitur.—*Blanckard's Lexicon.*

propositions ;—this resort of dissipation thus becoming in his hands a plaee for observation ! Heu ! quam pauci !—Accordingly, like the bee, culling from every variety of flower, so Galen draws important deductions from this locality, in speaking of Menander ; in whom he prognosticated a hemorrhage from the nose, whieh took place, to the astonishment of those around him. His remarks are levelled principally at Erasistratus and Herophilus ; but others are noticeed, and we have thereby the means of attaining the opinions of several, whose writings have not reached us. In the progress of this, he introduces a train of legal distinctions, and an oratorical piecee of imagery in defence of Orestes as the murderer of Clytemnestra, which is given as a reply to the sophisms of Erasistratus, and would not disgrace the acutest member of the bar. Another of the like nature, is the inquiry into the cause of death in a person to whom medicine is given,—whether it be the physician, the nurse, or the apothecary ! all in a strain of mirth, yet aecompanied with reason.

XV. GALENI, IN HIPPOCRATIS DE MORBIS VULGARI- BUS, COMMENTARII.

I. COMMENTARIUS IN PRIMUM LIBRUM HIPP. PRIMUS.

COMMENTARY ON THE FIRST BOOK OF EPIDEMICS.

BAS. ED. p. 400.

As commentaries upon the books of Epidemics, it is scarcely neecessary to say that a rieh treat awaits all who will take the trouble to explore them—far beyond that, whieh the simple text of Hippocrates alone affords.

In the Basil edition of this first commentary, *about a page is wanting*, which appears in that of Venice. Three commentaries are given by Galen on this first book, and three on the third. Both these (the first and third) books are regarded as the genuine productions of Hippocrates ; the others are at least problematical. On the sixth book of Hippocrates, we have six commentaries, *besides some additional ones, not appearing in the Basil edition, but are found in that of Venice*. It would be impossible to analyze them—they are themselves a luminous analysis of Hippocrates, with the superaddition of

Galen's reflections,—and which must suffer by any mutilation, as they consist of nearly three hundred folio pages. A translation of them would, I should think, be acceptable to the whole profession.

XVI. GALENI, IN LIBRUM SECUNDUM HIPP. DE MORBIS VULG: COMMENT. SECUNDUS.

A SECOND COMMENTARY ON THE SECOND BOOK OF EPIDEMICS.

VEN. ED., p. 198—*Novissime Repertus.*

It would seem that three commentaries on the second book of Hippocrates' Epidemics were written by Galen, or, at least, once had existence; but that this, the *second commentary*, has come to light at a period not very remote, (1609,) whilst the first is altogether wanting, as far as I can determine. The comments are pursued upon the same plan with the preceding,—and a vast deal of important practical and speculative matter is dispersed throughout. In several parts of these two commentaries, numerous lacunæ are unhappily supplied by stars, (* *), implying a loss or destruction in that part of the copy.

XVII. GALENI, IN LIB. TERTIUM HIPPOC. DE MORB. VULG. COMMENT. TRES.

THREE COMMENTARIES ON THE THIRD BOOK OF EPIDEMICS.

BAS. ED., p. 488.

This is one of the books considered as legitimate. It is on the same plan as the others. Some particular cases of disease, mentioned pretty concisely by Hippocrates, are very largely commented on by Galen, and are spread through all the three commentaries. The first is divided under twenty-nine paragraphs or sections, the second under nine, and the third under eighty-eight.

GALENI IN SEXTUM H. DE MORB. POPULARIBUS.
LIBRI SEX.

Similar in arrangement, &c., to the preceding books.

GALENI, RELIQUUM SEXTI COMMENTARII IN SEX-
TUM DE MORB. POP. LIBRUM.

VEN. ED., p. 212.

This was not printed in the former editions of the commentary on the sixth book; it is stated (Ven. eighth edit.) to be “nuper in lucem prolatum,” and is, as the title expresses, a continuation of the sixth commentary of the sixth book. It continues in the same style as the preceding, and begins with the ninth paragraph of the sixth book, and ends with the twenty-seventh.

GALENI IN SEXTUM HIPPOC. DE MORB. VULG. COM-
MENTARIUS SEPTIMUS.

VEN. ED., p. 215.

This, which is not in the Basil edition, follows the preceding, in that of Venice. It belongs properly to the consideration of Epidemics;—and it gives a description of the pestilential state of the air, explaining the various and successive symptoms, &c., in thirty-four paragraphs, accompanied with Galen’s comments on them.

GALENI, IN SEXTUM HIPPOC. DE MORB. VULG.
COMMENTARIUS OCTAVUS.

VEN. ED., p. 220.

As the preceding;—in forty-two paragraphs, and accompanying comments. In one of which (seventh), the “continentia, contenta, impetum facientia” of Hippocrates are explained.

The whole of these Hippocratic tracts, de morbis vulgaribus,

occupy, with their accompanying commentaries, about two hundred and fifty folio pages, and, certainly, are not undeserving of perusal, both on account of the facts stated, and of the explanatory aid afforded by Galen.

XIX. GALENI IN LIB. HIPPOC. DE HUMORIBUS, COMMENTARII TRES.

VEN. ED., p. 225.

These commentaries are not in the Basil edition, but they are in that of Venice (eighth), with a remark that they were not in the preceding editions. They are in different paragraphs; concise, and serving as texts on which Galen has abundantly enlarged; the three containing nearly one hundred paragraphs, and several lacunæ.

This book created formerly much dissension as to its paternity, whether it was written by Hippocrates or by his son Thessalus, or son-in-law Polybius. Galen has his doubts, but inclines to Thessalus. Be this as it may, it is deserving of attention, if only for the purpose of understanding the estimation in which the *fluids* were held in ancient times; and the folly and presumption of those who have at different periods risked the interests of medicine by their absurd attempts *to do without them*; explaining every thing by *sympathy*, and *associated motions*, (which they cannot demonstrate, but give upon trust) among the *solids* of the system alone!—It is not intended to affirm that all here said by the ancients is right, and all of modern date is wrong: it is the want of harmony and co-operation that is to be regretted in these particulars; which, by both parties might easily be surmounted, and a more equitable estimate had of every part of the system. It is the defect of information as to the real extent of the knowledge of our forefathers, that renders us so unjust to their merits, whilst we plume *our* writings with *their* feathers.

The third class terminates with the above. The fourth is now to be noticed. It is very much of the character of the preceding books, consisting chiefly of commentaries on particular parts of the writings of Hippocrates. All interesting, and of much value; yet scarcely capable of being epitomized.

C L A S S I V.

S E M E I O T I C S.

GALENI, librorum quarta classis, signa quibus tum dignoscere morbos, et locos affectos, tum præscire futura possimus, docet. Eighth Ven. Ed. Title, 1609.

INDEX OF THE VARIOUS BOOKS IN THIS FOURTH CLASS.

TRANSLATOR.

1.	Galeni de locis affectis, libri sex, - - -	G. Cope.
2.	de Pulsibus, ad Tyrone Libellus,	H. Cruserius.
3.	de Pulsuum differentiis, libri quatuor,	Idem.
4.	de dignotione Pulsuum, libri quatuor,	Idem.
5.	de causis Pulsuum, libri quatuor,	Idem.
6.	de præsagiatione ex pulsibus, libri qua- tuor, - - - -	Idem.
7.	Synopsis librorum sexdecem, de pul- sibus, - - - -	A. Gagaldinus.
8.	de Urinis liber, (spurius, Bas. Ed.)	J. Struthius.
9.	de Crisibus, libri tres, - -	N. Leonicenus.
10.	de diebus decretoriis, libri tres, -	J. Andernacus.
11.	in primum Prorrhетici librum, com- ment. tres, - - - -	J. Vasæus.
12.	in Prognostica Hippoc. comment. tres,	L. Laurentianus.
13.	de Præsagiis ex insomniis Libellus,	A. Gagaldinus.
14.	de Præcognitione liber, - -	J. M. Rota.

I. GALENI, DE LOCIS AFFECTIS, LIBRI SEX.

SIX BOOKS ON THE PARTS AFFECTED BY DISEASE.

BAS. ED., tom. iv., p. 5.

BOOK I.

This treatise, taken generally, is of much interest, and of great importance. The very name may be considered as indicating this character. It consists of a general explanation of those various modes that had been adopted, in order to become acquainted with the parts affected by disease; after which the subject is taken up more in detail, that is, as to the affections of individual parts. The whole is deserving of attention, but that is incompatible with our present object: a few particulars from each book are all that can be expected.

This first book sets off with affirming the importance of a knowledge of the parts diseased, and of the necessity of anatomy in attaining that information. Examples are afforded in proof of this; among which is to be found a reference to *the discharge, by coughing, of the bronchial cells*, or portions of them in pulmonary ulcerations, and of the intestinal coats in dysentery, &c.—No action or function of a part, it is asserted, can be injured, unless from an affection of that part, although it may be scarcely discriminated at times, from its slightness, but is only different in degree from that of the highest character. The different subjects adverted to are numerous; in that of retention of urine, the catheter is noticed, and some general divisions are given, in order to facilitate the distinction of affections, and of their causes; thus the obstructed actions of a part, lead to the notice of the excreta, position, species of pain, and the appropriate symptoms. A distinction is made between idiopathic diseases and those from sympathy; and an interesting case is related of distant affections removed by applications made to the spine; and notice is taken of the occasional loss of motion, without the loss of sensation, and of the reverse of this; with other circumstances of much interest.

BOOK II.

Three modes are stated as leading to a knowledge of the parts affected; one has reference to each individual part; a second, to the causes and affections or disposition of the parts; and a third, to the difference in the accompanying symptoms. Many of the remarks in relation to the different kinds of pain, are directed against Archigenes and his observations, and an explanation of that diversity is attempted; a great number are mentioned under a specific nomenclature. The mode and rationale of the means of knowing the seat of a disease and its disposition, are then pointed out, and some cases of interest are occasionally referred to.

BOOK III.

The distinction of primary from sympathetic affections constitutes much of this book. Archigenes is again attacked, and his observations on the loss of memory are critically examined, and his mode of treatment is pronounced to be absurd. This leads to a consideration of the origin of the nerves; and many of the diseases that are dependent on their presence, as convulsions, epilepsy, and others, are cursorily noticed and explained.

BOOK IV.

The affections of the face and fauces, &c., are here taken up, and their distinctive marks; of those of the spinal marrow, in the consideration of which, the subject of angina is touched on, one species of which was supposed to arise from a luxation of the cervical spine. The vitiation of respiration, and of the voice, through the influence of spinal affections: pulmonary affections, hemorrhage from; and a case of hemorrhage from swallowing a leech, is of some interest. One also of Antipatrus, a Roman physician, who died suddenly, after a long-continued irregularity of the pulse, but without much indisposition, or difficulty of respiration, until a few days previous to that event. Some cardiac and thoracic affections are briefly noted.

BOOK V.

In this book are considered the affections of the heart, more extensively than in the preceding; and those of the thorax, diaphragm, with somewhat on phrenitis; the affections of the throat or gullet; of the os ventriculi, and liver; with remarks on dropsy and jaundice.

The palpitation of the heart and its danger, from the connexion of that organ with every part, is particularly noticed; its other peculiar diseases, and those of the pericardium. In various parts, the etymology of sundry organs, &c., is given, and the changes thereof at different periods; stricture of the œsophagus is noticed, and its causes, &c. Some remarks allied to the pulmonary circulation may be found in this book. The diaphragm, septum transversum, phrenes vel mediastinum, is said to have had the first name given to it by Plato, from $\deltaιαφράσσω$, to limit or divide, as by a septum, the irascible power of the mind, supposed to be contained in the heart, from that of appetite or desire that was located in the liver. Such are the fluctuations of language, arising from fancy or hypothesis, and by which perpetual difficulty is presented to the advance of science. The os ventriculi, by which is now meant the upper orifice of the stomach opening into the œsophagus, was formerly called *cor*; from whence its name of cardiac orifice; it also had the name of *stomachus*, or rather, this term was applied to the œsophagus itself, subsequent to the time of Aristotle; whilst in Galen's time it had received the name of *gula*, from whence our gullet. It is obvious that infinite mistakes have arisen among medical writers by inattention to these changes, in investigating the works of the ancients, and thereby mistaking the accurate meaning of their terms! This ridiculous propensity for coining new names in every branch of science, in place of those well known and long employed, and more especially in medicine and its collateral branches, was never more extensive, (nor more absurdly conducted,) than at the present period, when the "march of mind" seems even to out-herod Herod himself.—A few interesting cases are to be found in this book.

BOOK VI.

Here we have the consideration of affections of the spleen, intestines, kidneys, bladder, uterus, and penis;—among those mentioned, we find nephritis and its various symptoms; diabetes, apparently a rare disease, since Galen seems to have met with but two cases of it, (“eum equidem ante hac, bis duntaxat videre potui.”) In speaking of uterine affections, much is said respecting seminal and menstrual retention; and the question “num uterus animal,” is duly considered and its absurdity pointed out. The subject of Hysteria, and its connexion with that organ is mentioned, especially as appearing in widowhood; and a curious trait in Diogenes is related; some reference is made to rabies, which is affirmed to be confined to dogs, though extended to man by means of their saliva. In speaking of the diseases of the penis, &c., various passages present an analogy to some of those diseases that are now considered to be venereal. From this brief account of these books, some slight idea of their importance may be had.

II. GALENI, DE PULSIBUS LIBELLUS, AD TYRONES.

A CONCISE TREATISE ON THE PULSE, FOR STUDENTS.

BAS. ED., p. 166.

At No. xviii. of the *prima classis* of Galen's writings, (p. 491,) we have the treatise “*de pulsuum usu*;” and which, had I not fixed on the arrangement of the Venice and Basil editions, I should have rather connected with the present and succeeding books, as a more appropriate location. It is deserving attention, from having so much in it, of close connexion with the subject of the circulation of the blood; the few extracts given from it will perhaps serve to satisfy most persons, desirous of truth, rather than of being considered “*addicti jurare in verba magistri*.” Before perusing the present treatise, it may not be useless to refer back to the book above-mentioned.

The outline of the *present book* is here presented, more in proof of Galen's ever active mind, than from any estimate of its absolute correctness, or of its practical utility; yet it contains much interesting matter for reflection.

The heart and arteries have a uniform pulsation, though not equally sensible in all the arteries; wherever it is capable of being felt, it is equally adapted for observation; but some parts are superior to others, and of these the carpus is best. The arteries are extended in every dimension, viz., in length, breadth, and depth. The quality of the motion; the interval or time of rest; equality and inequality of. Of a common and inordinate pulse; inequality of one pulsation; of a compound inequality of pulsation; vermicans, fluctuosus, formicans, magnus, longus, latus, altus, vehemens, mollis, celer, frequens, æqualis, ordinatus.—A threefold difference in the mutation of the pulse, viz., natural, non-natural, and præternatural. Each one may learn his own pulse by experience.—Of the pulse in men and women in infancy, and in age, and at intermediate periods. Modification of pulse according to season, country, &c. Pulse in pregnancy; in sleep; on waking;—changes of, from habits, natural or acquired; differences in, from different exercises, or baths, or food; influence of wine, water, &c., on; all which, immoderately used, are præternatural; their action is explained by the vital power, and the character of the pulse induced. Of the pulse of syncopal affections; of anger, pleasure, grief, fear, pain, and its varieties; of the pulse of inflammation; its locality and character, as of the diaphragm, in pleurisy, and its varieties; in empyema, marasmus, the hectic pulse in it, and in plithisis; pulse of peripneumony; of lethargy; phrenitis; catalepsy; catochos; convulsions; palsy; epilepsy; angina; orthopnœa; hysteria;—the pulse, and its diversity in various affections of the stomach; in dropsy, and its varieties; in elephantiasis, jaundice, and in those who have taken hellebore, &c.

We see by this brief *exposé*, to what an extent Galen carried his observations on the pulse; *can it be possible* he never dreamed of, or elucidated the route of the circulation!

In the succeeding books, the subject is very minutely entered upon. These books, are thus denominated.

DE PULSUUM DIFFERENTIIS. Bas. Ed., p. 178.

DE DIGNOTIONE PULSUUM.

DE CAUSIS PULSUUM.

DE PRÆSAGATIONE EX PULSIBUS.

Making sixteen separate treatises, and all of greater or less interest.

III. GALENI DE PULSUUM DIFFERENTIIS.
LIB. QUATUOR.

OF THE DIFFERENCE OF PULSES.

IN FOUR BOOKS.

BOOK I.

Galen begins with some good remarks as to the use of names. In themselves, they only facilitate the attainment of, but add nothing to the art. He animadverts on the perpetual changes made in them, and on the useless commentaries and disputes on the subject. These seem to have been as numerous as in our times; and to have no less retarded the progress of the science. He then notices the *name of pulse*, on which numerous commentaries appear to have been written, (*omnes qui de pulsibus instituerunt commentari;*" Ven. ed.) Hippocrates seems first to have employed the term, whilst others called it palpitation; and this was a common name both by physicians and the public. He then notices the intention of this book, and proceeds to consider the different genera, species, qualities, or difference of pulses, by all which names they have been called. This leads him on to the consideration of them more in detail; and he gives, in a tabular form, no less than twenty-seven varieties, dependent on the threefold distinction of quick, slow, and moderate; he next considers the *quality* of the stroke.—The difference of sects, some of whom judge of the variety of pulse by the distention of the artery, others by its contraction;—its state of quiescence, and the difference of *it*, and of *the rhythm*, which he explains;—also the different inequalities of motion; with tables, &c., he speaks here of various pulses, such as the undulating, vermicular, formicans, vibrating, and convulsive, &c., and gives an explanation of them, and of several others.

BOOK II.

This second book begins with an explanation of its use. Of the use of names, and of definitions, in opposition to the sophists; some

of whom he severely animadverts on, and calls one of them atrocious. This is a highly amusing chapter; and his description of his arguing with them, and turning them into ridicule, would form an admirable appendage to some of the writings of La Sage or Quevedo. He takes occasion to dwell on the opposition of Archigenes to himself (Archigenes) in his nomenclature. He then states how he discovered the differences of pulses, with reasons for distinguishing the common genera; and alternately lashes his opponents for their opinions, and their nomenclature.

B O O K III.

In this book Galen takes notice of several varieties of pulse; the vehement and languid, &c., refers many of the difficulties and contrarieties on the subject, to the intermixture of terms, and improper definitions. Archigenes, who is again the subject of his attack, errs greatly in even his definition of a vehement pulse; and the perpetual disputation about names, he tells us, had been more than useless, and that they have filled immense volumes with such follies as are undeserving of pardon; for since the subjects are obscure, if man's life was tripled, even then we should have but imperfect acquaintance with them.—Much more to this effect he says, that is deserving of consideration; and calls up for castigation various authors besides Archigenes, as Magnus, Herophilus, Athenæus, Asclepiades, &c., and points out their contradictions and intricacies; he especially speaks of Archigenes and his followers, as “imperitissimi et pertinacissimi,” and of their entire ignorance, abuse, and obscurity in their names, when they speak of heavy, light, impeded, and repressed pulses. He gives a laughable interview and conversation with an old man of ninety years; and shows himself a deep critic in nomenclature and etymology, in adverting to the word *γοργωδης* as improperly employed by Archigenes, meaning as it does, poetically, stridulus, which will not apply to the pulse in question.

It may be a question at present, whether this same term *stridulus* is properly applied to discriminate the peculiar sound in croup, as in different writers.—Objections are made to other definitions of Archigenes; and the host of hard names employed by him to explain the different pulses, are considered by Galen as being both obscure and useless. In this he was unquestionably right, if we may judge from those he has adduced, of which the following few

are samples, as difficult of pronunciation as any Polish or Indian words, in the softly-flowing Greek : *apokekroumnismenos, extethamboumenos, apopepougos, engkaluptomenos, ukopleptomenos, &c., &c.* The Latin translations are not a jot behind, either in obscurity or in utility, as applied to the pulse, and which they could scarcely be divested of, in an English dress, though possibly they might befit the unpronounceable dialects of Wales or Poland. Galen has well bestowed on this wretched host the epithet “*id genus nominum immensus numerus.*” Alone, and separate, adds Galen, these words have some meaning, but they have no appropriate connexion with the pulse. He affords some idea of his own views of a vehement pulse ; opposes the Pneumatists in their explanation of a full and empty pulse, and gives some reasons for changing those names. He states what he thinks to be the proper signification of a hard and soft pulse, and the deception of the Pneumatists in respect to them.^a

BOOK IV.

In this book, we find Galen still sedulous in repelling the ancient definitions, by which each partisan thought fit to transmit the notions of the pulse peculiar to his sect. He assigns some reasons whereby he was compelled to combat the shadows of the Pneuma-

^a It may be here remarked, as of some interest, that in this book, Galen evidences his acquaintance with the writings of both the Old and the New Testament. He is speaking of the difficulty of divesting one'self of sectarianism in medicine, and repeats from some writer,

“*Ut ligna tortuosa nunquam corrigas, virides nec arbor vetus, aliò si transferas, produxerit stolones,*” &c. He then adds,

“*Citius enim Moysi asseclae et Christi deccendant de sua disciplina, quám qui sectis sunt addicti et consecrati, Medici et Philosophi.*”—Basil Edit. 1549, as translated by Crusierius.

In an early edition of the Venice copy, the translation by Crusierius is given as above. But in the sixth Venice edition, it is thus changed :—

“*Potius enim alii omnes deccendant de sua disciplina, quam qui sectis,*” &c.—Now, why this change? In the Greek edition of Basle, 1538, the original words are *Μαυρού καὶ χριστών*. It apparently can arise only from the Basil copies being from a Protestant press; whilst the Venice *primary* editions, being detected in these obnoxious references of Pagan origin, must have been altered in the subsequent copies, by authority from Rome! There, however, stands the original text in Greek, as given by Galen, and helps to strengthen our views of the universality of his researches.

tists; and explains his opinion of what the pulse properly is; and from what he says, it appears that young physicians, *then*, as *now*, gave publicity to their lucubrations, ("non requirunt multa verba, quibus scatent juniorum medicorum libri.") He speaks of the various definitions of the pulse by the ancients, and the disputes thereon, apparently, as numerous as in later periods. It is a curious chapter, (ii.) and quite as well deserving of attention as any of the speculative treatises of Parry, Hillier, and others. Some defined the pulse, as the motion of the arteries; to this, some super-added that of the heart; others say it is that of only the arterial part of the heart, or ventricle. Further disputes sprung up, as to whether the arteries pulsated by their own accord (*sponte sua*), or by that of the heart, &c., and although he freely criticises, he yet seems to admire Aristotle. He notices the different structure of an artery and vein, and regards the pulse as a peculiar motion or action, especially (*præcipue*) of the heart, and then of the arteries, which, by a vital faculty are excited to distension and contraction, and whereby a degree of native heat is maintained. From Galen's statement, it would seem that the labour would be immense, and useless, to pursue all that had been said on the subject. That it was a favourite one, we cannot doubt; for he tells us, the pupils of Herophilus were the principal leaders of this curiosity, (*huius curiositatis*), to whom several of the family of Erasistratus succeeded; and to these, many Pneumatists and Methodists.

In the succeeding chapter, (iii.) he gives the description of the pulse, by Heraclides of Tarentum, Alexander, Demosthenes, Bacchius, Aristoxenes, Chryserneus, another Heraclides of Erythrea, Agathimus, Archigenes, Magnus, Athenæus, Asclepiades and his followers, Moschion, Erasistratus and his followers; many of whom may be recognised as writers quoted by authors of the present day. We must suppose, therefore, that the pulse has always been a subject of great interest, and that among so many learned men, and anatomists, had their writings and observations reached us, in *full*, we should probably find *more* than mere conjecture and distant probabilities, of a well understood and acknowledged circulation. As to Erasistratus and his followers, since they disagreed amongst themselves, as much as they did with other sects, we are led to wonder, says Galen, not so much at the diversity of medical sects, as that *they* differed the most, who were the disciples of the same master!

IV. GALENI, DE DIGNOSCENDI PULSIBUS. LIBRI
QUATUOR.

BOOK I.

ON THE KNOWLEDGE OF THE PULSE, FOUR BOOKS.

In this book, Galen remarks on the difficulty of attaining a knowledge of the pulse; and previously recapitulates his division of his books on the pulse, pointing out which are most connected with medicine, and which with philosophy. The first he considers common to both, (*de differentiis.*) The second and fourth (*de diagnoscendis et præsagitione,*) to the physician, and the third to the philosopher, (*de causis.*) Of particulars to be considered in the distension and contraction of the pulse, and in various other points; *how* to feel the pulse. He lays down four principles for knowing the pulse. Investigates the disputes as to whether the contraction of the pulse is felt;—*how* to apply the hand to the artery, to perceive the contraction; prognosticating by the pulse, and some cautions, &c.

BOOK II.

Here, he notices the *quick* and *slow* pulse, and compares them with the moderate pulse, to which reference is always to be made in becoming acquainted with any other variety. He animadverts on Herophilus and his followers, for being so careless and negligent respecting the pulse.

BOOK III.

Galen defines a *quick* and *slow* pulse, and points out how they are to be known; referring to his previous remarks respecting the intervals of motion, and the force of strength, and, keeping in view the moderate pulse, the state of distension, &c. He points out the attainment of the difference of the pulse in regard to length,

breadth, and depth, (*longitudo, latitudo, profunditas*), or the quality of the motion; he then notices the mode of acquiring a knowledge of the *rhythmus*,^a (interval of stroke, &c., Qu.?) giving a tabular view of his ideas, in two columns, representing the states of *distension* and *contraction* of the pulse;—the commencement of this scale is that of quick (*celer*) in both, and the ending of it is (*tarda*) slow in both; *moderata* in both, constitutes the mean of the scale, and the intervening degrees are filled with varieties in combination of these three terms.

BOOK IV.

Here we have the *hard* and full pulse; and his opposition to Archigenes and other ancients, as to their knowledge of the pulse. He describes how we are to know the stroke (*ictus*) of the pulse. A great (*magnus*) pulse, by some judged of, from its vehemence; by others, from its hardness. Of a full and empty (*vacuo*) pulse; some did not distinguish a vehement from a full pulse; and Herophilus and his followers did not know it; whilst Archigenes has written obscurely and erroneously respecting it, and others equally so. Galen then explains a full pulse; full, being first considered as of three kinds. Much interesting and useful matter may be found interspersed through these four books.

V. GALENI DE CAUSIS PULSUUM. LIBRI QUATUOR.

ON THE CAUSES OF THE PULSE. .

IN FOUR BOOKS.

BOOK I.

The causes giving rise to the pulse, are here *generally* adverted to, and are very ingeniously treated of under three heads or genera;—some arising from the nature of the instruments or organs; others

^a Rhythmus—ῥυθμός—proportio pulsuum prioris cum subsequentibus. Castelli, Lexicon.

generated, as it were. He then speaks of these separately; the instrument or artery, and foreign agencies, as heat, emotions, passions of the mind, eating, drinking, exercise, and so forth. The influence of age, as in infancy, &c. The inequality and other changes of pulse, from these and other causes, are noticed.

B O O K I I.

As the causes of the pulse *generally* constitute the principal intention of the former book, so those inductive of *inequality* in the pulse, are here considered. Of the causes of inequality in a single pulse,—of the vibratory, and many other varieties of pulse;—all, probably, as fully and as well explained as by any later writer.

B O O K I I I.

This may be in a measure considered as explaining the operation of the so-called *non-naturals*, in promoting the action and changes of the pulse:—of the pulses of man and woman,—of those of warm temperament,—of thin persons;—of its changes by age, season, climate, and state of air,—of pregnancy,—in sleep, and waking,—from artificial habits or temperaments,—exercise,—hot baths and cold,—food and wine. It is a book replete with interest, independent of its more immediate connexion with the pulse.

B O O K I V.

Preternatural causes are here noticed as productive of modifications of the pulse:—anger, joy, sorrow, fear, grief, pain;—the pulse of inflammation, of pleurisy, suppuration, decay, consumption, peri-pneumony, and a host of other diseases, are here noted; and, assuredly, in many, with a precision not inferior to any writer on the pulse of the present period.

VI. GALENI, DE PRÆSAGATIONE EX PULSIBUS,
LIBRI QUATUOR.

OF PREDICTION FROM THE PULSE, IN FOUR BOOKS.

B O O K I.

Some general remarks on prognostication ;—on that from a large and small pulse ; from a quick and slow one ; strong and weak, hard and soft pulse. In this consideration, the state of the pulse is to be connected with the particular disease, and not simply estimated from itself. The previous books on the pulse should be consulted before reading this.. Various pulses noticed, and their changes ; privation of pulse ; of the long, short, broad, narrow, low and high pulses, from whose varied combinations twenty-seven different pulses originate, &c. Four general differences in distention ; causes increasing and oppressing strength ; what external causes produce a hard pulse, and a soft one, &c.

B O O K II.

After noticing four differences of pulse according to the contraction of the arteries, similar to those derived from distention, he proceeds to note the prognosis from a frequent and rare (raritate) pulse, by the rhythm, from inequality in, from intermission, &c. Signification of rhythm, and inequality, &c. What pulse affords two strokes in one distention. Signification of certain pulses, as caprizans, dicrotus, and others. What is presaged by order in the pulse, and what by its disturbance. An intermitting pulse in age and in childhood less to be dreaded than in youth.—Many of these terms have maintained their standing in some of the treatises on the pulse in later times.

B O O K III.

In this book, the peculiar pulse in the different diseases of the heart is noticed, and the appropriate pulses of different fevers. He

is very precise in defining his terms; thus he says, that he is about to treat of those pulses that are *peculiar* to affections (*affectionibus*) or diseases; and he calls that an affection that is preternatural, (*præter naturam*), and the pulse peculiar to each one, that which perpetually attends it, or most frequently. He then proceeds to the different cardiac and other affections arising from heat or cold; with some observations as to the pulse in pestilential fevers, and on other sources of prognosticating, in which he seems to have observed the heat about the *præcordia* greatly increased, whilst other parts were cold;—of the pulse in such states.—A very useful chapter follows, on the proper signification of names and metaphors, and its connexion in regard to the pulse is pointed out. The general character of the pulse in fever, and the individual character in some particular kinds, explained. Changes in the pulse, from certain causes acting on the heart and arteries.

BOOK IV.

Presages drawn from the pulse, as modified by affections of other parts, especially those of respiration, nutrition, the head, &c. He notices the pulse, thus created by affections of the lungs, thorax, liver, diaphragm, pleura, stomach, and other digestive organs; and those of various other parts, as inducing sympathetic action.

Thus, then, the sixteen books on the pulse are concluded; but we find, immediately succeeding to them, one entitled, (at least in the Ven. edit.), *Synopsis librorum sexdecim de pulsibus*, or *Synopsis* of the sixteen books on the pulse.

VII. GALENI, SYNOPSIS LIBRORUM SUORUM, SEXDECIM, DE PULSIBUS.

VEN. ED., p. 123.

The following preliminary remarks to this book, under the name of “*Censura*,” may not be unacceptable to the reader, as showing that Galen had been induced to write such an epitome of his sixteen books on the pulse, that it might be more correct than if committed

to another person; and he commences by a recommendation to read his larger work first, as then, a few words of the synopsis, by association, would recal much to mind.

Galen, at the close of his book "*de arte medicinali*," thus writes, "It is my intention to write another book, in form of Epitome of all my sixteen books on the pulse, which I shall entitle Isagoge, Synopsis, or Epitome!" But in his book, "*de libris propriis*," chapter five, he says, "I have written one other book, a synopsis of the abovementioned sixteen books on the pulse." Now this must be that book abovementioned by Galen, for both the doctrine, and the reasons assigned for writing it evidently prove it. The author refers the reader frequently to the treatise on the pulse addressed to beginners, (Tyrone), and which he sometimes calls Isogotic; also to the larger work in sixteen books, and not unfrequently to the books "*de Crisibus*," and some others. Now as all those are declared by him to be his, this is found conformable to them; and he often declares that much will be gained by a previous acquaintance with the larger work, which he inculcates in the eleventh chapter of the present tract.

He then reminds the reader of the fourfold division of the work, viz.,

1. Of the difference of pulse, and mode of distinction.
2. Of the knowledge of the pulse, and how the distinction is made.
3. Of the causes, &c., of different pulses.
4. Of the prognosis of the pulse, and which he considers as the manifest point for which the whole was written. The danger of attending to names, rather than to facts, is strongly re-enforced. "Often," says Galen, "one word has various significations, and very often the same thing has different appellations, not always or equally appropriate, or of indiscriminate application. There is, therefore, a great chance of some equivocal meaning being bestowed by those who are not fully masters of a language, or of its various idioms," &c., and he therefore strongly urges the absolute necessity of giving to things their correct appellation.

The diastole (dilatation) and systole (contraction) of the arteries have received the name of *pulse*, to which two things or circumstances have relation, viz., the *space* through which the artery moves, and the *time* of that motion. He then assumes the position that four generic differences are to be considered in the diastole of

the artery, viz., as to quantity, time, tenor, and the body of the vessel itself. He hereby distinguishes twenty-seven special varieties in the pulse, though limited by others to a smaller number. Varieties further arise, in relation to the length, breadth, and depth of motion, &c. He attempts to prove, that no other than the above four named generic differences can be found in the diastole, by impugning the opinions of those who have explained a diversity of pulse, from the nature or character of the article conveyed (*re infusa*) through the artery; it being a question, if arteries were devoid of blood, or contained both it and spirits; also, as to the blood, whether it be serous and thin, thick and viscid, or intermediate between both.

He adverts to many absurdities advanced respecting the pulse; as of the *full* pulse, making three varieties, and confounding names, &c. He then proceeds to notice the different speculations on the systole of the artery; considered by some as sensible, by others, as insensible, and states the division of pulses founded thereon. After this he adverts to the hypothesis respecting the *rhythmus*, or interval between the diastole and systole, as to the equality or inequality of time, inductive of variation in the pulse with respect to strength, continuity, or interruption, &c.; then points out the mode of estimating the quantity of the diastole and systole; and says that the volume or smallness of the pulse, with its other variations, should be attended to in the systole. This is followed by noticing a triple genus of causes of the pulse, designated by the terms continent, antecedent, and procataretic. This being explained, he points out the uses of diastole and systole; and remarks, that when those are augmented, such and such pulses are induced. He now proceeds to a consideration of the pulse in health, as leading to the knowledge of that which is preternatural or unhealthy; and examines the propositions of Herophilus on the subjects of diastole, systole and *rhythmus*; says that systole can scarcely be known in new-born children; but that as age advances, the four times or differences augment; and he then directs the reader to the mode of acquaintance with the systole and diastole, both in febrile invasion, and in putrescence of the humours. Diastole, he says, relates to inspiration, systole to expiration; and by comparing these, the extent of lesion may be judged of. He then notices some pulses, in which the *rhythmus* varies; the difference of natural pulses, as induced by sex, age, season, &c., and takes a glance at those natural things or circum-

stances in sickness (symptoms) by which accurate information of the affection may be attained; next speaks of the signs of febrile invasion, and of those which Themison regarded as absolute and certain. He now proceeds to consider the causes of inequality in the pulse, and reckons up *nine* orders of such inequality in one pulse; says that the inequality in *one* pulsation is not in the softness or hardness of the artery; and that if it be in *several* pulsations, it will generally be in frequency or in slowness. He observes that a conjunction of inequalities in one pulse, will enable us to judge which concur in promoting a good or bad crisis; mentions what pulses should be considered in the diastole of the artery; what affection is peculiar to each, and what prognosis may be drawn from them. He then describes a great variety of pulses, under the names of vibrating, waving, undulating, vermicular, formicans, &c., and proceeds to notice some, that in one diastole, have an inequality in different parts of the artery; explains sundry occasional phenomena apparent in the pulse; speaks of the knowledge attained of fever, by means of the pulse; of the different forms of fever, and of the pulse peculiar to each, and of the indications of *crises* to be derived from it. He now proceeds to speak of the pulse peculiar to various diseased states, as pulmonic and thoracic affections, of the diaphragm, liver, spleen, stomach, bladder, uterus and its membranes, muscles, testes, &c., and then takes notice of the diagnostics of those causes (external) by which the pulse is altered in magnitude or diminution, such as baths, frictions, exercise, &c., —what indications are deducible from slow, frequent, intermitting, intercurrent and other pulses; and speaks of inequality as consisting either in the situation or the motion of the parts. In a synoptic view of the whole subject in his last chapter, Galen collects what has been said, and teaches how to prognosticate the termination of disease in health or in death; the time of recovery or death, and the mode of each; embracing in this consideration the rules for knowing whether the *vis vitalis* is weakened by its own exertions, or is overpowered by a host of foreign agencies; and concludes with some remarks on the termination of future crises in various modes.

This hasty summary of the different books on the pulse, occupying nearly two hundred folio pages, imperfect as it is, is sufficient, I should judge, to impress on every medical man, an opinion highly favourable to the illustrious author of these ancient views, had even

nothing further of his writings reached us. Upon the whole, on reviewing the sixteen books of Galen, on the pulse at large, or his condensed synopsis, and other treatises on the subject; I apprehend we may safely conclude that there is full as much good sense and reason in his speculations, as in any of those that have since his time been promulgated by Solano, Bordeau, Nihil, Falconer, and others, down to the later period of Hillier, Parry, and many more in Great Britain, and elsewhere. A comparison of his statements will establish the correctness of many of his propositions; and we may be inclined to doubt, whether a man, who here so fully proves his powers, and the resources of his art, could possibly have drawn his explanations and deductions on the pulse, from dissections and observations of the monkey alone; or that one who observed so cautiously and extensively, could be deficient in a knowledge of the circulation in most, or all of those particulars, which have been so pertinaciously awarded to Harvey! The loss of some of his writings has unquestionably thrown difficulties in the way of knowing the full extent of his information on this, and some other subjects; but enough is here said, in connexion with other parts of his works, to render such opinion not even tenable. I have largely discussed this subject elsewhere,^a and shall only add, that so many authors are alluded to, whose works and opinions are known to us through Galen alone, as to give a high character to his extensive research and erudition; and our regret must be strengthened, that so much actual information of ancient science, especially that of medicine, should have been lost, in the conflagration of the Alexandrine and other libraries, before the general extension of printing had rendered such an event of comparative insignificance.

VIII. GALENI, DE URINIS, LIBER SPURIUS.

O N U R I N E S.

BAS. ED., p. 474.

It seems doubtful whether this be the production of Galen, although he did write one on the urines, as he mentions in his first commentary on the humours. That the ancients generally thought

^a Refutation of Harvey's claims.

more on the subject of this discharge, and attended to it more uniformly and critically than is now done, cannot be doubted; and that many indications, &c., framed on the discharge, either as to colour, density, or tenuity, and other points, were well founded. It must be admitted that we fail greatly, by our almost total relinquishment of its inspection, whilst we sedulously attend to the discharges from the bowels, the stomach, lungs, &c. If these are required,^a why not also, in a greater degree the inspection of that fluid, which comes freighted with so large an amount of saline and other matters secreted from the blood, and freeing that important fluid from some of its most injurious contents. Why has this occurred? And from what period may this solecism be dated? It may be difficult to respond to these questions. Possibly, the dignity of the Profession was humbled, by the empiric extension of this subject of inquiry, in the hands of the so-called water doctors, who regarded the urine as the sole register to be examined in respect to the patient! In laughing those rogueish medicasters out of countenance, the regular members have occasionally received some rubs, which seem to have caused a perfect obliviscence that the urine was a secretion from the blood; and an excrement whose discharge from the system was of infinite consequence. Its saturation and super-saturation with saline matter, that could find no exit from the circulation except through the kidneys; and the evil to be apprehended from its retention, to the system at large, or to particular parts; conspire to prove that it was deservedly considered of the highest importance by our patient and indefatigable forefathers in medicine! and that, although they may have overdrawn the subject, it is not the less deserving of our favour and protection.^b

^a Which are chiefly the mere excrementitious parts of the food taken in; is it possible that the urine coming by secretion from the *interior* of the system, can be justly neglected?

^b *Water doctors.*—It is well known that within a very few years, some European practitioners acquired large sums by prescribing after simply inspecting the urine of their patient, by which they became fully acquainted with his disorder;—hence their common appellation was that of water doctors. At present our intention in advertizing to the fact is merely to introduce a *jeu d'esprit*, applied, it would seem, to the celebrated Doctors Mead and Sloane. Whether either of those gentlemen, in their examination of the urine, went further than mere inspection, as was mostly the case, we know not. It is, however, a *good hit*—and ought not to be lost;—we can join in a laugh on the profession, although members of it; for we well know it is often well deserved. It does not, however, at all diminish our respect for the science, nor for

The author of this treatise, whoever he may be, has presented in successive chapters, all that apparently was then known on the subject; and no doubt, accurate observation on our part, would fully substantiate the truth of many particulars laid down in this and other writings connected with the subject. The treatise scarcely admits of abridgment. The importance of urine, as a *critical* discharge, is considered in the following treatise.

IX. GALENI, DE CRISIBUS, LIBRI TRES.

OF CRISES:—IN THREE BOOKS.

BAS. ED., p. 482.

The doctrine of crises, it is well known, has at all times been a favourite and plausible one among the most learned members of our science, until within a short period; but even now, when it is considered as having been greatly exaggerated and overdone, in by-gone times, there is not a doubt, that we still look, (with half assurance of its truth) for the same events, under equal circumstances, as are detailed in the pages of Hippocrates and Galen.

By the term *crisis*, the ancients understood a sudden and rapid change in disease, tending to recovery or to death. In this struggle

those great and able members who have helped to rescue it from that *general* ridicule bestowed on it by Le Sage, Quevedo and others, but which might have been legitimately and advantageously administered in particular cases.

“AN OLD WOMAN’S FUN: OR, THE DOCTORS OUTWITTED.”

Two able physicians as e’er prescribed physic,
Were sent for in haste to repair down to Chyswick,
Each took *my lord’s water*, viewed, tasted and smelt it,
Then apply’d to his pulse, and immediately felt it.
Quoth Mead, “I’d let blood, as *his lordship’s red* water
Denotes an high fever,—and a bolus soon after.”
“You are right brother Mead, and (to this, added Sloane,)
He that voided this water must needs have *the stone*;”
—You are out (*quoth the nurse*) and have both of you miss’d,
For it was *not my lord, but my lady* that —”

GENT. MAG. 35, p. 478.

of Nature, if she prevailed, the patient was saved; but if she succumbed, the tendency was to death. In a more limited application, the term was sometimes used to signify a secretion of some of the humours, through which the *semina morbi* might be evacuated, and health restored.

Great allowance is to be made for the difference to be perceived, as to the facts themselves of the doctrine of crises, as abundantly set forth by former observers, when we consider the numerous alterations in the habits of life in almost every particular, from those of former times; each in its turn, no doubt, exercising some influence on the regular operations of the living system. Thus, the introduction of many articles of immense consumption, employed primarily perhaps as merely luxuries, but subsequently becoming of absolute and universal necessity. Is it possible such an entire change of habits should be unaccompanied by modifications in the human constitution, and thereby greatly tend to alter the natural actions of foreign agencies, whether of an healthy or morbid influence? Need we mention the articles of tea, coffee, punch, spirituous liquors of every description! the narcotic influence of tobacco amongst the nations of Europe and America, and of opium among the Eastern population, where wine is altogether prohibited! May we not to these superadd the extension of commerce, and the gradual increase of, and facilities in travelling, alike productive of infinite changes in the long established customs and habits of former ages? Changes, moreover, among a large proportion of mankind, arising out of the numerous modifications of religious and sectarian pursuits, that have sprung into existence since the reformation; by which those *salutary* habits of restriction in diet, by temperance and fasting, have been nearly abolished, or at least most imperfectly conformed to!—and latterly, the powerful influence of *liberty*, both of mind and body; which, originating principally through our revolutionary struggles, is still advancing, and must continue to advance, until the whole human race shall taste of that (to many, still forbidden) fruit! Consider the invigorated operations of the mind since printing shed its influence abroad; and which was in truth, the principal agency in advancing into broader day, what had before been merely dim and feeble glimmerings, amidst the Cimmerian darkness of the middle ages! Let us, I repeat, advert to these and other circumstances which will present themselves to the mind; and we shall probably discover sufficient causes for those discrepancies

that are to be found in the *critical* observations of the ancients and moderns.

Physicians formerly regarded themselves as merely the ministers of nature,—and acting under this impression, seldom interfered to restrain her operations. In the rapid advance of science, and the march of mind, fancy has not been idle! and the former humble follower of nature, has ventured to take the lead; and amid the revolutions of the world, the physician has assumed the privilege of enforcing, or of counteracting the laws of nature, by means of the adventitious and partial knowledge, that he has (or thinks he has) acquired! But, as the poet says of this mighty power,

“*Natura si furca expellas, tamen usque recurrit.*”

And hence she strives continually to maintain that supremacy, to which she is so justly entitled! Shackled and enchain'd however by her ruthless tyrants, what can she, for the most part, effect, save abortive attempts; by which too frequently injury is produced, rather than the benefit that might have otherwise been anticipated! Under all the circumstances thus presented for reflection, it will be readily perceived that it would be unnecessary to enter further into the subject; and yet, very much of a practical nature might be attained from a correct translation of the books in question, and many acknowledged truths would be admitted by the reader.

X. GALENI, DE DIEBUS DECRETORIIS, LIBRI TRES.

OF CRITICAL DAYS: IN THREE BOOKS.

BAS. ED., p. 558.

In the commencement of the first of these three books, Galen explains what is intended by crisis, and critical days, in a very satisfactory manner; and opposes those who deny the existence of the latter. He then enters on the consideration of the doctrine of these days, and that of each in particular; and minutely considers the subject under all its bearings.

In the second book the subject is continued, and that of astral influence is taken up, especially of the sun and moon. Hippocrates

is largely referred to, and, indeed, the whole may be regarded as in a great measure a commentary on that great physician. The comparison is made between the sun and the moon, the changes of the atmosphere from the influence of the latter in its occultation, &c., together with much of a meteorological nature. This is further extended in the third book, the beginning of which is chiefly a recapitulation of the preceding. The sol-lunar influence is as fully unfolded as by Balfour and others of later date. The changes of weather and of the winds, &c., as derived from the appearance of the moon, are given, in the quotation of some Latin hexameters from Aratus, which Galen says are correct; and he gives us his reason for writing this third book on the subject of critical days; which was, a vehement call on him from many friends, to carry it into effect, and he concludes by affording an explanation of what is meant by an acute and chronic, a short and a prolonged disease, &c.

And here we may ask, why the heavenly bodies, or planets, should not possess some influence on the living system both of animals and vegetables, when that influence is admitted on mere brute matter. The production of the tides is attributed to the influence of the moon, although the quo modo is not uniformly established. How far it is really true, is hard to say. Our highly-gifted Franklin doubts its correctness in an interesting essay or letter on the subject! Much may be urged on either side, and whether it be possible to arrive at a perfect solution, may well be doubted.

XI. GALENI, IN PRIMUM PRORRHETICI LIBRUM HIPPOC. COMMENT. TRES.

THREE COMMENTARIES ON THE FIRST BOOK OF THE PRORRHETICS OF
HIPPOCRATES.

BAS. ED., p. 616.

There have been doubts as to the first book of Prorrhetcies having been written by Hippocrates. However this be, the predictions, (170 in number,) with the commentaries upon them, are not undeserving of attention. They can scarcely be abbreviated: all that need be stated, is, that after pointing out, why predictions are necessary to the physician, we have several of the symptoms or signs, by which predictions are deduced; such as those derived from

the eyes, tongue, mode of lying in bed, and all such as are enumerated in the book of prognostics; and, as it seems to me, they should be conjointly studied, as affording mutual and great assistance. Like all the brief sentences or aphorisms of Hippocrates, they require the able comments of Galen, fully to appreciate them. Like isolated texts, without an explanation, they are very unimportant and incomprehensible, if not inconsistent; a position admitted by Galen himself, who, in the beginning of the second commentary, says, "Multa quidem in libro toto carent perspicuitate."—I may here remark, that this is one of the Hippocratic writings that has been translated by Moffatt, and printed 1788, with "large annotations, critical and explanatory." They serve, however, rather to whet the appetite, and thereby prepare it for the far more extended commentaries of Galen.

XII. GALENI, IN PROGNOSTICA HIPPOCRATIS, COMMENT. TRES.

THREE COMMENTARIES ON THE PROGNOSTICS OF HIPPOCRATES.

BAS. ED., p. 726.

This book of Prognostics is likewise translated by Moffatt, but it is of the text alone of Hippocrates, and unattended by any notes or commentaries, save a few at the foot of a page. Galen has been diffuse in his commentaries. This, like the preceding, can scarcely be abridged; and I could but repeat, what is there remarked. Certainly the comments of Galen in a good translation, would be well calculated to promote reflection; for they are on subjects of much interest and importance. In the Venice edition there appear to be one hundred and fifty-eight sections or texts, whilst in that of Basil, they are made to amount to one hundred and sixty-four.

XIII. GALENI, DE DIGNOTIONE EX INSOMNIIS LIBELLUS.

OF INDICATION FROM DREAMS.

BAS. ED., p. 820.

In this short treatise of scarcely a page, Galen has given us much

on the indications derivable from dreams; and undoubtedly the state of the body must, and does influence that of the mind on many occasions; so that a judicious physician will be enabled occasionally to call to his assistance even the “visions of the night” in aid of his opinion. His speculations as to the state or location of the mind (*anima*), during dreams, and sundry speculations as to the causes, &c., are plausible at least as any that can be now advanced; and although this production is of no great importance, it yet affords additional proof of the indefatigable attention paid by Galen, to investigate his patient’s complaints by every means that would afford him a probable assistance in attempting his cure!

XIV. GALENI, DE PRÆCOGNITIONE LIBER.

ON PROGNOSIS.

BAS. ED., p. 822.

This book, addressed to Posthumus, maintains the capability of the physician to predict what is about to happen to each patient. In doing this, the writer informs his friend that he had offended many physicians on his first settling at Rome by the predictions he made on several occasions. He depicts the habits of the medical men, at that period residing in Rome; by which it appears that professional animosity was as high then in that city, as it has been elsewhere, at any time; and he comes to the following conclusion in relation to them, “*Ergo, ut apud nos sibi latrones parcunt, et in facienda injuria, mutuo convenient, ita medici Romæ nunc habitantes faciunt, hocque solo a latronibus differunt, quod in urbibus, non in montibus scelera perpetrant.*”—In animadverting on the ignorance and malice of these men, he speaks of patients cured by himself after they had been deserted by them;—of his detecting by the pulse the love and anxiety of a female for a man; together with other cases of considerable interest; and finally mentions his retreat from Rome to his native country; and his recall by the Emperors Antoninus and Commodus;—then recurring to the subject of predictions, he states other instances of much merit, finishing thus the book;—and with it terminates the fourth class.

C L A S S V.

O F P H A R M A C Y.

GALENI Librorum quinta Classis eam medicinæ partem, quæ ad Pharmaciam spectat, exponens; simplicium medicamentorum, substitutorum, purgantium, antidotorum, componendorum tam per locos quam per genera medicamentorum. ponderum denique, ac mensurarum doctrinam comprehendit.—Venice Ed. 1609.

INDEX OF THE VARIOUS BOOKS CONTAINED IN THIS CLASS.

TRANSLATOR.

1. Galeni de simplicium medicamentorum facultatibus, libri undecim, - - - - - T. G. Gaudano.
2. de substitutis medicinis liber, - - - - - J. M. Rota.
3. de Purgantium medicamentorum facultate, - - - - - - - - - Idem.
4. Quos purgare conveniat, quibus medicamentis, et quo tempore, - - - - - Idem.
5. de Theriaca, ad Pisonem liber, - - - - - Idem.
6. de usu Theriacæ, ad Pamphilianum liber, Idem.
7. de Antidotis libri duo, - - - - - Idem.
8. de compositione medicamentorum secundum locos, libri decem, - - - - - J. Cornarius.
9. de compositione medicamentorum per genera, libri septem, - - - - - J. Andernach.
10. de ponderibus et mensuris, liber, - - - Idem.

These books, or fifth class, are of interest sufficient to engage the attention of all who are desirous to investigate the theoretic opinions of Galen and others, as to the asserted faculties or powers of simple medicines. It is impossible to abridge them; yet they are full of facts and practical matter; and, to the teacher, they open a wide field of information as to the Materia Medica of the day; and thus enable him to compare its present, with its past extent; and to find not a little, that in later days has been given to the world as altogether novel!

I. GALENI, DE SIMPL. MEDICAMENT. FACULTATIBUS,
LIBRI UNDECIM.

OF THE POWERS OF SIMPLE REMEDIES.

IN ELEVEN BOOKS.

BAS. ED., p. 5.

BOOK I.

Among the many subjects of this book we find *water* pretty fully noticed: and in the course of its consideration, reference is made to mineral waters; and even *artificial* mineral waters seem to have been known. After mentioning saline, nitrous, sulphurous and bituminous waters, Galen adds, "Imitari autem potes sicut marinam, sic aliarum quamlibet," &c. Connected with the subject, we find a speculation as to the cause of thirst, and of tastes, &c. Vinegar also is considered.

BOOK II.

In this book, he attacks the opinions of the Sophists who refused to confide in the senses, and confutes their demonstrations. Here the subject of oil is largely considered, in the course of his arguments against Archidamus. Other practical remarks occur throughout, of a pharmaceutic character.

BOOK III.

Repeating the outlines of the preceding books, the subject is discussed of hot, cold, moist and dry; and something is said respecting the necessity of experience, in order to know and properly estimate the powers of medicines; and this is made to diverge in a variety of particulars, much of which is speculative, and arising out of the hypothesis adopted by Galen.

BOOK IV.

The consideration of some individual articles and preparations is here further pursued. Astringents, bitters, and other divisions of the *Materia Medica* are elucidated; and the various tastes, &c., are considered as to their essence and existence.

BOOK V.

The uses of medicines are pointed to; such as refrigerate or moisten, and heat or dry the system;—in connexion with some of which the production of pus, of scirrus and some other affections, &c., is explained; likewise purgation, diuresis, &c., and some other discharges.

BOOKS VI. TO IX.

These books embrace the consideration of all the individual articles, chiefly in alphabetical order, of the vegetable kingdom.

BOOK X.

The powers of medicines as derived from the animal kingdom are here treated of; chiefly, however, of the excrementitious parts, beginning with the blood of various animals; then follow, milk and its preparations, bile, sweat, urine, saliva, &c.—excrements of man,

of the dog, and many other animals, with their differences; and the sordes of the ears and skin!

BOOK XI.

The animals themselves, and their different parts, are herein mentioned. Thus, we have the viper, fox, hyena, weasel, frog, grasshopper, earthworm, bugs, cantharides, and many more. Notice is paid to the fat, lard, marrow, heads, bones, horns, liver, nails, skin, and other parts. Cobweb is also mentioned;—oysters, eggs, snails, crabs, swallows, sponge, and so forth. Several hundred articles are thus treated of in these eleven books, derived from the different kingdoms of nature, that appear to have been employed in the practice of medicine. Some few of these have reached us, and continue, under different indications, to augment the list of the present day.

II. GALENI DE SUBSTITUTIS MEDICINIS LIBER.

OF MEDICINAL SUBSTITUTES.

BAS. ED., p. 322.

Galen tells us that as Dioscorides and others, had written somewhat on this subject of succedania, or a *quid pro quo*; he also deemed it right to state what, in case of need, might be substituted for an article intended, and informs us by what means he was induced to follow it up. Alphabetically arranged, we have a list of two hundred and fifty articles and more, whose place may be supplied by others; and from those enumerated, it would seem of little importance which of them were employed; as for the most part they might be adopted at random.

III. GALENI, DE PURGANTIVM MEDICAMENTORVM FACULTATE.

OF THE FACULTY OR POWER OF PURGATIVE REMEDIES.

BAS. ED., p. 328.

In this treatise, Galen attempts to show, in opposition to Erasistratus and Asclepiades, that every purgative possesses the power of

attracting and discharging an appropriate humour; and that by this means the blood is purified. Not that the humours are capable of transmuting the medicine into themselves, nor is any humour *indiscriminately* discharged by any purgative. Bloodletting, inasmuch as all the humours are conjoined together in the vessels, promotes the discharge of all alike; and such is the case also, when by the operation of a violent remedy, blood is evacuated by stool; otherwise the remedy given, first purges off the humour to which its affinity is greatest, and then one of the others *may* follow. Some useful facts are dispersed throughout the treatise, which, founded on what are now regarded as erroneous data, is, nevertheless not unskilfully managed in the superstructure.

IV. GALENI, QUOS PURGARE CONVENIAT, QUIBUS MEDICAMENTIS, ET QUO TEMPORE, LIBER.

WHOM, WITH WHICH, AND AT WHAT TIME, PURGATION IS APPROPRIATE.

BAS. ED., p. 340.

This book is by some asserted to be the production of Oribasius, made up from the writings of Galen. It is probably the case, for it is at best, a trifling work, and cannot add to the reputation of Galen. Some good remarks are made as to the occasional difficulty of exciting purgation, from the compact and hardened state of the fæces; under which circumstances enemata should precede the administration of the remedy.

V. GALENI, DE THERIACA, AD PISONEM, LIBER.

OF THE THERIACA.

BAS. ED., p. 340.

The subject of this book seems to have been a favourite with Galen, who pursues it in all its bearings; and he explains what led physicians to the formation of so compound a remedy. A long list of the articles entering into the composition of the theriaca

forms perhaps the chief value of the book at the present day; and notice is taken as to numerous variations that had been introduced into its formation; its uses, doses, and other particulars find their respective places, both in prose and in verse.

VI. GALENI, DE USU THERIACÆ, AD PAMPHILIANUM, LIBER.

OF THE USE OF THE THERIACA.

BAS. ED., p. 372.

This is considered a doubtful production. It is of little importance in the present day, when its sixty or eighty ingredients have been cut down to fifteen or twenty. It may be regarded as a continuation of the preceding, and as deserving about the same degree of attention.

VII. GALENI, DE ANTIDOTIS, LIBRI DUO.

TWO BOOKS ON ANTIDOTES.

BAS. ED., p. 378.

BOOK I.

In this first book, explanation is afforded of what is understood by an antidote, viz., that it is a medicine, which taken internally, cures the evil affections (*malas affectiones*) of the body. The author proceeds to mention a great variety of such remedies, and particularly notices the Mithridate, and the Theriaca Andromachi, between which a comparison is drawn, and their preparation is unfolded, and the various frauds therein pointed out. The choice of the various articles is explained, and the different instruments and manipulations described. The preparation of the theriaca of the elder Andromachus is given afterwards in verse, its uses, and in what diseases, &c., and also of the theriaca of Damocrates.

BOOK II.

The subject is here continued ; and a great number of antidotes from different authorities are described, many of them in Latin versification. Among the antidotes are many against the bite of a mad-dog, most of which have had their ups and down, in perpetual fluctuation of recommendation and contempt, which it is scarcely necessary to copy. I shall only state that amongst them we find the alyssus, trifolium, crabs-claws, and others that are occasionally still made to appear under the sanction of some quack. As giving us some slight acquaintance with the remedies at that time employed, a cursory glance may prove useful; and whilst laughing at the polypharmacy of past ages, let us not omit to consider, whether in our own time, this folly is not still too prevalent both in our prescriptions, and in our drug-stores; and equally so in the schools of medicine.^a

VIII. GALENI, DE COMPOSITIONE MEDICAMENTORUM LOCALIUM, LIBRI DECEM.

OF THE COMPOSITION OF LOCAL REMEDIES.

IN TEN BOOKS.

BAS. ED., p. 450.

Ten books on the subject of remedies appropriate for different parts and their respective diseases !! Specifics and panaceas, no doubt! yet amidst all this work of supererogation, there is to be found a good deal of useful matter, in the description of many of the diseases peculiar to the different parts or organs.

^a A principal advantage of homœopathic practice consists in their "infinitesimal" doses;—for assuredly, if they do no good, they at least can do no harm; which is more than can be said of the large and repeated doses of the most powerful remedies in the allopathic practice. Nature being, after all, the real practitioner in the human system, she is less liable to be disturbed in her operations by homœopathy; whilst she is too often entirely put out of her way, by the ill-judged, and ill-timed practice of those who view her in the light of a servant, whose province it is implicitly to obey the extravagances of theoretic practice, in which they have been indoctrinated.

BOOK I.

In this we are first presented with the indications of cure, and the general preparation of remedies; followed by an account of the various affections of the hair of different parts of the body, and the different prescriptions at different times proposed. Alopecia is largely considered, and the means of prevention; as also for the growth of the hair; in which Cleopatra figures as a candidate, for the honour of preventing the necessity of a wig! Tinging or colouring the hair is largely expounded; and some treatises on this subject and on general ornamenting of the body, as collected by Crito, who appears to have embraced the whole art and manipulation of cosmetics and their congenera; his four books on which, the delight of the female sex, Galen tells us were in every one's possession. Our present perfumers and venders of arcana, sink into nothing before him; and if his books could be attained, they would indeed prove a treasure! Galen gives the heads of the chapters of each book, but the particulars are unnoticed, probably for the reasons above. One of the chapters is headed “*Quæ conservant virginitatem!*”—Perfumes, unguents, and other personal and domestic applications are numerous, whether for gratification or the removal of disease. Galen concludes the list, by saying, “In his quatuor libris Crito diligentissimè omnia fermè exornatoria pharmaca scripsit, appositis etiam comptoriis quæ spuriam pulchritudinem non veram inducunt, quapropter etiam ego ea relinquam.” He does, however, notice a few articles “*quæ pulchritudinem secundum naturam conservant.*” A chapter on Phthiriasis affords numerous articles for its cure.

BOOK II.

Headache from numerous causes is treated of in this book, its contusions, ulcers, &c., and the appropriate remedies, including amulets, epithemeta, &c., from various authorities.

BOOK III.

The various affections of the ears and nostrils are here considered, and their treatment given.

BOOK IV.

Here the diseases of the eyes and lids, &c., and remedies are noticed; and the multitude of both, would not disgrace our present authorities!

BOOK V.

Continues the subject; and to it succeed the affections of the chin and face, and those of the teeth and gums;—dentistry seems nearly at as high a state as at present; Archigenes, Appollonius, Asclepiades and others have forestalled us in preventing the loosening and fœtor of the teeth; or removing them without pain; and dentifrices were abundant. Crito is equally at home here, as in the first book. Galen's *own* prescriptions, which he mentions as “*experimento comprobata*” if we could readily verify all the articles mentioned, are here found.

BOOK VI.

Affections of the mouth follow. Many remedies are stated, and their preparation; and many authorities noticed. In this book is also noticed the *removal of the uvula by incision*, and as recommended by Hippocrates; an operation supposed by some of our confraternity to be of recent origin, and ignorantly ascribed to a late celebrated Professor; although it is mentioned by almost every writer from Hippocrates down; and by some of whom even a picture is given of the instruments by which it was to be executed!

BOOK VII.

Affections of the respiratory organs are here given. Dyspnœa, and other difficulties of breathing; hæmoptysis, phthisis, &c.,—remedies, &c.!

BOOK VIII.

This book is occupied with the remedies adapted to affections of

the stomach and liver. The various modes of preparing the Hiera are again given; volvulus, singultus, &c. Liver and its affections.

BOOK IX.

The liver and its affections continued; icterus. The spleen and its complaints, and remedies from various sources. Dropsy, colic, dysentery, affections of the rectum and anus, haemorrhoids, prolapsus, affections of the pudenda, and of the uterus, especially hysteria.

BOOK X.

Here the remedies adapted to affections of the kidneys, bladder, and joints are noticed; nephritis, sciatica, gout, &c., as described by different authors.

These books have some interest, as containing the remedial measures of many physicians, whose names are not unknown to us; and some amusement may be found in the descriptions given of them, partly in prose and partly poetical.^a

IX. GALENI, DE COMPOSITIONE MEDICAMENTORUM PER GENERA, LIBRI SEPTEM.

OF THE COMPOUNDING OF REMEDIES IN RELATION WITH THEIR GENERA.

IN SEVEN BOOKS.

BAS. ED., p. 788.

Galen, in a kind of preface to these books, informs us that he had previously completed the two first, but that they were unfortunately destroyed in a fire, which burned down the Temple of Peace,^b and the vast libraries (*ingentes bibliothecæ*) belonging to

^a Perhaps but little use can be made of these books, or of those that succeed, amid the infinite changes of pharmacy and chemistry. They will at any rate serve to point out the groundwork of several of our present preparations, and to present to the Profession, proof of the indefatigable industry of their illustrious author.

^b Vide "de Anatom. Administ. Lib. 1."

the palace. Several other of his writings shared their fate, and he was compelled, from the want of another copy, to renew his labour at the solicitation of his friends. He points out the previous attainments necessary for those who desire faithfully to compound medicines, and reproves those who maintain that in such compounds, the powers of the simple medicines are preserved; telling them they do not distinguish between proper, and acquired powers. He then states what is the use of compound remedies; and treats of a great variety of plasters, and of the principles that enter into their formation, and uses.

B O O K III.

Here, remedies are classed together that are employed in the affections of the nerves, from wounds, punctures, contusions; and he prides himself on being the first to pursue the plan, which differed greatly from that before adopted, and which was generally fatal. Many useful practical preliminary remarks occur, relating to the subject; and the history is given of the first invention by him of his mode of cure. Several other histories of cases are interspersed, pointing out the difference of, and danger of mistaking nerves, tendons, and ligaments for each other; and the equal folly of supposing that all kinds of wounds, ulcers, &c., were curable by one and the same remedy. The remedies of different physicians in such cases are enumerated by him from time to time.

B O O K S IV., V.

Remedies useful in putrid, malignant and other ulcers, are here treated of; many plasters of the elder physicians described. And such is the case in the *fifth book*, derived from every source, and certainly, in number, sufficient for every emergency.

B O O K VI.

This book, consists chiefly of plasters and the like; dignified with the adjunct of *many virtues*, (*De emplastris polychrestis*),

which they certainly possessed, if only of half the amount attributed to them.

BOOK VII.

Emollient, relaxing, discutient, and other like remedies are here treated of, still closely united with plasters; but differing a little in name, viz., malagmata, acopa, et alia.

X. GALENI, DE PONDERIBUS ET MENSURIS LIBELLUS,—SPURIUS.

OF WEIGHTS AND MEASURES.

BAS. ED., p. 1046.

This book is of importance in determining the value of the weights and measures employed in medicine, in the time of Galen. It is obvious, however, that it cannot be abbreviated; and that it requires close attention in all who may be interested in the consideration of the subject. If not the production of Galen, it may be esteemed as correct, until at least the contrary is proved.

With this ends the fifth class of Galen's works.

C L A S S V I.

OF THE INSTRUMENTS OF CLINICAL PRACTICE.^a

GALENI librorum sexta classis de Cucurbitulis, Scarificationibus, Hirudinibus, et Phlebotomia præcipuo artis remedio tradit.—Ven. Ed. 1609.

INDEX OF THE VARIOUS BOOKS CONTAINED IN THIS CLASS.

TRANSLATOR.

1. Galeni, de Hirudinibus, revulsione, cucurbitula,
scarificatione, ac Venæ incisione
libellus, - - - - - J. Cornarius.
2. de Venæsectione, adversus Erasistratum,
liber, - - - - - J. Tectander.
3. de Venæsectione, adversus Erasistratæos,
qui Romæ degebant, - - - - - Idem.
4. de curandi ratione per sanguinis mis-
sionem liber, - - - - - T. Gaudanus.

This sixth class, although the shortest, is yet, all things considered, one of, if not the most interesting of Galen's works, whether as tending to show his great promptitude in bloodletting, his excellent judgment in relation thereto, or in connexion with his admirable defence of it against Erasistratus and his followers. In most instances his rules are excellent, and some particulars may afford us instruction in several cases of a doubtful nature. If we admit that Galen did not fully comprehend the *circulation* as now (*yet imperfectly*) taught, we cannot doubt that the existence of such a function was strongly and uniformly present in his mind, and that he compreh-

^a Οργανα της κλινικης.

hended its necessity, and acknowledged its importance, in his regulations for derivation and revulsion! A man who judges so correctly of venesection, and points out so minutely all its details and its practical utility, surely cannot be deemed ignorant of its existence universally; and in acknowledging the possibility of death from loss of blood from a single vessel, from the anastomosis of them in every part; surely, no great superiority over this information, can be strictly or justly ascribed to the assumed discoveries awarded to Harvey.

I. GALENI, DE HIRUDINIBUS, REVULSIONE, CUCURBITULA ET SCARIFICATIONE.

OF LEECHES, REVULSION, CUPS AND SCARIFICATION.

BAS. ED., p. 1053.

In the first chapter of this book, he briefly notices the multiplied uses of leeches, with the means of insuring their biting, in which ablution of the part is particularly insisted on; and even preparing the leech for the operation, by putting it in warm water, and removing the sordes from their surface by soft sponge, &c.—if applied to the hands or feet, those parts are to be immersed in the water with them. Snipping off their tail, to keep up the flow of the blood, is mentioned; and the subsequent application of cups, if necessary to continue it. Several measures are given for stopping the bleeding when it continues beyond our wishes, amongst which are burnt galls, and heated pitch. He regards the action of this species of bloodletting as confined to the blood of the superficial skin and flesh, and that they are simple substitutes for cupping, and are to be removed when half the amount is abstracted, in order (it is to be presumed) to give place to the cups.

In treating of *revulsion* in the second chapter, some useful practical facts are afforded, even if dissatisfied with his doctrines. Thus, in promoting revulsion from the chest or belly, the application is to be made to the hand; and to the lower parts, when the revulsion is to be made from the stomach to arrest vomition; acrid glysters are recommended for a like intent. The application of cups to the breasts (*mammæ*) is spoken of; and to the *præcordia*, in epistaxis, or in uterine hæmorrhage, and other particulars are laid down.

In respect to cups, (third chapter,) evacuations are previously recommended; and plethora seems to be regarded as opposed to their employment; for which cause they are not to be used in *the beginning* of inflammation of the brain and membranes, or other parts; but rather after all due evacuations are had recourse to. The effects of cupping are to abstract matter, allay pain, diminish inflammation, discuss swellings, induce appetite, restore energy to a weakened stomach, to cut short deliquium, translate morbid afflux from parts deep seated, restrain haemorrhage, and benefit meistruation.

The subject of scarification is then taken up, and “*multum in parvo*” may be said of it; the when, and the where, are briefly pointed out to the reader.

Immediately following this book is a short one, in the Venice edition, called a discourse (*sermo*), by Oribasius; it is on nearly the same subjects, and taken from his seventh and eighth books, as by him abstracted from Galen, Antyllus, Herodotus, Apollonius, and Menamachus; and in so far as epitomizing several preceding writers, it is by no means devoid of interest. Not belonging to my subject, I, however, pass it by, merely stating that *different kinds* of cups are mentioned, such as *glass*, *horn*, and *brass*:—this last being most commonly employed; and the glass is commended from its enabling us to see the amount of blood discharged. The operation is effected with the glass or brass cups, by aid of heat; with the horn, by forcible suction through an aperture. On the subject of phlebotomy, Apollonius, who is very favourable to scarification, says, however, that no one will suspect him of thereby exploding it, for he never omits it in the most dangerous diseases; in which it is requisite to employ it speedily and largely, in proportion to their violence.

II. GALENI, DE VENÆSECTIONE ADVERSUS ERASISTRATUM LIBER.

OF VENÆSECTION, IN OPPOSITION TO ERASISTRATUS.

BAS. ED., p. 1057.

Erasistratus appears to have been the prototype of old Van

Helmont in his enmity to bloodletting; and severely has Galen animadverted on him and his disciples. He commences this book by saying he deemed it worthy of inquiry, why, whilst Erasistratus had in relation to many trifling remedies, written most minutely, even as to their most insignificant points, as in the manipulations of a poultice, he had been altogether silent respecting bloodletting; even studiously so, whilst many celebrated ancient writers had fully treated of it before his time; and he tells us, that in all his writings, the word *venæsection* only once is to be found. This anomaly Galen attempts to elucidate, and gives us the opinions of Erasistratus in respect to the origin of fever and inflammation, and their conjunction; and then inquires, why he preferred abstinence to bloodletting, seeing it was so tardy in its effects, when the latter was prompt and immediate. Galen remarks on the *universal* evacuation from bloodletting, its rapid influence, and even the example of nature herself, who was so much esteemed by Erasistratus. The whole book is a satirical review of his opinions and conduct. Neither Dogmatist nor Empiric rejected phlebotomy; and physicians themselves uniting in its employment, only differed as to the amount, the precise period, and the part from which its abstraction was to be made; which points, he briefly treats on. He advertises to the facility of stopping the discharge at pleasure, and of the judgment that may be formed as to the amount *from the change of colour* in the blood as it flows.—Other remedies, after being taken, are no longer under our control, whether they work for good or evil; and this remark extends even to the aliment employed. He ridicules those who call themselves after Erasistratus, and tells them, they did not comprehend him. That their master had only three modes of evacuation,—baths, exercise, and the negative one of diminished diet; which last, he adds, is longer in promoting its effects, and is more injurious to the whole system than *venæsection*; which is more prompt, and safer, and not unfrequently prevents a rupture of some vessel. On these and other points, much is said, and he repeats that Erasistratus makes no reference to *venæsection*.

III. GALENI, DE VENÆSECTIONE ADVERSUS ERA- SISTRATÆOS QUI ROMÆ DEGEBANT.

OF VENÆSECTION, IN OPPOSITION TO THE ERASISTRATEANS OF ROME.

BAS. ED., p. 1074.

It is probable that the preceding book had called down the indignation of the followers of Erasistratus; and that Galen wrote this, in reply to their affirmations in behalf of their master. He tells us that at first settling at Rome, he found many physicians who so totally repugned venæsection, that they would not bleed in cases of the greatest emergency; some of which cases he mentions, and their fatal issue. He affirms that they even mistook the opinions of their master, and fell into subterfuges on the subject. In evidence of this, he analyses in a masterly manner, several of these cases, which had evidently proved fatal, from a neglect of this evacuation; their errors are largely dwelt on, and combatted; and the practice pursued by them, is justly censured! The reasons assigned by them and their masters, for the omission, are considered; and some judicious remarks are made as to the use of this evacuation, or its omission. In one part of the book we find the unacceptable remark, that "Desiderantur hoc loco non pauca."

IV. GALENI, DE CURANDI RATIONE PER SANGUINIS MISSIONEM LIBER.

OF THE RATIONALE OF BLOODLETTING.

BAS. ED., p. 1099.

This book may be considered as a full account of every thing connected with bloodletting; such as the mode of operating, and the preliminary considerations leading thereto; what affections chiefly require it, and wherefore; the locality to be selected, whether of an artery or vein, the amount, and other particulars. It is as a whole an admirable book, and deserves to be studied for its

merits as practically elucidating the benefits of venæsection. Unquestionably much useless speculation exists, but this ought not to preclude us from the information to be derived from other parts. The boldness of his practice is conspicuous throughout; his judgment not less so; neither of which are reconcilable to an ignorance or doubt of a circulation, even if some error may be ascribed to his demonstrations, so repeatedly enforced in order to enhance the merits of Harvey. No one has a right to judge in this, who has *neglected or omitted* to read the writings of *both Galen and Harvey*; and yet deems himself adequate, on mere second-hand authority, (too often itself removed alike from actual investigation,) to call in question the knowledge of the former, and to crown with laurel the head of the latter! If Harvey has actually discovered any individual parts of the circulation or its structural adaptations, unknown to Galen, or to any anterior to the period of his own elucidations, let them be *clearly advanced* in his behalf; but that such can be done by his warmest admirers, we have great doubts! for even now, all the mysteries of that wonderful contrivance are far from being fully comprehended, or universally admitted.

In this book, Galen again animadverts on the falsehoods of the Erasistrateans as to venæsection, telling them very plainly, that subtle as they are in their wicked sophistry, they well knew that they were lying at the time (*mentiri se sciant*), in striving to prove it a novelty. Whereas, many ancient writers, some of whom he mentions, had extolled it as first on the list of remedial agents. He affirms that on every question, reason or experience, or both united, must decide; and refers the reader to his treatise “*de plenitudine*” as a proper subject, previously to reading this book. He points out some of the circumstances that indicate the propriety of bloodletting, and others forbidding it; together with the general views to be considered when about to prescribe it, and the indications by which its propriety may be judged of. He speaks of its use in gout, and of his cures by it in the spring, as well as by purging; both of which are usually injurious in cases of intemperance, whether in eating or in drinking. He makes a remark of importance to show the conjectural character of medicine, as deduced from the different doses of medicine required; and points out, what cannot be too often repeated, as a guard to presumption in our doses, that such exhibition if erroneous, admits not of correction; whilst venæsection is superior in this respect, since we can at once arrest it; its efficacy is imme-

diate, when from plethora, &c., a violent and acute fever requires to be arrested, by bleeding ad deliquium, yet at the same time with proper caution.^a He says he remembers thus having drawn off six cotyla^b (about one lb. troy each) at once; with other instances of a like kind, being at the same time governed by the indications drawn from the pulse, the spissitude or tenuity of the blood, and its *improved hue* from a dark colour; which last, he tells us, was Hippocrates' rule for bleeding in pleurisy, and he gives various cautions for our benefit. The pulse, he tells us, he particularly attended to, as the blood was flowing, lest, when least expected, death might ensue instead of syncope, as happened in the practice of three physicians. He inculcates what practically we find erroneous, not to bleed (with some exceptions) under fourteen years of age, nor beyond seventy, to which he seems to have been led by some of his speculations on the subject of plethora. A case is recorded of ophthalmia, in the steward of a rich Roman, attended by a physician of the sect of Erasistratus; that is, one who was an enemy to bloodletting; and who had been under his hands for twenty days. By a little finesse, Galen obtained the chance of prescribing for him at his own (Galen's) house for three days, at which he was directed to call. "Venis autem, (says Galen,) circiter horam quintam: ac prima protinus detractione, tres sanguinis libras exhausi, deinde, hora nona, aliam,"—and by this treatment, and some topical application, on the third day, he sent him back to his master, nearly or quite restored. The other physician seems finally to have received from the master, the appellative or nickname of *αιμαφοβον* or sanguifugus.

Galen speaks very decidedly as to bleeding in inflammation of the throat and windpipe; and reprobates those physicians who limit blood-letting to the first days of the disease; some, he says, not

^a It may be here added, the carelessness of physicians too often in writing their *prescriptions* so illegibly that mistakes are not unfrequent; committed, as they not uncommonly are, to some ignorant assistant. We have heard of death from the mistake of aqua fortis for aqua fontis, and others of a similar description; and we have lately seen a "Correction" publicly given, calling on the proprietors of a medical formulary to correct a *typographical error* as respects the *symbol of quantity* in so highly dangerous an article as prussic acid, in which an *ounce* (3*i.*) is prescribed instead of a drachm (3*i.*) Typographical or not, the proof reader and the printer are both reprehensible, and should not have the charge of a publication, in which the lives of the community may be said to be hazarded.

^b "Cotyla Attica, pendet uncias novem, ut Hemina Italica. Cotyla Italica vero est libra mensuralis uneiarum xii." *Blancard's Lexicon.*

daring to extend it beyond the third, and others the fourth as the extreme; but he adds, we *must bleed even on the twentieth day*, if strength permits, and forbear even on the second, should prostration ensue. He laughs equally at the presumed hour of the day, on which some fixed the operation, as at five or six in the morning, &c. Night or day, says he, makes no odds;—giving at the same time some cautions on the subject; and concluding this interesting book with some remarks on arteriotomy, its dangers and advantages; the danger of aneurism, and even death from not being acquainted with the vessels by dissection; and declaring the necessity of tying up the artery *with a ligature*, when unhappily wounded, (*necesse enim hic est laqueo vasculum constringere*). He seems not to have omitted arteriotomy in different parts, on many occasions; and notices the circumstance of the ancients having called arteries by the name of veins, as being elsewhere treated of by him.

With this book the sixth class is brought to a termination.

CLASS VII.

THE THERAPEUTICS.

GALENI librorum septima classis curativam methodum tum diffuse tum breviter descriptam, victus rationem in morbis acutis, singulorum morborum facile paranda remedia, privatam quorundam morborum curationem, chirurgiae constitutionem, fracturarum ac luxationum sanationem, fasciarum denique et laqueorum, et machinamentorum tractatum continet.—Venice Ed. 1609.

INDEX OF THE VARIOUS BOOKS CONTAINED IN THIS CLASS.

TRANSLATOR.

1. Galeni, Methodi Medendi, i. e., de morbis curandis *L. quatuordecem*, - - - T. Linacre.
2. de arte curativa, Lib. duo, - - N. Leonicenus.
3. in libros Hippoc. de Vict. rat. in Morb. acut. *Com. quatuor*, - - - J. Vasseus.
4. de remediis paratu facilibus, liber, - H. Barlandus.
5. de remediis paratu facilibus, ad Solonem,—spurius, - - - - J. P. Crassus.
6. de rem. paratu facil. liber tertius,—spurius, - - - - - Idem.
7. Documentum de puerो epileptico, - N. L. Thomaeus.
8. de incantatione et amuletis et collis suspensione,—spurius, - - - - *incertus*.
9. Commentarius in lib. duabus de natura humana, - - - - V. Trincavellius.
10. de Oculis Therapeuticis,—spurius, - Demetrius, *Grac.*
11. de renum affectuum dignotione atque medela,—spurius, - - - - C. Heyl.

12. Galeni in lib. Hippocratis de officina medici,
Com. tres, - - - - - V. Vidius.
 13. in lib. Hippoc. de Fracturis, Comment.
tres, - - - - - Idem.
 14. in lib. Hippoc. de Articulis, Comment:
quatuor, - - - - - Idem.
 15. de Fasciis, liber, - - - - - Ven. Idem.
 16. Oribasius de Laqueis, ex Heracle, - Ven. Idem.
 17. Idem, de Machinamentis ex Heliodoro, Ven. Idem. .

In the Venice edition, the following notice appears, “Hos sex libros, quos Vidius olim converterat, nunc idem etiam diligenter recognovit.” The last three are not in the Basil edition.

I. GALENI, DE MEDENDI METHODO, SEU DE MORB. CURANDIS, LIBRI QUATUOR-DECEM.

OF THE METHOD OF CURING DISEASES.

BAS. ED., tom. vi., p. 6.

This treatise in nearly two hundred folio pages, may be regarded as a partial consideration of Galen's Practice of Physic, so far as medicine is concerned; for his whole writings point out how greatly he depended on diet. It would be impossible to give even a faint outline of this extensive work within the short limits to which I am restricted. A complete translation would not be useless at the present period.

The first book is a severe castigation of Thessalus (the prince of the Methodists) and of his sect; his principles he inveighs against, and overturns the foundations; pointing out the arrogance of the man, and the injury science had received through him. Some insight is afforded of the follies and vices of Rome, and ascribing the delay of his own writings to the idleness and debauchery every where surrounding him. Addressing himself to his beloved Hiero, he reminds him that he, and many friends, had exhorted him to write on the Practice of Physic; which, he adds, “I truly desire to

do, both to gratify him, and to benefit posterity. Yet, I always delayed, and that on many accounts; the chief of which was, that I feared I should write in vain, since scarcely any at this period paid attention to the seeking after truth. Money, civil power, and voluptuousness, alone took the lead; and all who pursued knowledge were regarded as madmen!" He complains greatly of ignorance in respect to the science of medicine, and of several other sciences at that era; and informs us that Thessalus boasted that he would teach his pupils the profession, in six months; so that, says Galen, it is the fact, that now, cobblers, dyers, carpenters, and blacksmiths, forsaking their respective occupations, at once jump into the Practice of Physic! and the mere compounders of mixtures for painters or perfumers do the same. Hence, says Galen, I feel compelled to detail the methodus medendi, so successfully begun by the ancients, and which their successors endeavoured to perfect.

Can we not here see, as in a glass, the features of that period reflected amongst us, when bookbinders and others, forgetting the precept of "ne sutor ultra crepidam," and recommended, moreover, by the fathers (!) of our science, quit their trades, in order to engage in the practice of physic; and by the assumption of some nostrum, *under their patronage*, realize fortunes, whilst the regular student, after taking his degree, starves in his professional career!

This man, Thessalus, rendered thus immortal by the castigation of Galen, who, noting his excessive vanity, and his envy of his predecessors, has likened him to Zoilus, who flagellated the statue of Homer, and to Salmoneus, who attempted to imitate the thunder of Jupiter; and also to a host of other miscreants, who feared neither men nor gods; this man, he adds, was nevertheless the leader of a sect, that upheld the doctrine of a *fluxum et clausum*, (a prototype of another subsequently maintained under the denomination of *strictum et laxum*.) Thus goes the world; old things become new, by the magic of a few unmeaning words, and by a change of nomenclature. The authors are forgotten, and arrogance joined with usurpation, or literary plagiarism of former doctrines, too often gives repute to the asserted novelties of present times!

The original modes of framing names for diseases are explained in the second book. The distinction of pain and disease, and several other particulars of interest to the medical reader. The third book is chiefly taken up with the consideration of ulcers and

their treatment, both simple, and when complicated with other diseases.—The fourth continues the subject of ulcers of a malignant character, explains their nature, treatment, difference of in form, locality, &c., and this is extended into the fifth book,—all connected with many interesting practical remarks, and observations on the remedies and diet required. The sixth book notices the mode of treatment in injuries of the nerves and tendons, in those of the bones, and of wounds of the peritoneum. The seventh has reference to the stomach and its affections. The eighth embraces fevers, and has numerous dietetic remarks, which are continued in the ninth, together with remarks as to the indications of cure, and on some of the remedial measures, as venæsection, &c. Hectic fever is considered in the tenth book, together with its treatment; and putrid fevers in the eleventh. The twelfth inquires into the nature of a symptom; one or two in particular, as syncope, &c., are especially noticed. Tumours of various kinds, phlegmonous especially, are considered in the thirteenth book; the rise of inflammation, its causes, and variation, according to the parts affected; treatment of, both remedial and dietetic. Several particular cases, as phrenitis, &c., referred to, and many interesting observations are largely dispersed throughout. Complicated tumours and swellings occupy the fourteenth book. Erysipelas, œdema, scirrus, cancer, anthrax, scrofula, and many others; together with some remarks on affections of the hair and of the eyes.

In concluding this hasty and imperfect sketch, I must repeat that I think a translation of these fourteen books would prove an acceptable present to every intelligent physician; an agreeable *bon-bouche* to all who can divest themselves of prejudices early instilled into their minds, by self-opiniated teachers, both public and private, against the ancient writers, of whom, in fact they know little or nothing. It is time that our medical youth should be led to know and to believe, that “all the talents” are not confined to a few plausible theorists of present times; but that with common diligence, wheat in abundance may be winnowed from the chaff of ancient lore, to their own advantage; and to a conviction that the science, perhaps even the practice of medicine, was as well comprehended and pursued, with far inferior advantages, in the time of Galen as at the present period of the “march of mind.” It is devoutly to be wished that a *revulsion* in favour of the ancients could fully and firmly be accomplished; which would be the case, if a translation

should be made of their writings, for who, now studies them in their original dress!—what if there be trash among them! is none apparent in the boasted productions of the present day? Can none, in theory or practice be pointed out, in the syllabi, and essays from our Professorial chairs?—who is it leads the student to believe that nought but trash exists within the musty folios of antiquity? who? why usually some pretender, who mystifies his hearets, and through their means the world at large, by assuming as his own, the opinions and views of others who have long preceded him; and but for which, his ignorance or idleness would have precluded his attaining. Desirous of shrouding the sources of his borrowed plumes, it is necessary to blind those who depend upon him for information, by the assertion that nothing good can “come out of Gallilee!” What! is there no pleasure even in contemplating the embodied *trash* of the early promulgators of science, if only to ascertain how high *we* have ascended beyond them in the route they had begun to trace? If the folios of old, exceed in magnitude, the octavos of our times; these last excel in number, and in rapidity of emission, that by no means compensate the contents of the larger proportion!

II. GALENI, DE ARTE CURATIVA, SEU RATIONE MEDENDI, LIBRI DUO.

OF THE METHOD OF CURING DISEASES.

BAS. ED., p. 366.

These books, addressed to Glaucus, may be considered as the continuation of the preceding, and might without impropriety rank as the fifteenth and sixteenth books; and from these too, may be abundantly gleaned a copious mass of information. The first book teaches us the reasons leading man to acquire information generally, and that of medicine particularly, as arising out of it. To illustrate this, the subject of fever is selected, and the causes and symptoms of the various kinds of fever are successively brought to view, viz., ephemeral, putrid, tertian, quartan, quotidian, continued, &c., affections of the head from various causes; crises, critical days, and numerous particulars connected therewith.

The second book embraces very fully the subject of inflammation,

its varieties, causes, &c., and the indication of cure, by general and topical means; œdema, abscesses, ulcers of different kinds, and morbid swellings of every description, are brought into view; and much practical information is every where to be found.

In these and other writings of former ages, we must be content to take them as we marry, for better and worse.—He must be fastidious in the extreme who cannot find something good; he that anticipates no error in them is a blockhead. In reading them we must “be to their faults a little blind”—at the same time remembering the centuries that have elapsed since they were penned, compare them candidly with those of the present period, and judge thereby of their extraordinary merits. No one will regret the loss of time in their perusal, for infinitely more is squandered away in the attention paid to the voluminous and reiterated *repetitions* in the successive volumes that now issue from the press.^a

In the writings of Galen, much practical matter will repay his perusal, even when we may be inclined to reject his doctrines; doctrines, however, in which the germs of, I believe, most of late or present notoriety may be discovered. Remember him as a writer of sixteen centuries past! The author of more numerous works than any who preceded or followed him; and admitted chiefly as his genuine productions; besides that of many that have unfortunately been lost,—and of numerous commentaries on the Hippocratic writings; to say nothing of those deemed to be spurious, or merely philosophical, without having any very close connexion with the science of medicine!—Is such a man undeserving of notice by his medical posterity? Is it possible we can be satisfied to know him by name alone? It is high time such apathy should cease for sentiments of a more generous character; and delight would result from pursuing the train of thought that has been illuminated by the midnight taper of the greatest man that our science can boast of. The prince (or tyrant if so he must be called,) of the medical profession for one thousand years, if he is not worthy of consideration, I really know not who is, now! If the giants of medicine, who, during so long a period entered the nets of his disposing, were too

^a Our medical works (with few exceptions) of the present period, are dull repetitions of some earlier author, enriched with a few scattered notes, “to make up a show.”—a “repetatur haustus” of professional dexterity.

readily seduced to devour indiscriminately all that they contained; those of the present day are precluded from the same; for the passages have been obstructed by every possible means, that interested motives could induce.

In the Venice edition, at the end of this book, we are told, that here ought to be placed that book which appears in the fifth class, under the title of "Quos, et Quando, et Quibus Medicamentis purgare conveniat."

III. GALENI, IN LIBRUM HIPPOC. DE VICTUS RATIONE IN MORB. ACUTIS, COMM. QUATUOR.

OF THE RATIONALE OF FOOD IN ACUTE DISEASES.—FOUR COMMENTARIES.

BAS. ED., p. 585.

To epitomize these commentaries is scarcely possible. Galen has divided the four books of Hippocrates on the subject stated, each into short sections or paragraphs, as texts, on which to build his remarks.

The first consists of forty-seven paragraphs; the argument of the book, in the *Venice eighth edition* is as follows, and sufficiently exhibits its contents.

Pertractat de iis, quæ veteribus medicis in acutorum morborum victu controversa erant; ac in primo quidem libro agit de Ptisana."

The second consists of fifty-five paragraphs, thus indicated:

"Exemplo doloris lateris agit de vi ac usu fomentorum, deinde de repentina tum in victu, tum in reliquis rebus mutatione; fusé latéque pertractat."

The third embracing sixty-two paragraphs, is thus headed:

"Exponit vini, mulsæ, oxymelitis, aquæ, et balneorum facultatem."

The fourth contains one hundred and twenty-three paragraphs; headed as follows:

"Liber á quopiam ex Hippocratis discipulis, multis diversisque

theorematis, inordinatéque dispositis, conflatus, quorum plurima ad acutos morbos videntur pertinere."

The reader is referred to the subject by Hippocrates, in the preceding part of this volume.

Following the preceding, in the *Venice* eighth edition we have a short book, itself imperfect in the beginning, entitled,—

GALENI, DE DIÆTA HIPPOCRATIS IN MORBIS ACUTIS.

ON THE HIPPOCRATIC DIET IN ACUTE DISEASES.

From a note given, it appears doubtful whether this work on which Galen discourses, is the production of Hippocrates; but the remark is made, that whoever was the author, he was well acquainted with the doctrine of Hippocrates. Much other matter is contained in it than what appertains solely to diet, yet all connected with medicine, and deserving at least of a cursory perusal, but scarcely admitting of an abstract.

IV. GALENI, DE REMEDIIS PARATU FACILIBUS LIBELLUS.

OF REMEDIES OF EASY PREPARATION.

BAS. ED., p. 419.

This is a kind of domestic dispensatory or pharmacopœia, affording receipts for the preparation of different remedies for an extensive set of diseases; having a preface explanatory of the treatise, as being written for the use of country people, travellers, and persons living at a distance from medical assistance. It consists of one hundred and thirty-one short divisions or chapters,—in some of which, the precepts of other physicians are given.

Many of the prescriptions might subserve the interests of Charlatanism, by introducing some novelties to their notice. Much of it is praiseworthy, and fully equal to Buchan and his commentators on domestic medicine; superior indeed, in one particular, that of brevity!

We may connect with the above, the two succeeding books, for they are of precisely the same character, and seem as if they were the contents of Galen's common place-book of recipes, &c., derived from all quarters; they altogether form a curious, and not uninteresting part of the works of Galen, or of that age.

V. LIBER DE MEDICINIS FACILE PARABILIBUS, GALENO ASCRIPTUS, LIB. SECUNDUS.

OF MEDICINES OF EASY PREPARATION.

BAS. ED., p. 447.

This is addressed or inscribed "ad Solonem, medicorum principem,"—and contains nearly one hundred and fifty recipes for sundry complaints and other intentions; some are connected with cosmetics, others for aphrodisiacal uses, &c., "Ad conceptum usum." "Ut mulier marem generet," &c., &c. Some promoting, others to prevent abortion, &c. "Aliquando dormitat bonus (Galenus) Homerus."

VI. LIBER DE MEDICINIS FACILE PARAB. GALENO ASCRIPATUS. LIB. TERTIUS.

BAS. ED., p. 483.

This third book is called also by the title of "De medicamentis quæ ad manum sunt" (off-hand remedies), and consists of nearly three hundred prescriptions! in omnes ferè morbos, et quibusdem alios!

In these three books may be discovered the originals of many of the panaceas, and receipts of the present age, for Hydrophobia, and the “ thousand ills that flesh is heir to.” They constitute a kind of romance in the domains of prescription!

VII. GALENI DOCUMENTUM DE PUERO EPILEPTICO.

ADVICE FOR AN EPILEPTIC BOY.

BAS. ED., p. 518.

This is a letter of advice from Galen to Cæcilianus, who had consulted him respecting his son; in which he enters pretty extensively into the treatment, both remedial and dietetic, which he deemed proper to be pursued, and gives his reasons for the same;—although not capable of being epitomised, it will by its perusal afford information.

VIII. GALENO ASRIPTUS LIBER DE INCANTATIONE, ADJURATIONE, ET SUSPENSIONE.

ON INCANTATION, ADJURATION, AND CHARMS.

BAS. ED., p. 526.

This book on charms, amulets and the like, is ascribed to Constantinus Africanus, in whose writings it appears; why it should have been attributed to Galen, does not appear. It commences by an address to Constantine’s child (*fili charissime*), who seems to have inquired as to the utility of the objects in view; and whether any thing had been written on the subject by the Greeks or Indians? To this inquiry, the treatise is a reply; and Galen is referred to in more than one part. Much curious matter is spread over it,—and the influence of the mind or imagination on many occasions is pointed out, and its utility in practice is sustained. The folly of some of the notions then entertained, and which have come down nearly to our times, is pointed out, and the statements of some of the physicians of anterior period, as to charms, &c., are enumerated;

and although he seems to doubt them, further than as operating on the imagination; yet he acknowledges the difficulty of coming to certain conclusions, where not personally present; adding, that as we would doubt the attraction of iron by the magnet, if we had not seen it, so many things may be true, which we cannot comprehend.

IX. GALENI IN LIB. DE NATURA HUMANA, COMMENTARIUS SECUNDUS.

A SECOND COMMENTARY ON THE BOOK DE NATURA HUMANA.

VENICE ED., p. 180.

This book “de Natura Humana,” is not acknowledged by Galen as one of Hippocrates. (class 1, no. 3.) This second commentary is on that part of the treatise regarded by Galen as spurious, and which he attributes to Polybius. He divides it under twenty-two paragraphs, as texts for his comments. The operation of some common cause in producing an epidemic is affirmed. The origin of four pair of vessels from the head is properly criticised, and some useful remarks are spread throughout the whole.

X. GALENI, DE OCULIS THERAPEUTICON.—SPURIUS.

OF THE TREATMENT OF OPHTHALMIC AFFECTIONS.

BAS. ED., p. 530.

This treatise, stated to be spurious, gives an account of the eyes, their construction, their tunics, humours, muscles, nerves, &c., the mode in which vision is accomplished, and other particulars relating thereto. Then, after some observations on the primary intentions of medicine in general, in relation to diseases, their causes and symptoms; the affections of the eyes, and of their respective parts, are considered, and the remedial measures to be adopted for their removal. An immense assortment of collyria is presented, headed “de collyriis multis ad oculorum ægritudines,” and the patient must be hard to please who cannot find one for his purpose.

XI. GALENO ASRIPTUS LIBER DE RENUM AFFEC-
TUUM DIGNOTIONE ET MEDICATIONE.

OF DISEASES OF THE KIDNEYS, AND THEIR TREATMENT.

BAS. ED., p. 566.

The kidneys are here described, as to substance, situation, parts, and uses. Nephritis, calculus, and other renal and vesical affections, are duly treated of. The causes of calculus, symptoms, &c., and of those impacted in the urethra. Difference of calculi in size, situation, figure and colour. Cure of, and relief, by various means, of a general character; followed by those adapted to particular cases. The latter part of the treatise is especially intended for, and is addressed to an individual labouring under calculus. Another tract upon the subject is partly promised.

XII. GALENI, IN HIPPOCRATEM DE OFFICINA
MEDICI.—COM. TRES.

THREE COMMENTARIES ON THE HIPPOC. TREATISE OF THE OFFICE OF
THE PHYSICIAN.

BAS. ED., p. 746.

There seems some doubt with Galen, whether this treatise is not the production of Thessalus, one of the sons of Hippocrates, and intended by him simply as hints for remembrance. The commentaries on each paragraph are pretty extensive, and many of much interest. Indeed the treatise is itself far too brief to be properly comprehended now, without the aid of Galen. The second of Galen's commentaries commences with that part of Hippocrates' treatise that treats on bandages, and the right indication for their employment. In the Venice eighth edition we are presented with a series of engravings of the various bandages affixed to different parts of the head, body and extremities, with copious remarks. The subject is continued in the third commentary, and not a little is said

on fractures and luxations, which is, however, more fully pursued in the succeeding book.

XIII. GALENI IN LIB. HIPPOCRATIS DE FRACTURIS, COMMENT. TRES.

THREE COMMENTARIES ON THE BOOK OF FRACTURES BY HIPPOCRATES.

BAS. ED., p. 840.

In these three commentaries the subject of fractures is largely discussed. After some preliminary observations as to the general nature of fractures, and the indications of treatment, they are individually considered, and some rude plates are given as explanatory of some parts, in the Venice edition. Luxations of sundry joints are treated of, as those of the femur, knee, ankle and others; and figures of some of the machines for extension in reducing them, are also afforded; some of which, probably, might be occasionally useful where at present pulleys are employed, but which are not always to be had in the country at a moment's warning. Compound fractures, &c., constitute the subject of the last or third commentary, with some accessory observations on bandages, luxations, &c. Some of the cuts given, look considerably like splints, &c., that have given celebrity to later writers!

XIV. GALENI, IN LIB. HIPPOC. DE ARTICULIS, COMMENT. QUATUOR.

FOUR COMMENTARIES ON THE BOOK OF HIP. ON LUXATIONS.

BAS. ED., p. 944.

As the preceding book, though nominally appropriated to fractures, contains much on the subject of luxations, so this, which is connected chiefly with luxations, has much respecting fractures. In the Venice edition we have a considerable number of cuts, explanatory of the processes pursued in the reduction of different luxations, especially of the humerus; the symptoms of each are pointed out,

and the rationale of the process pursued. As in the former, so in this, it would be impossible to give an epitome of the contents. The subjects are copiously handled, and especially some of the most important; thus, on the luxation of the femur, we have it treated of, under the following heads.

De Femore ex coxa prolapsa ; divided under four varieties.

De capite Femoris in *exteriorem* partem luxato.

De Femoris capite in partem *priorem* luxato.

De Femoris capite in partem *interiorem* luxato.

De Femoris capite in partem *posteriorem* luxato.

There is a good deal of very singular and *heels-over-head* business in these books; for, under some circumstances, the reduction is made by hanging the patient by the legs, head-downwards, as described, and exemplified by engravings, and probably, in practice, not unavailing. Should curiosity lead any one to peruse these commentaries, some pearls may be found amongst a good deal of rubbish.

XV. GALENUS DE FASCIIS.

ON BANDAGES.

VEN. ED., p. 293.

The Latin translator (Vidus Vidius,) of this, which does not appear in the Basil edition, in an address to the reader, informs him that this is one of the three treatises on bandages, by Galen, Soranus, and Heliodorus; of which he gives only this, of Galen, since whoever knows it, will be masters of the other two. Satisfied that this is Galen's, he remarks that it is the very book he promised, in the second commentary: "De Officina Medici." As some few things are wanting that are found in Soranus and Heliodorus, he has here inserted them. Some further information of not much importance, is added, and the treatise itself immediately succeeds.

Various bandages (and many plates) for the head are described from different authorities, seventy in number;—followed by others

for the luxation of the extremities; fracture of the clavicle; suspensory and other bandages, all derived apparently from other writers; and some not undeserving of present notice. Some indeed are in use amongst us.

XVI. ORIBASIUS, DE LAQUEIS, EX HERACLE.

OF A NOOSE OR LIGATURE.

VEN. ED., p. 306.

This treatise introduced into the Venice edition, is only noticed here from that circumstance. It is, says the Translator Vidius, praised by Galen in his book on bandages (*de Fasciis*), and is elsewhere noticed by him, yet in the Greek copy, he adds, it is referred to Oribasius. However this be, he further remarks, there are many things in it necessary to the elucidation of medicine. The subject matter is that of ligatures, of various kinds, for tying up bandages or dressings, extension in the reducing of fractures, &c. Cuts are given of these, nearly twenty in number.

XVII. ORIBASIUS, DE MACHINAMENTIS, EX HELIODORO.

ON SURGICAL MACHINERY, OR APPARATUS.

VEN. ED., p. 309.

What is said above, will apply to this treatise on the machinery employed. It appears to be a collection made by Oribasius, from Hippocrates, Galen, and other authors—giving the description and use of such machinery, with the rationale of its employment. It is accompanied by figures.

This concludes the seventh class.

ADDITIONAL CLASS.^a

GALENI extra ordinem Classum Libri, in quibus breves rerum determinationes traduntur, quarum perceptio, superiorum librorum lectionem requiret.—Venice edition, 1609.

INDEX OF THIS ADDITIONAL CLASS.

	TRANSLATOR.
1. Galeni in Aphorismos Hippoc: Comment; Septem. - - - - -	N. Leonicenus.
2. adversus Lycum, in Aphor.: Hippoc.	J. Alexandrino.
3. contra ea quæ a Juliano in Hipp.: Aphor.: dicta sunt. - - - - -	Idem.
4. explanatio linguarum obsoletarum Hippocratis. - - - - -	J. Cornario.

The aphorisms of Hippocrates are in the hands of most physicians. They have been much read, and much commented on. They are in fact, almost the only part of his writings that are familiar to the Profession; and with much to be admired, and admitted as truth, contain not a little error. The commentaries of Galen are, in many parts interesting, and much practical use may be acquired from their perusal. An abstract of them is impossible. The aphorisms are singly taken, as texts, on which Galen very learnedly expatiates. All the three first numbers of this class, are of the same character. The latter (No. iv.), though united with these aphoristic books, is merely an explanation of obsolete words in the Hippocratic writings, and of consequence

^a Το αφοριστικόν.

forms a kind of lexicon in alphabetical order. The second number is a contradiction of the opinion of Lycus, in respect to a certain aphorism (fourteenth) of Hippocrates; and the third in like manner opposes some of the assertions of Julianus relating to the aphorisms.

We leave this class, and proceed to mention, what are in the Venice edition denominated “*Spurii Libri*,” and in that of Basil, “*Libri Galeno ascripti*.”

SPURII GALENO ASCRIPTI LIBRI.*

“Qui variam artis medicæ farraginem ex variis auctoribus excerptam continentes, optimo, quo fieri potuit, ordine sunt dispositi, et in unum corpus redacti.”—Venice Ed. 1609.

These contain, as above stated, a vast medley of the medical art, extracted from numerous sources; disposed of in the best mode that could be devised, and brought thus into a compact form. A mere enumeration of the titles must suffice to show their respective character. There is, however, contained in them an abundant harvest of interesting and curious matter, deserving the attention of the philosopher and physician.

I. GALENI LIBER DE HISTORIA PHILOSOPHICA.

OF THE HISTORY OF PHILOSOPHY.

J. M. ROTA, TRANSLATOR.

This is very interesting. It begins with an account of the origin of philosophy, both moral and natural, prior to Socrates, the succession of the philosophers, sects, denominations, &c. &c. Metaphysics are largely dwelt on. God, the soul, necessity, fate, and an infinite number of topics of much interest, are successively considered. It would exhibit a curious outline of the different ideas of the philosophers of successive ages to the time of Galen, if clothed in a modern language!

* Tea Nego.

II. PROGNOSTICA DE INFIRMORUM DECUBITU, EX MATHEMATICA SCIENTIA.

MATHEMATICAL PROGNOSTICS ON THE DECUBITUS OF THE SICK.

This is a most singular production, and probably was highly instrumental in introducing astrology into medicine. Under the name of mathematics, which is here highly extolled, astrology seems to be intended; and its utility to medicine is insisted on, from the authority of Hippocrates and Diocles. The figure (*configuratio*) of the moon is run through all the signs of the Zodiac, and the effects in disease, &c., largely enumerated and predicted.

III. GALENI, DE PARTIBUS ARTIS MEDICÆ.

OF THE DIVISIONS OF MEDICINE.

N. R. CALABRI, TRANSLATOR.

The divisions of the science as made by different men, are enumerated and criticised; after which the author gives his own. The translator says of this book, “*Qui nisi Galeni fuerit, eo tamen auctore dignus videtur.*”

III. GALENO ATTRIBUTUS LIBER DE DYNAMIDIIS.

Desideratur principium.

IV. GALENO ATTRIBUTUS LIBER ALTER DE DYNAMIDIIS.

What is spoken of in the first of these tracts, is stated to be more fully detailed “*In libris facultatum medicamentorum simplicium.*” The greater part of the latter is said to be derived from Aetius. The term dynamis seems to imply, that the treatise is a store-house or assemblage of remedial means, and which are here noticed.

V. GALENO ASRIPTUS LIBER DE SPERMATE.

ON THE SEED.

This treats of the male and female seed, and of its product the foetus; with the influence of the seed, as to the greater or less amount of either, in determining the sex and its qualities, &c., according as conception is produced under the influence of the sanguine, choleric, phlegmatic or other temperament; or as connected with the state of the humours of the body, of the heavenly bodies, planets, &c. Some remarks appear to be connected with the planetary influence on disease, &c.

VI. DE NATURA ET ORDINE CUJUSLIBET CORPORIS.

Treats of the nature and effects of the four humours constituting the body of man. Of the foetus in utero, in the disposition of its formation. A slight sketch is given of the anatomical structure of man. The book is correctly said to be “ordine et judicio carens.”

VII. DE ANATOMIA PARVA. ASRIPTUS GALENO.

ON COMPARATIVE ANATOMY.

This assigns some reason for Galen and others dissecting brutes. It points out the mode, and gives the anatomy of the hog, which in its internal structure is said to be closely allied to that of man. A most ridiculous description is given of the anatomy of the uterus and of the brain. The book is properly stated to be “maxime deridendum.”

VIII. DE ANATOMIA VIVORUM.

OF THE ANATOMY OF LIVING SUBJECTS.

The body is divided into simple and compound parts, which are

respectively treated in detail. The book is said to contain much that is correct and worthy of Galen, but much also that is the reverse of this.

IX. DE ANATOMIA OCULORUM.

OF THE ANATOMY OF THE EYES.

N. REGIUS, TRANSLATOR.

A concise description of these organs, their coats, humours, &c.

X. DE COMPAGINE MEMBRORUM, SIVE DE NATURA HUMANA.

“Aliqua et hic vera, aliqua deridenda,” says the editor. The book is partly anatomical, in part physiological. We have here a speck of phrenological location of the admitted faculties of the mind, when speaking of the brain and its division of parts. “Intra quam sunt divisiones tres, prima dicitur phantasia : secunda rationalis : tertia memorialis. Inter phantasiam et rationalem est pannus quidam frigidus et siccus,” &c., &c.—“Ex memoriali vero procedunt duo canales tenues et humidi, qui penetrant per totam compaginem, et veniunt usque ad phantasiæ cellulam, per quos possit phantasticus spiritus et rationalis commendari memoriæ, et iterum memorialis duci ad rationem et phantasiam.” The faculties, it would appear, then belonged to the *peripatetic* school! and were not permanently attached to one habitation.

XI. DE VIRTUTIBUS NOSTRUM CORPUS DISPE NSANTIBUS.

“Ex veris Galeni libris fragmentum,” says the editor.

The powers or faculties (*virtutes*) have their origin in three sources, viz., the heart, the head, and the liver ;—the influence or effects arising therefrom. Animal and vital spirits. Generation is under the influence of all three.

XII. DE VOCE ET ANHELITU. TRACTATUS QUATUOR.

Of the voice and the organs producing it. How effected, impeded or lost. Diversity of, in gravity, or acuteness, &c. Injuries of the medulla spinalis, how affecting the voice and breathing. Natural breathing, if voluntary.

XIII. DE UTILITATE RESPIRATIONIS.

Many of the things in this book, the editor says, are correct, but for the most part are taken from Aristotle. The consideration is interesting, from the facts and speculations found in it.

XIV. COMPENDIUM PULSUUM.

“*Liber jejunus, sed non omnino rejiciendus,*” says the editor.

XV. DE MOTIBUS MANIFESTIS ET OBSCURIS.

This treatise attributed to Galen, is stated to have been translated from the Greek into Arabic by Johannitius; and from the Arabic into Latin, by Marcus. By such repeated translations, several errors have been introduced. Galen mentions this book in several places; nor is it undeserving of attention. It may afford a slight idea of its contents to state that in ten short chapters the following subjects are embraced. Of the faculty or power of motion in different parts, its causes, &c. Of the motion in respiration, and of the difference of opinion as to its being voluntary or involuntary. A comparison drawn between such involuntary, or non-manifest motions, and the intestine motion of some fluids, &c.; of the motion of the penis; of the tongue; of the motions of vomiting and swallowing; of the motion of the eyelids; of the motions excited in coughing, laughing, and sneezing, &c.

XVI. DE DISSOLUTIONE CONTINUA CORPORIS HUMANI.

Many parts of this treatise are derived from Galen's books, "De alimentis et cibis boni et mali succi," and it is supposed to have been written by some one long after him. It consists principally of a statement of the nature of the food, with which the body is supplied, to make up the deficiences arising from the discharges.

XVII. DE AQUIS, EX GALENO, ET ALIIS PRÆ-STANTISSIMIS MEDICIS.

A. GADALDINUS, TRANSLATOR.

The Venice eighth edition says that this book is entitled in the previous editions "De Bonitate Aquæ," and is greatly mutilated. It here consists of six chapters, derived from Oribasius, who has extracted them from different sources, as Galen, Rufus, Diocles, Athenæus, &c.

XVIII. DE VINIS. EX GALENO.

A. GADALDINUS, TRANSLATOR.

From the medical tracts of Oribasius.

XIX. PRÆSAGIUM EXPERIENTIA CONFIRMATUM.

G. VALLA, TRANSLATOR.

An imitation of some of Galen's books, but trifling in execution. It treats of præsages, in general, and of the signs indicative of future fever. Something is said on sweat, and bloodletting, on which last, evidence of bold and energetic practice is apparent, and is extracted from Galen.

XX. DE URINÆ SIGNIFICATIONE, EX HIPPOCRATE.

G. VALLA, TRANSLATOR.

XXI. DE SIMPLICIBUS MEDICAMINIBUS.

A short description of a long catalogue of remedies, addressed to a friend, whose diligence and skill he warmly praises. They are arranged in alphabetic order. It will serve for reference.

XXII. DE VIRTUTE CENTAUREÆ.

A book, says the editor, which though probably not from Galen, yet much is to be found in it not devoid of reason. It contains an account of two species of centaury, their powers, preparation, and use in disease.

XXIII. DE CATHARTICIS.

An incorrect (*corruptus*) book, says the editor, and to be cautiously compared with the true writings of Galen. Cathartics are here intended to apply to other evacuants than mere purgatives. In this book are therefore considered, not only such, but those also that cause vomition, a discharge of tears, or from the ears, nostrils, lungs, and thorax, liver, spleen, kidneys, and uterus, &c. Some useful hints may be derived from its perusal.

XXIV. DE GYNÆCEIS, ID EST, DE PASSIONIBUS
MULIERUM.

N. RHEGIUS, TRANSLATOR.

A trifling treatise according to the editor. It consists of various prescriptions, for numerous female affections.

XXV. LIBER SECRETORUM.

ADDRESSED TO MONTEUS.

Although these secrets are not from Galen, yet, says the editor, something may be derived from their perusal. They consist of prescriptions, with an occasional record of some case in point, somewhat as a puff direct. An ingenious quack might here find arrows for his quiver! as well as advertisements for the public. Some of the prescriptions have so many ingredients, that the disease must be fastidious, that could not pick out some one for its benefit.

XXVI. DE MEDICINIS EXPERTIS, VEL MEDICINALIS
EXPERIMENTATIO.

This is rather a singular treatise, and may possibly be correctly ascribed to Galen, judging from its beginning. “The lightning, says the author, which struck the altar, burnt up the King’s books, and together with them, many medical works; many books of my own were destroyed, some of them complete, and some merely commenced. I do not so much regret them, as I do the loss of many experiments in medicine contained in them, which I had obtained from several excellent experimenters; for some of which thus obtained, I returned perhaps several, or purchased them for cash.” It would seem, however, that copies must have been kept of many of them, for at the close of the preface, we are told that he composed this book, from medicines he had himself tried, and acquired from good physicians; and adds, that here are to be found not the remedies of universal note, but such, as for the most part were unknown to all. “If hereafter I acquire more, I will write another book respecting them.” He then proceeds to give prescriptions for these remedies, received from sundry Empirics, and other physicians and philosophers, whose names are stated; concluding with some, which “multoties experti sumus.” The whole is a curious farrago, and as a curiosity may deserve inspection.

XXVII. DE MELANCHOLIA, EX GALENO, RUFO, ET
POSSIDONIO, AB AETIO^a CONSCRIPTA.

J. CORNARIO, TRANSLATOR.

This disease seems to have had as many vagaries formerly, as at present, and to have been equally difficult of cure. The rationale of some of these vagaries is attempted, such as of those who considered themselves to be an earthen pipkin, (*vas fictile.*) Another who thought he had no head.^b The observations are in many parts judicious; and the treatment is perhaps fully as correct as any now pursued.

XXVIII. DE CURA ICTERI.

Much herein, says the editor, is true, and derived from high authority. Phlebotomy and evacuations both up and down, with topical applications are urged, such as cataplasms, cups, &c. Baths, diet, &c., are not omitted, and various medicines are enumerated for particular indications.

XXIX. DE CURA LAPIDIS.

If judiciously perused, says the editor, something useful may be obtained. The treatise is regarded as of Arabian origin. Much utility is ascribed to diet and certain remedies in destroying the stone; and several prescriptions are interspersed, most of which seem to be of the order of diuretics. Some directions are given for the cure of incontinence of urine.

XXX. QUÆSITA ASCRIPTA GALENO, IN HIPPOC.
DE URINIS.

These appear to be inquiries (to be pursued) as to certain points

^a Lib. 6. cap 9.

^b And girls turned bottles, call aloud for corks."—POPE.

on the subject of urine in the Prognostics and Aphorisms of Hippocrates.

XXXI. LIBER DE HUMORIBUS.

A. GADALDINUS, TRANSLATOR.

Probably short minutes of the larger treatise on this subject, under class third. Of little importance. Not found in the Basil edition.

XXXII. DE PLANTIS. TRANSLATUS DE ARABICO.

This appears to be a glossary of *Humain*, an Arabian, on several plants, &c., mentioned by Galen, possessing certain occult qualities, not fully investigated or proved, and which *Humain* undertakes to explain and illustrate under forty-six heads.—Not in the Basil edition.

XXXIII. DE CLYSTERIBUS ET COLICA.

This would seem to be also from the hand of *Humain*, and is stated to have been translated into Arabic from the Greek, and from the Arabic into Hebrew: the Latin Translator is not mentioned. Some good remarks occur as to glysters, and numerous prescriptions, adapted to various ends, especially in cases of colic.

With this, the Libri Spurii terminate, and a short series called *Fragments*, bring the writings of Galen to a conclusion. These are merely enumerated. They do not appear in the Basil edition.

F R A G M E N T S.

GALENI, operum quorundam, quæ aliquo modo mutilata ad nos pervenere, FRAGMENTA, ad varias medicinæ partes attinentia, quæ proximæ tantum ante hanc editiones evulgaverant.—Ven. Ed. 1609.

1. Galeni, Commentaria quatuor in lib. Hippoc. de Alimento.
2. Fragmentum comment. in duo lib. Epidem. Hippocratis.
3. Brevis Denotatio Dogmatum Hippocratis, &c.
4. Fragmentum ex quatuor comment. quos ipse inscripsit
de iis quæ medicè dicta sunt in Platonis Timœo.
5. Fragmentum de Motu Thoracis et Pulmonis.
6. Vocalium Instrumentorum Dissectio.
7. Fragmentum de substantia facultatum naturalium.
8. Frag. exiguum, ac mendosum Galeno ascriptus, cuius
Titulus est Sermo adversus Empiricos Medicos.
9. Fragmenta ex Aphorismis Rabbi Moysis collecta.
10. Fragmenta ex Rasis lib. contin. collecta.
11. Coena Philosophica, ex Athenœo.
12. Ex libro Nemesii de anima, cap. duo.
13. De morsu, qui in ægritudine percipitur :—ex incerto.
14. Ex Themistio, in Paraphrasi quarti de naturali auscultatione, cap. quadriginta tres.
15. Ex Simplicio, in quartum de Natur. Auscult. Aristotelis.
comm. quatuor-decem.
16. Ex Averroe libro priorum Aristot. primo, Cap. octo.

All the above are of slight importance, further than as completing from every quarter all that relates to Galen and his works. The whole of the writings thus noticed briefly in the foregoing sheets, occupy several hundred folio pages, spread through six or

seven volumes in the Latin, and five in the Greek. A new edition in the present style of typography had been long wanting,^a for numerous difficulties attend the perusal of the older copies, and are sufficient in the present day to preclude most persons from making the attempt. A few of these I shall notice. They consist of numerous contractions, omission of complete syllables, and often of the hyphen at the close of a line, in the division of the syllables of a word. The extreme closeness of many words to each other, at times nearly running into one another, as though but one. The use of one letter for another, as *j* in place of *i*, (thus *ijs* for *iis*, *v* for *u*, and reversely.) Of which the following are examples.

uictus for victus,	uero for vero,
vrina " urina,	uua " uva,
cauam " cavam,	apvd " apud,
vlcus " ulcus,	

Contractions, &c.

oēs	for omnes,	errātes " errantes,
oīa	" omnia,	solet " solent,
autē	" autem,	profluia " profluvia,
scdm	" secundum,	vuulā " uvulam,
tūc	" tunc,	&c., &c., &c.

All these, and many others—together with a want of stops at times; at others, a full stop, followed by a small letter—render the reading very far from desirable. In the days of those editions, such contractions and other particulars enumerated, were fully understood, and were productive of neither mistake nor difficulty. Not so now, especially since the Latin language has become much less familiar. Now, these are not of merely rare occurrence; but occur by scores in every page, and as they are not uniformly maintained, the labour is much augmented.

At the end of Le Clerc's "Histoire de la Médecine," he has given us an apology for the condensed view he has afforded of the writings of Galen, which will serve with equal force in behalf of the

^a This has been effected by the assiduity of the learned Gottlob Kühn, Professor of Physiology and Pathology in the University of Leipsic, in 1832, but whose edition did not come into my possession, until the preceding abstract was completed. It would have saved me much trouble had it reached me at the period of its publication.

editor of this volume; and which the editor begs to place before his readers with a like intention.

“ Si l'on avoit voulu entrer dans un détail qui eût renfermé tout cela, il auroit fallu faire un gros livre; à moins de quoi il auroit été impossible de rendre exactement raison de tout ce qu'il y a de remarquable dans six volumes in folio que nous avons de Galien.”

This apology is followed by a list of the writings of Galen, derived from the edition given by Chartier, the most full and perfect of any edition that had been given to the world previous to that of Kühns. It may not be unacceptable to the reader, and I give it therefore as it appears in Le Clerc.—ED.

Liste des Livres de Galien, tirée de l'édition de Chartier.

La lettre L, qui est ajoutée à la fin de quelques-uns des titres des livres de Galien, marque que ces livres ne se trouvent qu'en Latin. Monsieur Chartier donne une autre liste des livres de Galien, qu'on n'a plus ni en Grec ni en Latin, ou qui sont cachés dans quelques Bibliothèques, & qui ne sont connus que par le titre. La plus grande partie de ces livres ne regardent pas la Médecine.

GALIEN, de ses propres livres, i.

De l'ordre de ses livres, i.

Harangue de Galien de Pergame, Paraphraste, fils de Menodotus, pour exhorter à apprendre les beaux arts. i.

Il est visible que c'est un autre Galien.

De la meilleure Doctrine, i.

De l'Histoire Philosophique, i.

Fragment de Galien, tiré de Jean le Grammairien. Livre attribué à Galien, intitulé, Que les qualitez sont incorporrelles, i.

Fragment de Galien, tiré de Simplicius.

Autre, tiré d'Averrhoës.

Notes de Galien sur Hippocrate, tirées de Stobée.

Des Sophismes dans les mots, i.

- Galien, Explication des vieux mots d'Hippocrate, i.
De l'établissement de l'art de la Médecine, i.
L'Art de la Médecine, i.
Définitions Médicinales, i.
Des parties de la Médecine, i. L.
Des Sectes, à ceux qui commencent à étudier, i.
De la meilleure Secte, i.
Discours contre les Empiriques, Fragment attribué à Galien. L.
Exposition du Système des Empiriques. L.
Qu'un bon Médecin doit aussi être Philosophe, i.
Introduction à la Médecine, où le Médecin, livre attribué à Galien, i.
Des Elémens, selon Hippocrate, ii.
Des Temperamens, iii.
Commentaires sur deux livres d'Hippocrate. De la nature de l'homme, ii.
Des Humeurs, i.
S'il y a naturellement du sang dans les artères ? i.
De la Bile noire, i.
De la Semence, iii. De la semence petit livre ; L.
Des os, à ceux qui apprennent l'Anatomie, i.
Des Administrations Anatomiques, ix.
De l'Anatomie des Corps vivans, attribué à Galien, i. L.
De la petite Anatomie, attribué à Galien, i. L.
Dissection des organes de la voix, i. L.
De l'Anatomie des Yeux, attribué à Galien, i. L.
De la Dissection des Veines, & des Arteres, i.
De la Dissection des Nerfs, i.
Des Muscles, tiré des livres d'Oribase, i.
De la Dissection de la Matrice, i.
De l'Usage des parties, xvii.
De l'Ame, Fragment tiré du livre de Nemesius, intitulé de la nature de l'homme.
Autre Fragment tiré du chap. xx. du même Nemesius, touchant la Peur.
De la substance des facultez Naturelles, fragment.
Des Facultez qui gouvernent nôtre corps, attribué à Galien, i. L.
Des Facultez Naturelles, iii.

- Galien, Des sentimens d'Hippocrate, & de Platon, ix.
 Fragment sur le Timée de Platon. L.
 De la formation du fœtus, i.
 Si toutes les parties de l'animal se forment en même temps? L.
 De la nature, & de l'ordre de chaque corps, attribué à Galien, i. L.
 De la liaison des parties, ou de la Nature de l'homme, attribué à Galien, i. L.
 Si ce qui est dans la matrice est un animal? i.
 De l'Enfant qui naît le septième mois, i.
 De l'organe de l'odorat, i.
 Du Mouvement des Muscles, ii.
 Des Mouvemens manifestes, & obscurs, attribué à Galien, i. L.
 Fragment, tiré de cette même paraphrase du quatrième livre de *Physica auscultatione*.
 Autre Fragment, tiré de cette même paraphrase.
 Autre, tiré du livre des Songes, de Michel Ephésien.
 Du Mouvement de la poitrine, & du Poumon, Fragment. L.
 De l'Usage de la respiration, attribué à Galien, i. L.
 De l'Usage de la respiration, reconnu pour être de Galien, i.
 Des causes de la respiration, i.
 De la Voix, & de la respiration, attribué à Galien, i. L.
 De l'Usage des Pouls, i.
 Que les qualitez de l'esprit suivent le temperament du corps, i.
 De la bonne Constitution du corps, i.
 De l'Embonpoint, i.
 Si l'Art qui regle l'usage des choses qui regardent la Santé, dépend de la Médecine, ou de la Gymnastique? i.
 De la Conservation de la Santé, vi.
 Des Facultez des Alimens, iii.
 Du flux continual de la substance du corps; ou Quatrième livre des alimens, attribué à Galien, i. L.
 De la Manière de vivre atténuante, i. L.
 Des bons, & des mauvais Sucs des alimens, i.
 Préceptes touchant la constitution du corps; touchant la diète convenable dans les quatres saisons, & dans les douze mois de l'année, i.

- Galien, De l'Usage des choses liquides, i.
De la manière de vivre de ceux qui se portent bien, iii.
Des Eaux, Fragment tiré de Galien, Oribase, &c.
Des Vins, autre Fragment tiré d'Oribase.
Autre Fragment sur le même sujet, tiré du même.
Autre Fragment sur le même sujet, tiré d'Athènée.
Du Pain, Fragment tiré d'Athènée.
De la Ptisane, i.
De l'Exercice de la petite paume, i.
De l'Acte Vénérien, Fragment.
De la connoissance des maladies tirée des Songes, i.
De la connoissance, & de la cure des passions de l'ame, i.
Autre livre dont le titre est presque semblable.
De la Coutume, i. L.
Des Differences des Maladies, i.
Des Causes des Maladies, i.
Des Differences des Symptomes, i.
Des Causes des Symptomes, iii.
Des Differences des Fiévres, ii.
De l'Intempérie Inégale, i.
Du Marasme, ou de la Consomption, i.
Des Tumeurs contre nature, i.
De la Plénitude, i.
Des Causes Procatactiques, i. L.
Du Tremblement, de la Palpitation, de la Convulsion, du Frisson, i.
Du Coma, i.
De la Difficulté de respirer, iii.
Des Temps des Maladies, i.
Des Caractères des Fiévres, i.
Contre ceux qui ont écrit des Caractères des Fiévres, i.
De la Soif, Fragment.
De la Fièvre Hémitrîtée, i.
Des Parties affectées, vi.
Des Maladies des Femmes, i.
Des Maladies des Femmes, Fragment. L.
Des Pouls, à ceux qui commencent d'étudier, i.
Des Differences des Pouls, iv.
De la connoissance des Pouls, iv.
Des Causes des Pouls, iv.

- Galien, Des Présages tirez des Pouls, iv.
 Abrégé des seize livres des Pouls, i. L.
 Abrégé des Pouls, attribué à Galien, i.
 Des Pouls, petit livre, addressé au Philosophe Antoine.
 Des Urines, attribué à Galien, i.
 Abrégé des Urines, i.
 Petit livre des Urines, tiré d'Hippocrate, de Galien, & de quelque autres.
 Des Crises, iii.
 Des Jours Critiques, iii.
 Trois Commentaires sur le livre d'Hippocrate, des Hu-
 meurs. L.
 Trois Commentaires sur les Prognostiques d'Hippocrate.
 Trois Commentaires sur les Prédictions d'Hippocrate.
 Du Prognostique, à Posthumus, i.
 Du Prognostique, petit livre.
 Vrai, & experimenté Prognostique.
 De La Saignée, Fragment.
 Prognostique sur la manière dont un malade est couché,
 tiré des Mathematiques, i.
 Comment on découvre ceux qui feignent une maladie, i.
 Questions sur Hippocrate, attribuées à Galien, i. L.
 Trois Commentaires sur le premier des Epidémiques
 d'Hippocrate.
 Un Commentaire sur le second des Epidémiques.
 Fragment de Commentaire sur le même livre.
 Trois Commentaires sur le troisième des Epidémiques.
 Six Commentaires sur le sixième des Epidémiques.
 Sept Commentaires sur les Aphorismes d'Hippocrate.
 Qu'Hippocrate n'a point erré dans l'Aphorisme, qui com-
 mence ainsi; *Ceux qui croissent ont le plus de chaleur
 naturelle, contre Lycus.*
 Contre ce que Julien a écrit contre les Aphorismes d'Ip-
 pocrate.
 Fragmens de Galien, tirez des Aphorismes de Rabbi
 Moïse.
 Fragment tiré de Rhases.
 De la Méthode de traiter les maladies, xiv.
 L'Art de guérir les maladies, addressé à Glauq, ii.
 De la Saignée, contre Erasistrate, i.

- Galien, De la Saignée, contre les Sectateurs d'Erasistrate qui sont à Rome, i.
- De la manière de guérir par la Saignée, i.
- Des Sansues, de la Révulsion, des Ventouses, & de la Scatification, i. L.
- Des Facultez des médicamens purgatifs, i.
- Des médicamens purgatifs, attribué à Galien, i. L.
- Qui sont ceux que l'on doit purger, par quels médicamens, & quand on le doit faire.
- Conseil pour un jeune garçon Epileptique.
- De la Mélancholie, Fragment tiré d'Aëtius.
- Des Yeux, attribué à Galien, i. L.
- De la Colique, i. L.
- De la Jaunisse, attribué à Galien, i. L.
- Des maladies des Reins, livre supposé.
- De la Pierre, attribué à Galien. L.
- De la Sciatique, & de la Goutte, i.
- Des Remèdes expérimentez, attribué à Galien, i. L.
- Livre des Secrets, à Monteus, attribué à Galien, i. L.
- De l'Incantation, de l'Adjuration, & de la Suspension, attribué à Galien, i. L.
- De la cure Homerique, Fragment tiré de Trallian.
- Des remèdes assez à faire, i.
- Des remèdes assez à faire, addressé à Solon, Chef des Médecins, supposé, i.
- De Dynamidiis*, c'est à dire, des facultez des médicamens, ou des médicamens efficaces, attribué à Galien. *On croit que ce livre est de Gariopontus*, L.
- Quatre Commentaires sur le livre d'Hippocrate de la Diète dans les maladies aigues.
- De la Diète dans les maladies agues, petit livre. L.
- Trois Commentaries sur le livre d'Hippocrate, de la Boutique du Médecin.
- Trois Commentaires sur le livre d'Hippocrate, des Fractures.
- Quatre Commentaires sur le livre d'Hippocrate, des Articulations.
- Des Bandages.
- Des Facultez, & Temperamens des Médicamens simples, xi.

- Galien, De la Composition des Médicamens, considérrez par rapport aux parties du corps, x.
- De la Composition des Médicamens, considérrez par rapport à leurs genres, vii.
- Des Antidotes, ii.
- De la Thériaque, à Pison, i. Ce livre paroît à quelques-uns supposé.
- De la Thériaque, à Pamphilianus, attribué à Galien.
- Des Médicamens Succédanées, i.
- Des Poids, & des Mesures, i.
- Des Médicamens simples, à Paternianus, attribué à Galien. L.
- Des Plantes, attribué à Galien. L.
- Des Facultez de la Centaurée, attribué à Galien. L.
- Des Clysteres, i. L.
- Trois Commentaires sur le livre d'Hippocrate, de l'Air, des Lieux, & des Eaux. L.
- De l'anatomie des Muscles, à ceux qui apprennent, i. L.
-

Kühn, in the preface to his edition of Galen, has exhibited a determination, that could alone have enabled him to undertake and complete a task so herculean. He presumes that many, on seeing the first volume of the work, will accuse him of temerity, considering its magnitude and the uncertainty of life, &c., yet still he could not be deterred from it, but was incited more courageously (aerius) to continue the work, in hopes that even should he not live to effect it, it would still be happily accomplished. After full deliberation on the subject, he adds his hopes that no one who knows him will accuse him of levity in not sufficiently weighing the difficulty of the task, or taking into consideration his unfitness to bear such a burden as he assigned to himself. He nobly, in determining to fulfil it, thus expresses himself:

“ Cæsarem igitur imitatus, qui cum ad Rubiconem dubius, an flumen trajiceret, nec ne, aliquamdiu stetisset, subito exclamans. Jacta alea esto! exercitum Rubiconem transire jussit, bono animo hujus editionis curandæ labore aggressus sum.”

He proceeds then to consider the imperfections of preceding editions, arising from the ignorance of transcribers, and want of care in obviating errors in manuscripts, &c.—that at the beginning of the sixteenth century, the number was so great, that the life of a man would have been inadequate, though daily employed, to compare them with the text of the Basil or Charterian copies. Other difficulties are enumerated, which not being able to overcome fully, he accomplished what was in his power, by consulting all the editions he could obtain the use of; a list of which he enumerates, animadverting on the defects of many, and acknowledging his obligations to several friends for aid in his researches, and hoping his undertaking may be happily brought to a completion.

After this preface, he proceeds to give the literary history of Galen, embraced in nearly two hundred and fifty pages. Of this I give the catalogue of the writings, which is more extended than those I have already introduced; but it appears so much more perfect, owing to additional discoveries, that I feel assured it will not be unacceptable to the Profession at large.

HISTORIA LITERARIA CLAUDII GALENI.

- | | |
|---|---|
| I. Vita Galeni.
II. Galeni in medicinalem scientiam
merita generatim.
III. Medicinae status iis temporibus, qui-
bus Galenus universam ejus sci-
entiam mutabat.
IV. Quid in singulis medicinalis scientiæ
disciplinis invenerit Galenus rec-
tiusque dixerit.
V. Systema Galeni medicum.
VI. Libri a Galeno conscripti. Eorum
ratio.
VII. Classes, ordo librorum Galeni.
VIII. Institutum in ordine librorum Galeni
a me servatum.
IX. Singulorum librorum Galeni, et qui-
dem genuinorum, recensio.
1. De sectis ad eos, qui introducuntur.
2. De optima secta ad Thrasybulum.
3. De optima doctrina.
4. De sophismatis seu captionibus pc-
nes dictionem. | 5. Quod optimus medicus sit quoque
philosophus.
6. Suasoria ad artes oratio.
7. De constitutione artis medicæ ad
Patrophilum.
8. De elementis ex Hippocrate lib. ii.
9. De temperamentis libri iii.
10. De atra bile.
11. De inæquali intemperie.
12. De optima corporis nostri consti-
tutione.
13. De bono habitu.
14. De facultatibus naturalibus, lib. iii.
15. De substantia facultatum natura-
lium.
16. De anatomicis administrationibus
libri ix .
17. De ossibus ad tirones.
18. De venarum arteriarumque dissec-
tione.
19. De nervorum dissectione.
20. De muscularorum dissectione. |
|---|---|

21. De uteri dissectione.
 22. An in arteriis natura sanguis continetur.
 23. De motu muscularum libri ii.
 24. Vocalium instrumentorum dissectio.
 25. De caussis respirationis.
 26. De Hippocratis et Platonis decretis, libri ix.
 27. Fragmentum in Timœum Platonis, vel ex iv. commentariis, quos inscripti: De iis, quæ medice dicta sunt in Platonis Timœo.
 28. De semine libri ii.
 29. De usu partium corporis humani lib. xvii.
 30. De instrumento odoratus.
 31. De locis affectis libri vi.
 32. De differentiis febrium libri ii.
 33. De morborum temporibus.
 34. De respirationis usu.
 35. De usu pulsuum.
 36. De pulsibus libellus ad tirones.
 37. De pulsuum differentiis libri iv.
 38. De dignoscendis pulsibus libri iv.
 39. De caussis pulsuum libri iv.
 40. De præsagitione ex pulsibus libri iv.
 41. Synopsis librorum suorum xvi. de pulsibus.
 42. De dicibus decretoriis libri iii.
 43. De crisibus libri iii.
 44. De difficultate respirationis libri iii.
 45. De caussis procatareticis.
 46. De plenitudine.
 47. De tumoribus præter naturam.
 48. De tremore, palpitatione, convulsione et rigore.
 49. De simplicium medicamentorum temperamentis et facultatibus libri xi.
 50. Ars medica.
 51. De differentiis morborum.
 52. De morborum caussis.
 53. De differentia symptomatum, libri iii.
 54. De compositione medicamentorum secundum locos libri x.
 55. De compositione medicamentorum secundum genera libri vii.
 56. Methodus mcdendi libri xiv.
 57. Ad Glauconem de medendi methodo libri ii.
 58. De venæsectione adversus Erasistratum.
59. De venæsectione adversus Erasistratos, Romæ degentes.
 60. De curandi ratione per venæsectionem.
 61. De marasco.
 62. Pro puero epileptico consilium.
 63. Ad Thrasylbum liber, utrum medicinæ sit, vel gymnastices hygieine.
 64. De attenuante victus ratione.
 65. De tuenda sanitate libri vi.
 66. De alimentorum facultatibus libri iii.
 67. De probis pravisque alimentorum succis.
 68. Quod animi mores corporis temperamenta sequantur.
 69. Linguarum, seu dictionum exoletarum Hippocratis explicatio.
 70. De septimestri partu.
 71. De libris propriis.
 72. De ordine librorum suorum ad Eugenianum.
 73. De Ptisana.
 74. De parvæ pilæ exercitio.
 75. De hirudinibus, revulsione, cucurbitula, incisione et scarificatione.
 76. Quomodo morbum simulantes sint deprehendendi.
 77. De dignotione ex insomniis.
 78. De proprietum animi cujusque affectuum dignotione et curatione.
 79. De cuiuslibet animi peccatorum dignotione atque medela.
 80. De prænentione ad Epigenem.
 81. De antidotis libri ii.
 82. De fœtuum formatione.
- X. *Libri suspectæ originis.*
 83. Introductio s. medicus.
 84. De subfiguratione empirica.
 85. De voce et anhelitu.
 86. De respirationis usu.
 87. An animal sit, quod in utero est.
 88. An omnes partes animalis, quod procreatur, fiant simul.
 89. De consuetudinibus.
 90. De motu thoracis et pulmonis.
 91. De totius morbi temporibus.
 92. De typis.
 93. Adversus eos, qui de typis scripserunt.
 94. De coitate secundum Hippocratem.
 95. De victus ratione in morbis acutis ex Hippocratis sententia.

96. De purgantium medicamentorum facultate.
 97. De remediis paratu facilibus libri iii.
 98. De theriaca ad Pisonem.
 99. De theriaca ad Pamphilianum.
 100. De fascis.
- XI. *Libri manifeste spurii.***
101. De historia philosophica.
 102. Definitiones medicæ.
 103. De partibus artis medicæ.
 104. De anatomia vivorum.
 105. De conipage membrorum sive de natura humana.
 106. De natura et ordine cuiuslibet corporis.
 107. Quod qualitates incorporeæ sint.
 108. De motibus manifestis et obscuris.
 109. De facultatibus corpus nostrum dispensantibus.
 110. De dissolutione continua, s. de alimentorum facultatibus.
 111. Præceptum de humani corporis constitutione, dc diæta quatuor anni tempestatum et duodecim mensium.
 112. De humoribus.
 113. De prænotione.
 114. Omnino vera expertaque præsagatio.
 115. De venæsectione.
 116. Prognostica de decubitu ex mathematica scientia.
 117. De urinis.
 118. De urinis compendium.
 119. De urinis ex Hippocrate, Galeno et aliis quibusdam.
 120. Quæsita in Hippocratem de urinis.
 121. De pulsibus ad Antoninum.
 122. Compendium pulsum.
 123. De adfectuum renibus insidentium dignotione et curatione.
 124. De colico dolore.
 125. Introductorius liber, varias morborum curas complectens.
 126. De cura icteri.
 127. De melancholia ex Galeno, Rufo, et Marcello Sicamii Aëtii libellus.
 128. De oculis.
 129. De pica, vitioso appetitu.
 130. De gynæceis.
 131. De cura lapidis.
 132. Liber secretorum ad Monteum.
 133. De medicinis expertis.
134. De incantatione, adjuratione et suspensione.
 135. Fragmentum libri de dunamidiis.
 136. Liber secundus de dunamidiis.
 137. De ponderibus et mensuris.
 138. De succedaneis.
 139. De simplicibus medicamentis.
 140. De plantis.
 141. De virtutibus centauræ.
 142. De clysteribus.
 143. De catharticis.
 144. De peste.
- XII. *Fragmenta.***
1. De aquis.
 2. De vinis.
 3. De vinis.
 4. De pane.
 5. De aquarum natura et dc balncis.
 6. Sermo adversus empiricos medicos.
 7. De morsu, qui in ægritudine precipitur.
 8. De venereis.
 9. Ex libris de demonstratione.
 10. Ex commentariis Simplicii.
 11. Ex Averroe.
 12. Galeni notæ in Hippocratem e Sto-bæo.
 13. Fragmenta ex Nemcsio.
 14. Ex Themistio.
 15. Ex Michaele Ephesio.
 16. Ex Moysc Maimonide.
 17. Ex Rhase.
 18. Quos, quibus purgantibus medicamentis et quando purgare oporteat.
 19. Fragmentum de Homericâ medicatione.
- XIII. *Commentarii Galeni in Hippocratis libros.***
1. In Librum Hippocratis de natura humana commentarii ii.
 2. In Hippocratem de salubri diætæ ratione privatorum.
 3. In Hippocratem de aërc, aquis et locis commentarii iii.
 4. In Hippocratem de alimento commentarii iv.
 5. In Hippocratem de humoribus commentarii iii.
 6. In Hippocratis prognosticon commentarii iii.

7. In Hippocr. prædictionum libr. i. commentarii iii.
8. In Hippocr. de morb. popular. libr. i. commentarii iii.
9. In Hippocr. de morb. popul. libr. ii. comment.
10. In Hippocr. de morb. popul. libr. iii. commentarii iii.
11. In Hippocr. de morb. popul. libr. vi. comment. vi.
12. In Hippocr. aphorism. lib. vii. comment vii.
13. Galeni adversus Lycum liber.
14. Galeni contra ea, quæ a Juliano in aph. Hippocr. dicta sunt.
15. In Hippocr. de diæta acutor. libr. comment. iv.
16. In Hippocr. de officina medici librum comment. iii.
17. In Hippocr. libr. de fracturis comment. iii.
18. In Hippocr. libr. de articulis comment iv.
- XIV. Libri, qui sub Galeni nomine in bibliothecis latent, nondum typis exeuſi.
- XV. Libri Galeni medicinales, qui interierunt.
- XVI. Libri Galeni, ad alias disciplinas pertinentes, deperditæ.
- XVII. Codices MSS. operum Galeni omnium, aut librorum plurium Græci et Latini.
- XVIII. Editiones operum Galeni omnium, Græcæ, Græco-Latinæ, Latinæ.
- XIX. Collectiones librorum Galeni, at non omnium, Græcæ, Græco-Latinæ, et Latinæ.
- XX. Galenus in epitomen redactus. Specula Galeni, Theatrum, Indices.
- XXI. Index auctorum, qui Galeno edendo, interpretando, illustrando operam dederunt. Commentarii in plures Galeni libros.
- XXII. Libri, in quibus Galenus defenditur, confutatur, in quibus loca quædam Galeni explicantur.
- XXIII. Editiones operum Galeni, Græcæ, Græco-Latinæ et Latinæ, quæ lucem non viderunt.

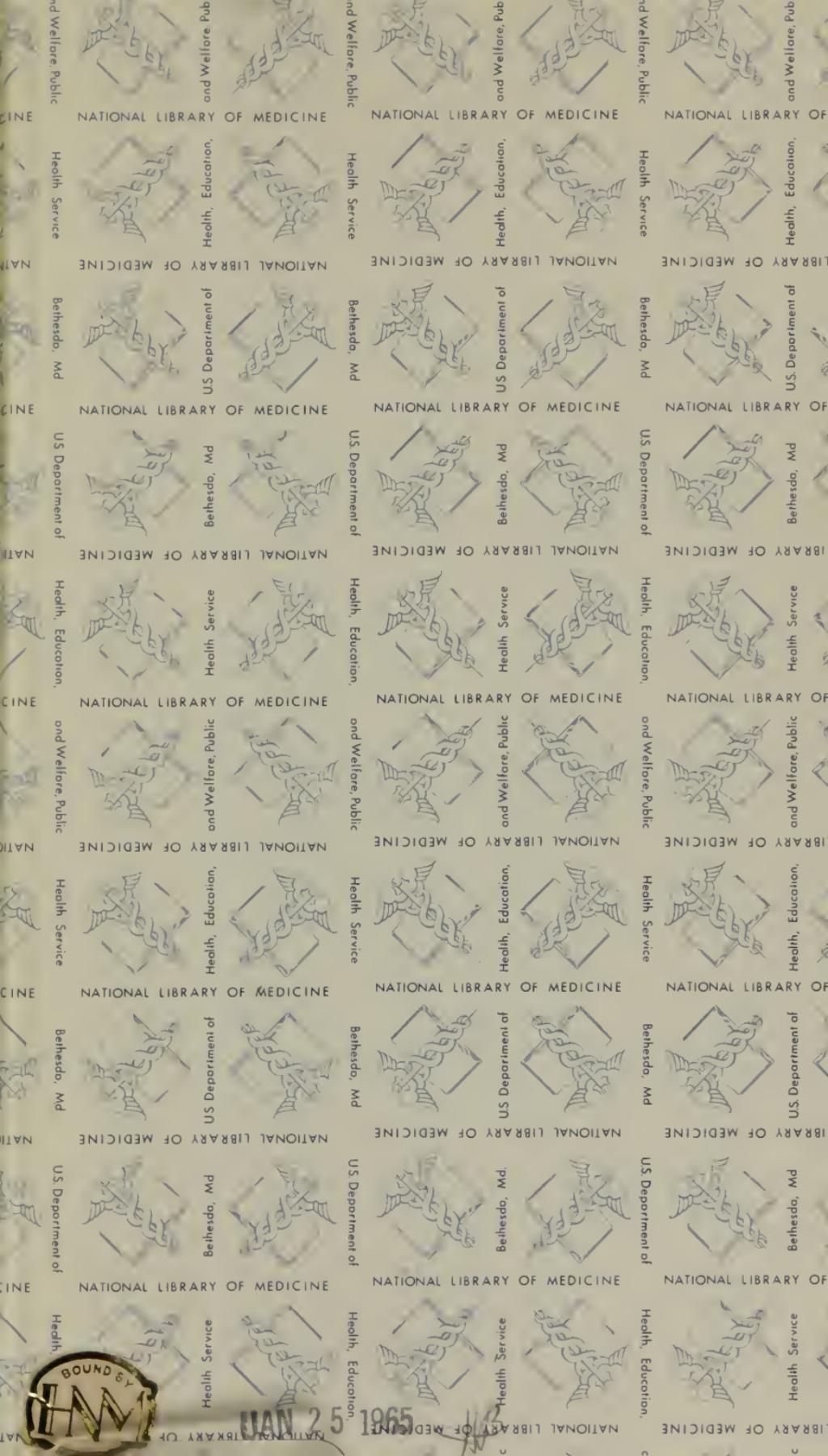
Having brought to a termination the proposed epitome of the writings of Hippocrates and Galen, it is respectfully offered to the Medical Profession, with a fervent desire that it may awaken an interest in favour of our Great Predecessors, and eventually lead to a full and complete translation of their works. Should such prove to be the case, my warmest wishes will be gratified.

JOHN REDMAN COXE.

Philadelphia, September 16th, 1846.

THE END.





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