

Synopsis of the universal practice of medicine : Exhibiting a concise view of all diseases, both internal and external: illustrated with complete commentaries / ... Translated from the Latin, by Edwin A. Atlee.

Contributors

Lieutaud, Joseph, 1703-1780.

Atlee, Edwin Augustus, 1776-1852.

National Library of Medicine (U.S.)

Publication/Creation

Philadelphia : Published by Edward and Richard Parker; Abraham Bowman, printer, 1816.

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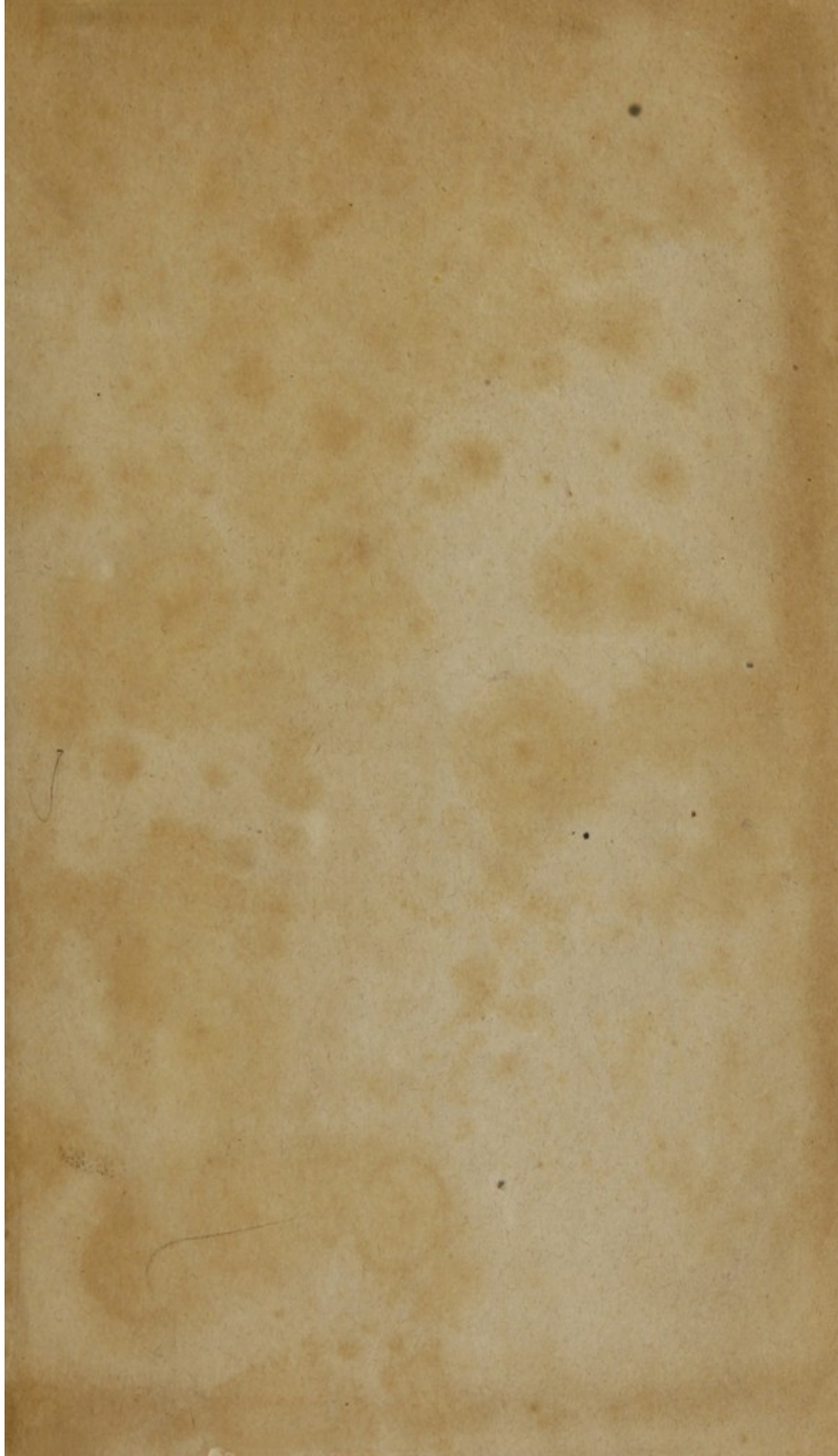
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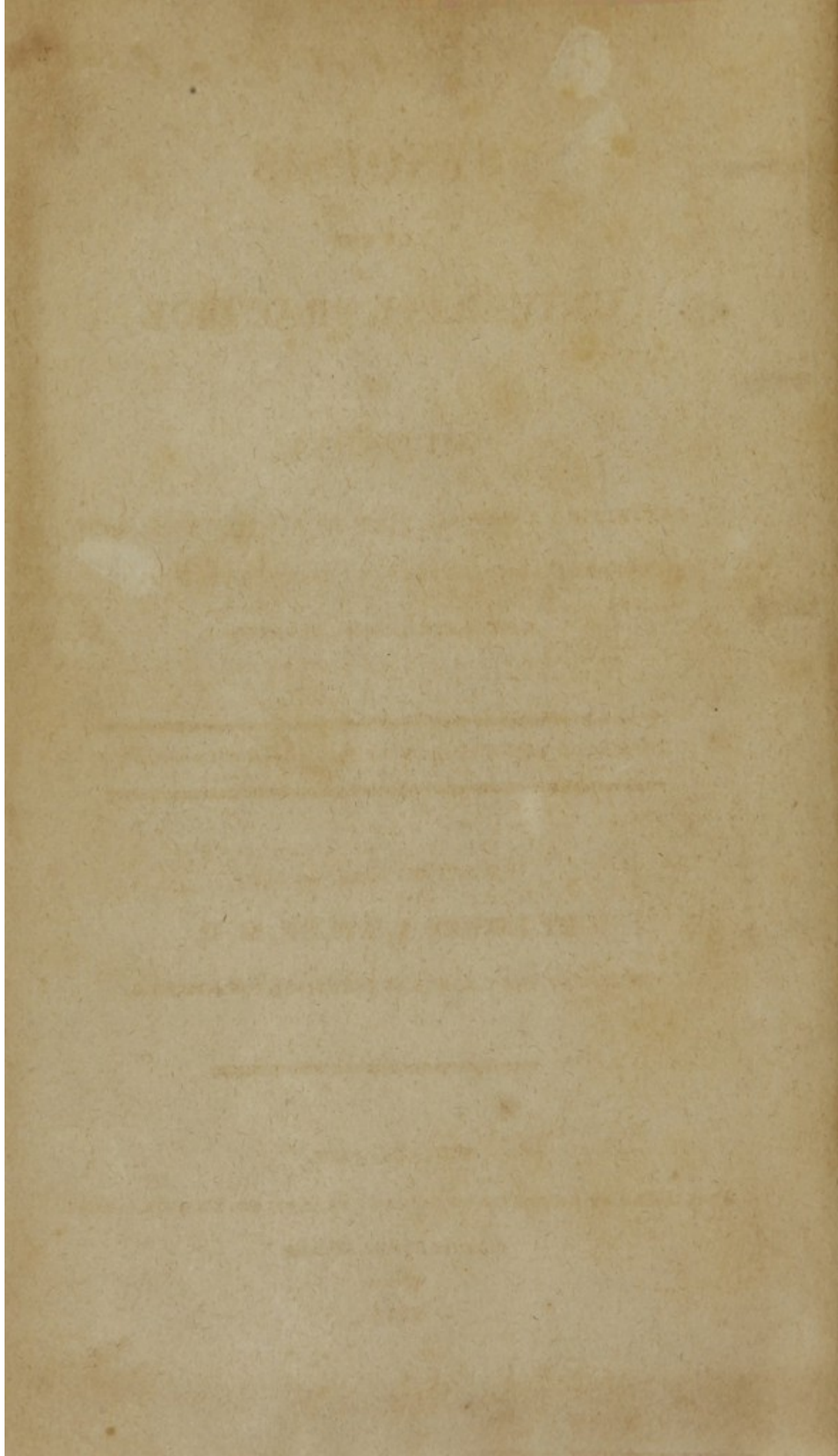
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ANNEX
Section Med. Pract.

Number 330481





Wm. Donnan

SYNOPSIS

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OF THE

UNIVERSAL PRACTICE

OF

MEDICINE.

EXHIBITING A CONCISE VIEW OF ALL DISEASES, BOTH
INTERNAL AND EXTERNAL: ILLUSTRATED WITH
COMPLETE COMMENTARIES.

BY JOSEPH LIEUTAUD, FIRST PHYSICIAN TO LEWIS XV.

TRANSLATED FROM THE LATIN,

BY EDWIN A. ATLEE, M. D.

FELLOW OF THE COLLEGE OF PHYSICIANS, PHILADELPHIA.

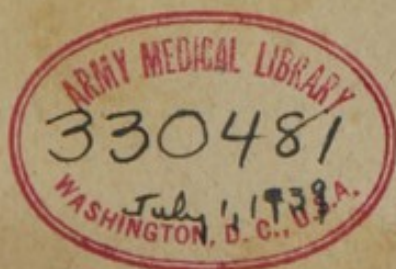
PHILADELPHIA.

PUBLISHED BY EDWARD AND RICHARD PARKER, NO. 178 HIGH STREET.

Abraham Bowman, Printer.

.....

1816.



DISTRICT OF PENNSYLVANIA, TO WIT:

BE IT REMEMBERED, That on the twenty-fourth day of July, in the forty-first year of the Independence of the United States of America, A. D. 1816. EDWIN A. ATLEE, M. D. of the said District, hath deposited in this office the title of a book, the right whereof he claims as Proprietor, in the words following, to wit:

"Synopsis of the Universal Practice of Medicine, exhibiting a concise View of all Diseases, both Internal and External: illustrated with complete Commentaries. By JOSEPH LIEUTAUD, first Physician to Lewis XV. Translated from the Latin, by EDWIN A. ATLEE, M. D. Fellow of the College of Physicians, Philadelphia."

In Conformity to the Act of the Congress of the United States, intituled, "An Act for the Encouragement of Learning, by securing the Copies of Maps, Charts, and Books, to the Authors and Proprietors of such Copies, during the Times therein mentioned."—And also to the Act, entitled, "An Act supplementary to An Act, entitled, "An act for the Encouragement of Learning, by securing the Copies of Maps, Charts, and Books, to the Authors and Proprietors of such Copies during the Times therein mentioned," and extending the Benefits thereof to the Arts of designing, engraving, and etching historical and other Prints."

D. CALDWELL, Clerk of the
District of Pennsylvania.

TO THE
COLLEGE OF PHYSICIANS
OF PHILADELPHIA,

THIS WORK
IS AFFECTIONATELY
AND RESPECTFULLY INSCRIBED,

BY THEIR FRIEND,

THE TRANSLATOR.

THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF THE UNIVERSITY OF OXFORD

IN TWO VOLUMES

LONDON

1704

Printed by J. Streater, in Strand

TO
NATHANIEL CHAPMAN M. D.
PROFESSOR OF INSTITUTES
AND PRACTICE OF MEDICINE, AND OF
CLINICAL PRACTICE
IN THE
UNIVERSITY OF PENNSYLVANIA.

THIS WORK IS ALSO DEDICATED BY THE
TRANSLATOR,
AS A TESTIMONY OF ESTEEM AND RESPECT.

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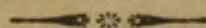
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THE TRANSLATOR'S PREFACE.

IN giving to the world this Work, my principal object has been, to render publicly useful, by rescuing from unmerited neglect, an Author of the first eminence; whose eulogy were I to attempt, it would argue presumption, as, to use a vulgar phrase, *I am not fit to hold the candle to him*. Indeed, while engaged in the arduous undertaking, my admiration was often excited, that some one of the eminent practitioners who have quoted his writings, had not, e'er this, dressed him in an English garb.

The reader will discover a *laconic* and *satyrical* style, which I have found to be characteristic of the Author, and therefore considered myself bound to follow as accurately as possible. There is also now and then apparent, a *vein of piety*, which renders it the more *precious* to those who value *gold* more highly than *tinsel*; and although *time was*, when perhaps *this* would have nearly shut up its way in the medical world, it is, nevertheless, truly pleasing to see in this enlightened day, numbers of the practitioners of the healing art, in various religious societies, who are not ashamed to wear the badge of Christianity. Infidelity scarce dares to lift its head amongst them, because the darkness in which it delights, is so dispelled, that its hideous deformities are too apparent.

The remedies directed for the diseases respectively treated of, are classed according to the Author's nomenclature in his MATERIA MEDICA, or *Second Part*, which I had some thoughts of translating, but declined it in consideration of the many modern improvements in this branch of our science.

As this Work has been patronised by many who are not physicians, to whom I feel grateful, inasmuch as their motive for encouraging it was purely disinterested

and benevolent; I regret that the *nature* and *limits* of it, did not admit of it being rendered more intelligible; notwithstanding hope that it will prove to them a useful *Family Physician*. It is probable also that I shall never have an opportunity, more suitable than the present, to acknowledge the kind attention and friendly regard of some of the practitioners of this city, who since my residence here, have extended the hand of encouragement when much needed.

These remarks being premised, nothing further appears necessary. *Good wine needs no bush*: and if, in *drawing* it from the *European* to an *American cask*, I have been favoured to preserve it *genuine*, not even attempting to correct its *austerity*, I shall have attained *one desideratum*, that of being a faithful

TRANSLATOR.

Philadelphia, 7th Month 1816.

EXTRACT

FROM THE

AUTHOR'S PREFACE.



THE mind is astonished when viewing the miserable condition of mankind, ignorant of their future destiny, catching with cries, the first breath of life, and yielding it in a short time to inevitable Fate. Nor do the poor sufferers spend even this short span of existence in peace, but are wearied with numberless afflictions, among which the formidable Phalanx of Diseases lifts its dire head. Some through stress of gloomy care, and influenced as it were, by an unlucky planet, have laid guilty hands upon themselves. Hence it is little to be wondered at that some licentious ones, tainted with an impertinent Itch for Scribbling, should through impatience and fickleness of mind rashly bring upon themselves the misfortunes with which they are borne down, and which they impiously charge upon the SUPREME AUTHOR OF GOOD. Those, however, who excel in virtue, and are better acquainted with Nature, have on all hands refuted these cavillers, and more rationally concluded that adversities are owing to the wickedness of mankind, who would never have suffered them, had they not deviated from the simple manner of life of their progenitors.

When man was yet rude and uncultured, in the new Earth and under the recently formed Heaven, and the uncorrupted fruits of the Ground were his food: when lowly Tents were the habitations of Flocks and their Lords in common; when the chaste wife not more polished than her husband feasting on nuts, made up her ill-contrived covering of skins, and strewed her rustic couch with leaves; when as cultivators of paternal Fields and keepers of Flocks, they indulged in moderate labour and grew old in unimpaired vigor: Then were they governed by the Law of Nature, and were not anxious, so long as *Truth* flourished, to solve the perplexities of human Laws. Little solicitous about the *origin* and *causes* of things, so sedulously traced by their descendants, they followed the Philosophy of Nature, by which they discovered *Effects*, and used to discern *Right*

from *Wrong*, and *salutary* from *noxious* things. It was not necessary that men who kept off disease by this simple mode of living, should unravel the **Problems of Medicine**; for although ignorant of this science, they enjoyed a life untainted and uncontracted by **Maladies**. And when grey hairs approached, they despised not an old age so conspicuous for **Virtue**; but welcomed it with the highest honours and religious veneration, until having filled up the measure of their lives in placid industry, they, without fear departed to their **Heavenly Rest**.

But when the world became foolish and degenerate, **Idleness** crept in, and the accursed love of **Gold** led mankind captive. All morals were perverted, Sons refused to follow the footsteps of their **Fathers**, they vied one with another in splendour, wealth and family distinction, and began to devise base things, not blushing to change black into white. Ever panting after happiness, they betook themselves to sumptuous **Edifices**, decorated their bodies with softest raiment, **Gold** and **Purple**, exhibited to the wondering crowd, **Feasts** of exquisite dainties, tortured with every variety of cookery; in short, exhausted by every species of luxury and gluttony, every vice followed close at their heels, the practice of which in a short time obliterated shame, and all things gradually went to decay and ruin.

It is no marvel, if as this destruction advanced, all the laws of the **Animal Economy** should have been perverted, and a grievous host of diseases should afflict these madmen, who notwithstanding yielded very reluctant submission to these calamities. Even then however they might have provided for their restoration, had they profited by this chastisement, and settled their fluctuating minds by the *precepts of wisdom*: but, borne away by their own lusts, they thought little about investigating the cause of their misery, although conscious of their licentious manner of life, and made no exertion to avert these fell distempers, but only to mollify or remove them by chance remedies, or such as were at hand, the good or bad effects of which they noted. So that from their observations, collected and arranged, might have sprung that primitive and rude art of healing, which in its infancy dwelt in **Egypt**, from whence it migrated into **Greece**, and of which no learned man is ignorant.

Among the **Greeks**, the first who collected the scattered **Theories of Diseases** (assisted perhaps by the writings of **Asclepiades**) and reduced them into a **System** when culled from the **Votive Tables** in the **Temple of Æsculapius**, was **HIPPOCRATES**, whose writings are truly precious, although they have much dross and impurity mixed with them, unless as some conjecture, his legitimate works have been contaminated by spuri-

ous additions. Even the Hippocratic Art might have been lost by the injuries of time and rudeness of the age, if GALEN had not undertaken, with his great abilities, to restore it, torn as it was by innumerable sects, after the lapse of six hundred years. This GALEN was a Physician, second to none, but he has befouled his writings with vanity and verbosity enough to sicken one.

The Medical Art advanced but little afterwards, nor did the other sciences experience a better fate until the 7th century, when the Arabs and Saracens laid waste almost all the world, and even Athens and Rome. Yet there were not wanting, among these barbarians, some who cultivated the Greek Language and gave earnest attention to promote the study of Medicine; and through the care of these the art was revived, and slowly advanced, until a century had nearly elapsed: since which time innumerable medical writings have appeared, many of which are condemned to oblivion, and given to the moths and worms, while others contain many things which are tolerable, but are chiefly made up of mere hypotheses, rendered prolix by a great round of words that weary the reader. There are notwithstanding a few more durable than brass, and fraught with exquisite observations. But various domestic concerns forbid me comparing this mass of all kinds of books, nor is it in the power of men, incumbered as I am with practice and frequent watching of the sick, to look them over.

Hence many, of no mean rank, urged by these difficulties, have bestowed great labour to encounter this almost insuperable disadvantage, or by some means to smooth the rugged path of Medical Science. These, by comprising in few words what were here and there written in more diffuse style, endeavoured to limit this exceedingly ample science.

Various Compendia have appeared: exhibiting rather a specimen of learning than a just rule of practice, which therefore, with leave of the illustrious authors, afford little satisfaction to a mind desirous of knowing what is true and expedient. And although nothing would be more out of date than for me to cultivate this Broom, yet the unfortunate event of the above-mentioned works, has in no wise withheld me from my undertaking. Whether I shall be more successful, let those determine, who have traced the recesses of Clinical Medicine. Yet far be it from me, after a view of so many publications of the same nature, to write an *Iliad* after Homer, or serve up Colewort twice boiled. My design is vastly distant from these Compendia, and the principal part of this work is drawn from my own store-house, I mean from my clinical and anatomical notes, some of which

are already superannuated, and contending with mouldiness, I have thus saved them from destruction, but do not publish them entire, (as I had hastily thrown them together in sheets) rather as abridgments or deductions that I might spare the labour of my readers. This Epitome is not only contained herein, but also that of the copious works of the most fabulous writers, which I have searched with unwearied labour, not without repentance for the undertaking, that I might pick out from the immense confusion of Books, such only as were of use in practice, and reduce them to my plan. Wherefore, from all these, accurately digested, and disposed in clearer order according to their importance, leaving out the learned and curious comments with which others abound, and lopping off every thing foreign from my purpose, this SYNOPSIS has been produced, not an elementary or didactic work, but made up of mere observations, while engaged among the sick and the dead.

I have enumerated under distinct heads, all Affections of what kind soever, among which some have occurred hitherto unheard of. The signs by which they are known, and the symptoms whereby they are attended, are carefully noticed. An accurate history of Diseases does not always require to relate separately, whatsoever Authors have advanced on any subject, for their works more often savour of subtilty of genius, than careful observations in practice. Moreover, every one knows, that to consider these morbid appearances of nature, sometimes as *signs*, sometimes as *symptoms*, according to the whim or pleasure of Physicians, renders it difficult to distinguish them one from the other. It may be well also to remark that all that are reckoned under the title of any disease, in no wise manifest themselves in every subject, but some or other of them, are sooner or later, to be discovered, so that we only cite those which are general and uncertain. By this we may understand why an accurate delineation of each morbid affection would be arduous and difficult, since there is none which, on account of the inexhaustible varieties, is not continually exhibiting a new appearance: For it is known to all that diseases of the same name or of the same species, never occur clearly alike in practice, both on account of numberless circumstances derived from temperament, age, sex, season, state of the atmosphere &c. and by reason of different modes of living, and of treating diseases. They miss the mark and labour in vain, who delight to follow this trifling exactness in describing this or that disease.

The more experienced practitioners have for a long time complained, that the science of Medicine has been corrupted by the luxuriant wit of Physicians, and that nothing scarcely comes to

light, except *Hypotheses*, celebrated by the most empty Babble of the Schools, which, when brought to the Touchstone of Truth, are found to be mere notions. Shamefully indeed do they blunder who think to derive a Medical Theory from such trifles, since it rather consists in *Knowledge previously obtained*, from mathematical science, experimental natural philosophy, anatomical demonstration, chemistry, natural history, &c. and in accurately observing the Phænomena of Nature, and the powers of the animal Economy, as well in the sound as in the morbid state: from all which, selected and arranged by assiduous care, a genuine Theory of Medicine is deduced, such as was sketched out, by the ancients, and improved by some great men of the Profession, which a series of years has spared, whilst other Theories changeable at the nod of the learned, have year after year put on new faces. Therefore utterly rejecting all Hypothesis, I have not said a word on the *proximate cause* of disease, which is involved in obscurity, and I doubt not that whatsoever those have written on that subject, who have not blushed to deal in such trifles, will be rejected by the scrutiny of the more judicious. But the *remote* and *manifest* causes are carefully noted, from which when rightly examined, the genuine lineage of a Disease is mostly traced.

It must be obvious to all, of what use toward the development of the most intricate diseases, and for the advancement of Medicine, observations taken from *dissections of dead bodies* are, wherefore there is cause to admire that medical writers, so little studious of a matter of such importance, should have written scarcely a word on the subject, or have treated it superficially. On which account I have exhibited histories almost numberless, from the heaps of subjects which I have dissected for 20 years and upwards, extracted and abridged to suit this work. To these I have thought fit to subjoin whatsoever *Bonnetus*, *Mangetus*, and other moderns have recorded from the writings of *Soothsayers*. Nevertheless there was necessity to make a choice, since many authors, consulting only their own reputation, or ignorant of Anatomy, have gained no credit on the subject. Therefore whatsoever scattered observations I have drawn from this abundant source, I have collected and related in an abridged stile, which I thought could not be unacceptable to Physicians. Yet it must not be passed over in silence, that all diseases, even the more violent, do not always occasion any evident injury to the viscera, as very frequently when examined after death, they plainly appear unhurt, which ought to be well noticed, lest articles omitted in the history of these should rashly be considered as defects.

vol The *Prognosis* of Diseases I have touched upon in a few words, because I judged it vain and needless to repeat in each article, that delirium, convulsions, comatose affections, difficulty of breathing, stertor, faintings, cold sweats, and other oppressive symptoms usually attending fatal diseases, portend an unhappy issue, which certainly can be unknown to none, however rude and inexperienced. But some symptoms occur, which by reason of various circumstances, ought sometimes to be considered favourable, sometimes disastrous; such as fevers, eruptions, hæmorrhages, vomiting, diarrhœa, &c. which I have thought it worth the while carefully to note down. Nevertheless learned and experienced Physicians know that the science of future events is obscure, and the judgment concerning life and death uncertain. On this account *Hippocrates* rightly advises to predict with caution, affirming that nothing certain as to the event can be concluded in acute diseases. And perhaps this most ancient Founder of Medicine, has given us more instruction by this Saying, than by his diffuse works on Prognosis, out of which notwithstanding among many things doubtful and very intricate, some excellent observations, to be mentioned in their place, may be gathered.

rel I have dwelt very little, or only incidentally, on the Rules of Diet, although on the observance of these the cure principally depends: But advice on this subject appears superfluous, as I think no practitioner will be unmindful of them. As to Remedies, I have selected from the senseless hotch-potch of them, such only as were often tested among the sick, as each practitioner is able to discover those most suitable for the cure of each disease. The more experienced confess with one accord, that few remedies are required in *acute* diseases, in which it is customary, after premising the obvious medicines, to delay or forbear, until the nature of the disease become manifest. It is otherwise in *chronic* complaints, for the cure of which it is mostly expedient to prepare the way by repeated trials, from which we learn of what moment it is, in this state of things, that many remedies should be known, by the careful examination of which the desired end is frequently attained, but every one may see the necessity of a cautious choice, as medicines rarely do good, unless they be given with judgment, especially as it is confessed by all, that a Physician should be the Contemplator and Servant of Nature, and his duty, to direct her spontaneous movements with caution, or to complete and perfect her deficient and weak endeavours with timely assistance, otherwise he is wanting in the duty entrusted to him, if either in preserving health or removing

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diseases, he attempt any thing against the laws of nature, or fall upon distempers with hostile force, against her will.

Nothing forbids the conjecture that no morbid affection is insuperable, if attacked in proper time and with suitable weapons. But "*hoc opus, hic labor est.*" It is expedient to deal cautiously with remedies, though they may appear innocent, since it remains a fixed maxim that many maladies may safely be left to the mere powers of nature, which through untimely or preposterous applications, may be rendered more violent or even fatal. The vulgar part of Physicians are with truth accused of rashness, who, without investigating the nature of a disorder, or but slightly attending to the pulse, hasten to apply their remedies: while the learned and experienced, being more slow of judgment, think that nothing ought to be done without properly considering all circumstances, and candidly own that the effects of medicines are doubtful and deceptive, whatever those may babble to the contrary who arrogate to themselves the name of Physician. For it is established among practitioners of the first rank, that nature is the best healer of diseases, and that the most common affections if left to her, are spontaneously removed; but that in others there is no small advantage in calling in the aid of Art, provided our remedies be given in proper time and in suitable doses, nevertheless even such as are adapted to the relief of mankind, do sometimes become hurtful through bad and presumptuous administration.

From this it is evident how far they err from the mark, who, despising simples, and adhering to the disgusting notions of the Arabians, overturn the healthful endeavours of nature, by their ill-timed apparatus of remedies; and reduce their borrowed prescriptions to the rule of their boastful craft. Alas! wretched patients, unless nature vanquish the disorder and overcome their preposterous helps. Nor do they less deviate from the right way of cure, who venture indiscriminately to take what remedies come to hand, among the variety collected hap-hazard under certain names of classes, since it frequently happens, that they occur in such abundance that the more experienced anxiously hesitate in selecting this or that. They also shamefully blunder, who persuade themselves that every morbid affection is to be attacked with the same weapons, and after the manner of Mountebanks, boast of a few Nostrums, which soon cheapen when they become known. Nor do they more unhappily miss their aim, who setting aside familiar remedies, preach up only those that are more rare and unheard of. Because no one denies, that all remedies, cautiously administered, of what kind soever, whether indigenous or exotic, simple or compound, do-

mestic or officinal, Chemical or pharmaceutical, deserve their respective praise.

It is evident from the ancient monuments of our Science, that the first practitioners gave simple and domestic Medicines, which they either prepared, or committed to the care of some of their pupils, until, perhaps, by the unlucky vanity of both, this most excellent Art was entrusted to certain unskilful persons, who were gaping after gain, more than the welfare of the sick, and took advantage of the credulity of the unwary, by their impostures and wonder-working pageantry: so that shrewd men discovering the fraud under their atrocious buffoonery, and ridiculous jestings, have lampooned both the genuine and spurious Arts together. Pharmacy as derived from the Greeks and Latins, was confined within narrow limits. The Arabians restored and enlarged it perhaps beyond the proper bounds, for truly there was none, even among the meanest, who withheld his part toward its amplification. Chemistry was rejected, and although very ancient, was rarely claimed, for medical use; so that it scarcely raised its head, till the beginning of the last Century. But the ancient Medico-chemists were of little use, because they purposely obscured their writings, or used strange and barbarous words, that they might gain the admiration of the ignorant. Their successors, however, or rather a part of them, have without deceit, illustrated this noble Art; which would have been of greater benefit, had they not, with too eager desire, been ever in pursuit of novelties, and striving to add to the shops already overstocked, various trifling and superfluous articles: mere baubles for the multitude.

Hence, in process of time this prodigious furniture of the Shops so encreased, that scarce any one, even the most experienced, could without great difficulty select from the superabundant store, the most suitable or beneficial.

Such is this *Synopsis of the Universal Practice of Medicine*, which I thought would not be unsuitable to make a matter of public benefit, that practitioners might be at no loss in discovering the nature of any disorder, and properly administering aid. Nor ought the *genuine* science of Medicine, to aim at any thing else, according to the judgment of *Hippocrates*, but to direct the spontaneous efforts of nature, and to study lest any thing be attempted against her will, lest it might in any degree render her efforts abortive. On the other hand, from the preposterous use of even the best of Medicines, in despite of the powers of nature, proceeds a *spurious* art, adulterated by the deceptions of a number of Scoundrels, and condemned by the judicious as hurtful and destructive. Whence it happens, that what the SUPREME

CREATOR, in his abundant goodness prepared for the comfort of the sick, is converted into their *bane*, by these presumptuous fellows, who never understood even the Rudiments of true medical Science : And thus this most useful art, perhaps without an equal among all the other blessings of the Deity, becomes, through the fault of Physicians, the cause of destruction.

BOOK THE FIRST RESPECTING INTERNAL DISEASES.

SECTION THE FIRST.

Of Diseases that may be called General, or of Uncommon Sorts.

FEVERS.

THE Genuine nature of Fever, lies in great obscurity, and perhaps its difference are not more clearly manifest, notwithstanding what some authors of the last note have advanced on the subject, amongst the innumerable novices, who have scribbled on the same theme, of whom the greater part too much attached to their own physiological opinions, or treading in the footsteps of others, have disgraced their writings with mere hypotheses, and comments on previous writings, inasmuch, that amidst this abundance of words, it is difficult to distinguish certain from uncertainty, a clear from a doubtful view. Hence many of us mean have doubted, whether it would not be better to give up the undertaking, and content themselves to new observations, out of which, when well investigated and arranged, there might be produced a second Theory. I leave this to the more learned, and will only candidly and briefly publish what I have collected from a practice of thirty years.

To begin therefore, with things more familiar. While I have unannouncedly watched the sick, day and night, their appearance to me, to be only four species of Fevers, or continued kind, viz. The simple continued, by some called continued, because it continues as it were in the same state, without variation, which is to be admitted with some limitation. When the first kind, certain as to its duration, yet it rarely exceeds fourteen days, unless its course be interrupted by involuntary evacuations, putrid continuance, which is marked by evident exacerbations, and symptoms of increased violence, and by a certain Dyscrasia, or ill humor of the blood and humors, tending to putridity. - Whence it happens that it rarely ceases without some previous evacuation, by which the blood and juices are freed

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To begin therefore, with things more familiar. While I have unremittingly watched the sick, day and night, there appeared to me, to be only four species of Fevers, of the continued kind, viz. The *simple continued*, by some called *continent*, because it *continues* as it were in the same state, *without exacerbation*, which is to be admitted with some limitation. We can fix nothing certain as to its duration, yet it rarely exceeds fourteen days, unless its course be interrupted by injudicious treatment. The *putrid continued*, which is marked by evident exacerbations, and symptoms of encreased violence, and by a certain *Dyscrasia*, or ill habit of the blood and humours, tending to putridity. Whence it happens that it rarely ceases without some previous evacuation, by which the blood and juices are freed

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from their impurities; and indeed this spontaneous or critical evacuation shews the character of a Putrid Fever. *Ardent* or *burning Fever*, which from the intense thirst, and heat of the intestines, is justly distinguished from all others. And lastly, the *Malignant*, the direful symptoms of which seem to arise from an injury of the Brain and Nerves; and in this respect differs greatly from the others. It is well known, that this last is of longer continuance, and mostly epidemic, contagious, or pestilential.

But the above mentioned Fevers, rarely discover themselves, by certain and constant signs; for one while they run their course with gentleness, at other times, they exercise greater Tyranny, so that these different species might be considered as nearly allied; whence it happens that frequently they appear scarcely to differ one from the other. From all which it is not to be wondered at, if many Writers of approved credit, even BOERHAAVE himself, were of the mind that all fevers exhibited various grades, as it were, of one and the same disease. Nor does the observation of epidemic fevers oppose this opinion, which in the same constitution of climate, and season, shew themselves under different appearances, or counterfeit the Type of various diseases, by which the inattentive, deceived by their affinity, often precipitate themselves into a fatal error. Nor are we ignorant, that continued and intermittent Fevers, are allied, as well in the manner of their exacerbations and paroxysms, which really come on at stated times, as with respect to their accession, period, and crisis; as continued Fevers often take the nature of intermittents, while intermittents run into continued. Notwithstanding, whatsoever may be indicated concerning their affinity, we will follow order in the description of them, that a just and clear method of cure may be discovered.

Nor is the view of the *Symptoms* of Fevers attended with less difficulty, which, requiring a different treatment, ought rightly to be distinguished from essentials, which flow from a depraved state of the blood. 'Tis true that Symptomatic Fevers grow out of other diseases, and hence are called erysipelatic, inflammatory, dysenteric, catarrhal, rheumatic, arthritic, milk (fever) lochial, cachectic, scorbutic, &c. the fevers indeed, are clearly manifest, which attend the small-pox, measles, scarlet eruption, erysipelas, inflammation, dysentery, catarrh, rheumatism, gout, formation of milk, suppression of the lochia; and lastly pains, contusions, wounds, burns, &c. But those are very obscure, which arise from plethora, cachexy, depraved bile, scurvy, lues venerea, scrophula, hysteric and hypocondriac affections, heat of the blood, gluttony, depraved humours, and worms

lodged in the intestinal canal, obstructions, internal abscess, gangrene, stagnations, suppressed evacuations, recession of eruptions, translation of the milk, exhausted strength, affections of the mind, insolation, &c. concerning which in their proper places. But all these obscurely handed down, await our successors, who will not grudge to sweat in this arduous field of labour.

Little better have those authors succeeded, who from the view of this or the other symptom, have given trifling or incongruous names of Fevers: For it is hard to tell what they mean by fevers which they called *algid*, or numb, *epial*, or *hot and cold*, *lipyrial*, the same; *comatose*, *phrenitic*, from thirst, from hunger, panting, anxious; *asodes*, or attended with inquietudes, nausea, &c. syncopal or attended with fainting, vomitory, torminal, caccatorial, or attended with copious stools, sudatory, uretic, colliquative, &c. But leaving these idle doatings, I proceed to things of a more abstruse nature, to wit, to the examination of Fevers, having as yet no Type, which can be referred neither to essential nor symptomatic. For every practitioner knows that the commencement or invasion, not only of continued but of intermittent fevers, is doubtful, so that their nature at the beginning is wrapped in great obscurity. Fevers especially of a bad kind, as we shall say hereafter, are very intricate at their commencement, nor are they ever clearly manifest until after the seven or twelve first days, on which account they who have more experience than the vulgar, remain in anxiety, and suspend their judgment, unless a general epidemic constitution of the air, come to their aid. The troubles of Physicians are not confined even to these limits, for they are subject to still greater in the ascertaining of fevers, from the incongruous regimen, or preposterous mode of cure of those fevers which depart from their specific nature, and put on a different appearance, which are therefore called *corrupt fevers*. Lastly, *complicated fevers* are not more happily explained, in which for example, continual and intermittent, essential and symptomatic, acute and chronic, &c. are joined together, by which even the more judicious are puzzled, ; so that very often there would be need of an *Ædipus* to help them out.

From what has been said, it appears how difficult it is to trace the genuine character of diseases, nor is the event more clearly marked, notwithstanding what HIPPOCRATES and PROSPER ALPINUS (who has given his doctrine in a more accurate method) have written on the subject; as well as innumerable ancient, and some modern writers, who have done their best to promote this art of foretelling. But we may collect this one thing out of their

endless labours, to wit. that predictions are uncertain, and therefore that we must presage with caution. This is a maxim of HIPPOCRATES, who after more mature consideration, condemned, as it were, his own works, like a writer of unblemished Truth. We may however attain some certainty concerning *Prognosis* in Fevers, as well from the monuments of the ancients and moderns, as from our own particular observations, which I have thought would not be foreign from my purpose briefly and distinctly to publish.

THE FACE, that we may begin from the upper parts, is first presented to the observation of Physicians, for from this, well examined, may be gathered many signs of death or health, which are as follow: The *Hippocratic Face*, as they call it, affords a class of dangerous signs, especially at the beginning of a disease, this consists of the pointed nose, hollow eyes, sunk temples, dry and leaden skin, &c. moreover the countenance flushed with unusual redness, a strong pulsation of the carotids, the eyes fiery and stern, and having a fixed or uncertain set or cast, denote hæmorrhage or delirium. The light hurtful (except in small-pox and measles) dulness or loss of sight, the eyes immoveable, dim, or half shut and convulsed in sleep, forebode an unlucky event. From *spontaneous tears* also, while the other signs are bad, may be prognosticated Death. Redness of the cheeks, in acute fevers, is the forerunner of an exacerbation, or denotes a consumption of the lungs, particularly, if the *alæ narium* are moved with every inspiration. A tumid countenance, in acute fevers, portends nothing bad, except their long continuance. Eruptions of an itching or other kind, about the lips and nostrils, indicate a speedy and safe termination.

Nor are signs less worthy of observation, discovered in the *mouth* which have the following appearances. Thirst, intense and clammy, or deficient, is cause of no little fear; but its sudden cessation in ardent fevers, strikes the greatest terror, confirmed by various distressing concomitants. Tremor of the lips, livid and dark spots, and difficulty of swallowing, are enumerated among the bad symptoms. The same judgment may be given concerning a dry furred tongue, as if burnt, or covered over with a foul crust. A Ptyalism is innocent, and even considered salutary in small-pox, and some epidemic fevers. We can fix no certain criterion concerning *the gritting or gnashing of the teeth*, even without febrile horror and rigor, unless we first enquire whether, in usual health, it is customary for the patients so to do in sleep.

No one is ignorant (to continue the subject on the Head) that very severe head-aches, stubborn wakefulness, convulsive par-

oxysms, and stupour of parts, are to be accounted as unfavourable and deadly signs. When *delirium* comes on with drowsiness, it threatens danger. If *convulsions* quickly follow great discharges of Blood, we may look for Death. *Hæmorrhage* from the Nose sometimes relieves the head, and may mostly be considered harmless, while within certain limits, beyond which it is certainly of dangerous tendency. Practitioners care little about *Tinnitus Aurium*, nor are they more afraid of *Deafness*, among the common symptoms of fevers of a bad kind, especially if it happens in the decline of the disease. Lastly, we must have regard to the habit of mind, for no one denies that it is easier for the *dull* and *fearless* to recover, than for those who are more *delicate* and *timorous*; for it is certain that a host of diseases is derived from Terror and Fear. *Grey hairs* exhibit an amazing effect of perturbation of mind, which is brought on in a few hours from *fear of death*; accounts have testified this to have often happened under these circumstances. Hence it is evident, of how great moment it is, that the sick should be kept from every thing that may distress them, nor is this the least duty of Physicians.

Having duly attended to what concerns the head, we come now to the Breast. Wherefore, *deficient* or *tremulous voice*, *difficulty of breathing*, *stertor* and *hiccough* threaten Death; danger is to be expected also from anxiety about the *Præcordia*, which torments the sick in every posture. But we must not prognosticate evil concerning that difficulty in the chest, which precedes a crisis, or certain cutaneous eruptions. Connected with the Breast, is the PULSE, that *Cynosura*, as it is called, or directing Star of Practice, from proper attention to which is discovered the genuine state of the Heart, and the degree of Fever or of Strength, which every one knows is of the greatest consequence in our prognostications. Therefore a Pulse preserving a medium between full and empty, vehement and languid, hard and soft, affords no small hope of the recovery of health. We may form the same judgment, of the equality, proportion and order of its strokes: A pulse, on the contrary, small and contracted, unequal and irregular, hard and quick, indicates a disease of a more violent and dangerous nature: If it be weak and intermitting, and yields easily to pressure, with frequent recurrence of fainting, the patient is hastening to a close. The arteries seized with a kind of spasm, or vibrating beyond the usual measure, presage no good. Lastly, a pulse resembling a healthy one, or appearing to approach the natural, during the prevalence of violent symptoms, threatens a fatal event. To this head belong those exacerbations, which occurring irregular-

ly, or on alternate days, portend nothing dangerous, yet when daily or often repeated, are much to be dreaded. But when they arise, for instance, on the fourth day, they denote a tedious disorder, which indeed produces the affinity above noticed, between continued and intermittent fevers. Moreover, other circumstances are observable, in examining the pulse, namely an unusual *subsultus tendinum*, which is esteemed a sign of a grievous disease. At the same time appear dryness, heat or coldness of the skin from which according to circumstances, or the combination of other signs, various presages are derived. Finally an unusual tremor of the hands, and irregular motion of them, are considered as symptoms bordering on death.

To return to our proposed order; there are yet many prognostic signs to be gathered from rightly observing the *Abdomen*; the usual inflation of which, or swelling under the border of the ribs more conspicuous than common portends nothing bad. But if this prominence of the abdomen should arise to a very great degree, and be attended with very acute pain, it frequently leads to Death. A vomiting at the commencement of a disease is accounted favourable, nor need we fear it at other stages of the disorder, if viscid or bilious matter be expelled, otherwise it is thought to be dangerous, especially if emetics and cathartics have been given without effect, particularly if black and fetid *saburra* be thrown off, we may send for the Bier. Nothing is to be feared from the *alvine discharge*, which sometimes relieves the head—Yet if it exceed the natural limits, it is not without danger. Moreover involuntary discharges, or more than usually serous, frothy, adipose, full of worms, bloody and excessively putrid, cause difficult work for physicians. As it respects the appearance of the *Urine*, when that is very plentiful, high coloured, bloody, especially in small-pox, viscid and black, it occasions no small apprehension. If it suddenly stop, or be emitted without the knowledge of the patient, it indicates a grievous and dangerous disorder. High coloured urine in the beginning of acute fever, indicates a short disease, but of doubtful event. Urine discoloured, bloody, or of a vinous colour, in affections of the brain, is unfavourable. But if it be turbid, and impregnated with various matters at the time of coction, all things turn out to our wish. We add nothing concerning other signs discovered by *Quacks* from examining of Urinals, seeing they are considered by experienced practitioners as treacherous.

THE HABIT OF BODY, also affords its share in forming a prognostic. From *sweats*, for example, gently or profusely breaking out, for the most part fevers are judged of. If it is deficient in intermittents, they become more obstinate. Sometimes

however, sweats are taken in the aggregate of symptoms, for if they preceed the accession of fever, they augur ill ; if more copious through the course of the disease, or if continued, clammy and fœtid, they are never void of danger. The more they recede from the natural state in odor, consistence and color, the more are they to be feared. Lastly, it is generally known, that cold sweats, especially of the Face, are the forerunners of death. Exanthemata, pustules, and other cutaneous eruptions are dreaded without reason, seeing they often render a disease lighter. *Pustules of the mouth*, are preludes of health in all fevers ; and even from *petechiæ* in malignant fevers, no greater danger need be apprehended. *Shivering* and *Chills*, at the commencement of paroxysms, or febrile exacerbations, portend no evil ; but if they are lengthened out more than common, they indicate a tedious disease : When they occur inordinately, they excite suspicion of lurking suppuration, or threaten delirium, or other aggravated symptoms. Concerning cold chills, or horripilation from hysterico-hypocondriac affections, from atrophia, or any other continued disease, (of which in another place) I add nothing.

The next thing now is briefly to treat of *Pains*, which respect the whole habit of body. Therefore, febrile pain fixed in any part, while it proceeds not from disease of the viscera, is not of a dangerous nature—but if a puffing up or flushing, purulence or gangrene be detected, the thing is of dangerous aspect. When pain suddenly vanishes, while other symptoms are not mended, the sick will soon depart to rest. But there occur pains which are to be rightly distinguished from febrile ones, as they arise from another cause, but are exasperated by febrile heat : of this kind, are the syphilitic, scorbutic, rheumatic, &c. which commonly occasion more fear than danger. These are the *phenomena of fever*, from which are collected the signs of health or death. But it must ever be deeply remembered, that judgments concerning acute diseases are almost always uncertain, wherefore it behoves us to predict with caution. Lastly, it is to be remarked, concerning the phenomena of fevers above related, that many occur which do not interfere with the usual method of cure, and that some dangerous ones demand peculiar treatment ; while others that are merely critical, baffle all remedy. But rightly to distinguish these salutary and spontaneous movements of nature, from which appears the hope of cure, from the genuine symptoms, which bring apprehensions of death, is an arduous and difficult task, unless an accurate Doctrine of Crises be preserved ; which on this account I have judged it suitable to subjoin in these general terms.

Crisis
 Beyond all appearance of doubt, it remains fixed, that various febrile appearances among those enumerated, which constitute the crisis, or shew it to be near at hand, often excite the greatest terror in those who are inexperienced. So that I do not hesitate to assert, that scarcely any acute fever occurs, which may not be distinguished by some crisis, more or less obvious, whatever some among the moderns may babble to the contrary, who, knowing nothing of delay or waiting, are used to subvert all things by their incongruous and untimely medicines. Nevertheless, according to the highest medical authority, or rather according to the law of nature herself, a *Crisis* is nothing else than the spontaneous exit of morbid matter, which is mostly preceded by the most aggravated violence of the humors; or it is a certain disturbance in the animal œconomy, to prevent which the incautious, or those blinded by novel opinions, direct all their endeavours, to the greatest injury to the sick: Wherefore, it is little wonder if many patients, as well by this struggle of nature, as by injudicious remedies, are brought to the hazard of life, or to death itself. For it is proved by multiplied and accurate observation, that fevers are resolved through certain emunctories of the body, or by some eruption. To this end contribute spitting, hæmorrhages, vomiting, purging, urine more plentiful, or full of various substances, abscesses, buboes, anthraxes, efflorescences, or cutaneous pustulæ, &c. by which the seeds of fevers, now subdued, are carried off, so that these being driven out, all things are restored to their Halcyon state. But when these efforts of nature become neither absolute or legitimate, nor vary from the stated time, the disease is protracted or exasperated, which, that they may more clearly be noticed, we have thought it necessary to publish the doctrine of critical Days, in which, for the most part the crises are wont to happen.

Critical Days
 THE CRITICAL DAYS, according to the illustrious arbiter HIPPOCRATES, are, the fourth from the invasion, the seventh, eleventh, fourteenth, seventeenth and twenty-first. From hence it is obvious that these periods are strictly contained within three and a half days, which to be sure has little agreement, as some have affirmed, with the superstitious numbers of *Pythagoras*. Every one knows that various patients in fever, even against a preposterous method of cure, either are restored to health, or fall victims to death, on the fourth, seventh, eleventh, fourteenth days, &c. Hence it appears that the computation of *Hippocrates* is accurate, which allows it to be protracted to the forty-second day, or the term of twelve periods, consisting of three and a half days. It is known moreover that the legitimate Tertians are rarely continued beyond the

seventh Paroxysm or circuit: that inflammatory fevers are found mostly to extend to the fourth or seventh day: that Peripneumonia is completed by resolution on the fourth, or runs into suppuration, whereby the disease is prolonged till the seventh, fourteenth, and even twenty-first: that the scarletina, measles, and erysipelas, for the most part yield to the septenary number: that Small-Pox become conspicuous on the third and fourth days from the attack, and that Pus is formed about the seventh. Lastly, there are innumerable histories of epidemic fevers, in which a sweat broke out, with remission of disease, on the seventh day. But the Work would swell to an immense size, if I should add all the examples of these periods. I may add one, for instance, in the Epilepsy of Children, the continuance of which, according to some in whom we may place confidence, is for seven months or as many years; to say nothing of the Catamenia, the course of which is completed in five periods of seven years. These are the laws established by nature, according to which, fevers are used to run their courses, which however we cannot always follow, or observe, by reason of the doubtful or obscure invasion of some fevers, by which indeed all calculation is frustrated.

From this we learn that, at a certain fixed time, the morbid matter, by the action of the vital organs, is thrown off, and in this action consists the *coction* of the morbid virus, lurking in the recess of the viscera, as has perhaps been too much talked about by the ancients, and unadvisedly neglected by the moderns. To these efforts of nature do they attend, who consult the good of the sick, and have no pretensions to the art of Robbery: Whatever incongruity the word *Coction* may present, we think it ought to be adopted, because it is sanctioned by time, and publicly received. Yet it is expedient to remark, that the above mentioned times of Crises, are not always governed by immutable laws; for the climate, seasons, age, temperament, peculiar method of treatment, mode of living, and innumerable other things, lessen or encrease the powers of nature, suited to this work, and therefore hinder or hasten the crisis. It even sometimes happens, that it is brought about in an imperceptible manner, or is altogether wanting, which nevertheless does not prevent the more experienced from attending to critical days; lest by an untimely remedy, they should turn every thing upside down. Nor are even those Practitioners free from this fear, respecting the seventh day, who oppose the doctrine of Crises. A very accurate history of this subject, is to be seen in a French Lexicon, which they call an Encyclopedia, by BORDEAU, an eminent, and illustrious Physician of Paris.

From the foregoing, we may learn that the simple method of cure is the more salutary, which, every one knows, consists in the cautious use of venesections, emetics, cathartics, diluents, refrigerants, moderators, antiseptics, diaphoretics, and sedatives, concerning which we shall presently speak particularly. But there is a necessity for a choice of them, seeing that a cure is not always safely performed by the power of the above mentioned remedies, but they rather occasion harm, if they produce effects contrary to the indication of nature. For whither nature inclines, there we ought to lead her, because if we set her aside, the administration of remedies will rest upon no foundation, or upon one that is but fabulous. Perhaps nothing more assists the healthy endeavours of nature, than the most spare diet, yea, even the copious use of water alone, so long as it does not oppress the stomach by its quantity; or from six to twelve pints drank within twenty-four hours, laying aside all other drinks, during the three or four first days from the attack, powerfully prevents the febrile orgasms, and has snatched many that were diligent in the use of this regimen, from the jaws of death. It is well known that a certain quack of Malta, administered the coldest water for aliment and drink, for thirty days and longer, in a certain very acute disease, with inconsiderate boldness to be sure, but with happy success. Nor does this copious ingurgitation of water, or any other plentiful draughts, hinder the cure, although the bloodvessels beat forcibly, if the blood be not carried with too great impetus, or the vessels do not swell immoderately; and the *primæ viæ* be emptied by emetico-cathartics, if they should be filled with depraved sordes. Taught by multiplied experience, we do not hesitate to assert, that by this very sparing regimen alone, otherwise consonant with reason, the fever has fled, or that the subsequent symptoms, by which it was usual to be exasperated, were assuaged: Finally, that every acute disease becomes more easy of cure thereby. To this method are alone to be opposed the exhausted powers of nature, the weak habits of infants, and of those in extreme age, under which circumstances this method of cure might not be proper.

Although *Blood-letting* is justly considered among the first remedies in fevers, yet it does not agree with all. For it frequently affords no relief, and indeed very frequently when repeated without judgment, it is capable of bringing on the greatest injury. We cannot doubt that inflammatory fevers demand a certain number of bleedings, yet there occur some epidemic constitutions of fevers of this kind, in which HUXHAM, and other celebrated practitioners, who paid great attention to them, have considered them as very hurtful. Nor ought we in fevers of any

kind, to strike a vein indifferently through the course of the disease; for blood-letting after the third or fourth day from the first onset, ought rarely to be judged of advantage unless in a very urgent case, which practitioners should bear in mind, who are very prone to venesection, if they value the health of their patients, and are seeking an honourable character.

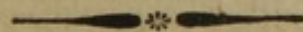
It is allowed by all that emetico-cathartics, given without delay, in the first invasion of a disorder, while it is expedient to have an eye to the *primæ viæ*, afford present help. For if this evacuation is omitted, in acute diseases, every fever is encreased by venæsections, because the emptied vessels allow a more free *ingress* to the depraved remains of concoction. But the case is otherwise, through the course of the disorder, within the compass of which, these evacuations ought to be prescribed with the utmost caution, lest the coction should be prevented, that is, until the organs become more yielding, or recover their pristine flexibility, for as *Hippocrates* says: "*concocta medicari oportet non cruda.*" And it is a maxim in medical law, that a physician should do nothing before this previous spontaneous operation of the humors, for they not only labour in vain, who attempt an evacuation by prematurely giving *cathartics*, but frequently excite latent motions, or occasion disturbances scarcely to be quieted by *paregorics*. This is the doctrine of the ancient fathers of medicine, confirmed by daily practice, which we cannot slight, without great risk. This doctrine is followed by the most experienced and free from prejudice, while those who are blinded by new theories, and talk of nothing in fevers but putridity, rush into the contrary practice, to the greatest injury of their patients. Nor do we think this controversy can be decided, unless the principal powers of these remedies be first honestly considered, for that a cathartic is given with a two-fold view, appears agreeable to reason and experience: namely, in the first place, that the depraved juices, putrid matter, or depraved bile itself, lodged in the stomach and intestinal canal, may be carried off, lest being drawn to the blood through the lacteal vessels, they should cause damage or excite a more dangerous or stubborn fever. With this view, an extemporaneous evacuation of this *saburra*, is considered salutary and necessary, and therefore, at the commencement of a fever, we have above hinted that it ought to be administered without delay: In the second place, that the sickly humor mixed with the blood and juices, may be directed to the intestinal sink, or sewer. But this matter is first to be subjected to the action of these organs, that it may be freed from its own obstructions, and become more obedient to purging, or may more easily be carried off, otherwise the vessels

scarcely suffer this morbid matter to be thrown off, and the organs confine it, being seized with a spasmodic stricture, and become insusceptible of the stimulus of cathartics. Hence it is little to be wondered at if practitioners attempt this excretion to no purpose, before the signs of concoction appear. And by this untimely method the symptoms become aggravated, and baffle the utmost endeavours of these incautious ones.

No one is ignorant, (to prosecute our design) that the use of *Diluents* and *correctors* is very general. It is well known that these articles are profitable in all stages of disease, to assuage the wild movements of the blood, to make the impacted humors flow more easily, to promote a flaccidity of the fibre, and assist the secretions. Water in the most simple state performs this office most happily, and perhaps excels all ptisans, apozems, and gruels that are made for this purpose, since the aforesaid medicines borrow their principal virtue from Water itself, as we have above insisted. There are some, however, who reject the *crude* water, as they call it, wherefore, in this case, let it be impregnated with some of these corrective herbs, or let sugar, honey, lemon-juice, syrup, &c. be added to it. *Refrigerants* and *anti-putrid medicines* also, which check the force of the humors, and break the impetus of the blood, and preserve this fluid from putrescency, are in great esteem in the practice of medicine; and particularly, *Diaphoretics* mitigate the inward fires with which the viscera are often inflamed, and with medicines of the same nature, afford wonderful help if the fever disposes to sweat, otherwise we must deal cautiously with them, and beware lest this hypothesis beguile us. Nor are *Narcotics* given more safely, for by inducing a stupor on the vital organs, they sometimes impede the subduing of the morbid matter, and it is stirred up to the destruction of the patient. Frequently also, by the action of these medicines, diseases change from their proper character, and present a distracted species, by which the inexperienced are deceived. It is known, moreover, that by these remedies, *phrenetic* patients are hurried to madness, or seized with deathly sleep.

These are the general remedies, by which Fevers are usually removed, they succeed to our wish, if exhibited with a sparing and cautious hand; and they may annul the mandates of fate. But they become destructive, when administered in great abundance, and indiscriminately by the unskilful. The more *simple* have the preeminence over the rest, nor are those formulæ consisting of such a multitude of ingredients, undeservedly banished in our day, which for the most part oppose each other, being absurdly heaped together, and prepared for mere ostentation,

which to be sure, savour more of ignorance than of learning. What wonder, if such confused and untimely remedies should hinder the more salubrious efforts of nature, operating against her consent; and more to be dreaded than the disease itself, should draw after them so many miseries and deaths. Alas! indeed, for the wretched patients, who commit themselves to such silly *nostrum mongers*, and suffer the torments of their foolish doatings. **HOFFMAN**, and innumerable writers of the first rank, have in very plain terms condemned this dangerous practice, and have lacerated the authors of this unlucky method, with very cutting reproofs. **HIPPOCRATES** followed nothing scarcely in acute diseases, but low diet. **ETMULLER** insisted on aqueous drink alone in the first stages of disease. **BAGLIVI** was strenuously opposed to the multiplied use and farrago of medicine, and did not hesitate to assert, that the greater vehemence of symptoms was more owing to bad treatment, than to the disorder. It is well known that the famous **REED**, **COCH**, and other Physicians of the first note, were of the same judgment. The observations of **SANCTORIUS** during the prevalence of Plague, are consonant with the above animadversions. Finally, the illustrious **LOBB**, (to omit the advice and testimonies of others) is perhaps more severe than what is right, against this unwarrantable method of cure, since he spares neither bleedings, emetics nor cathartics. From all which it may be gathered, that the *Phænomena* of disordered nature are immersed in dark and impervious obscurity, and therefore that the path of Medicine is arduous and rugged. These are the difficulties of the art, which so many of the unskilful little suspect, who have never indeed commenced with the rudiments of genuine medicine, and, like cattle, only tread in the footsteps of others. But they escape not the notice of the fathers of the Art, who have spent a life among the sick, and perhaps have had no other reward of their labour and erudition.



SIMPLE CONTINUED FEVER.

Called also, Synocha not Putrid, Ephemeral, Continent, &c.

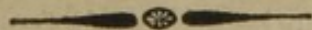
IT has been rashly considered by some, as a putrid fever of a milder kind, or of a lower grade, since it shews no putridity, nor mark of concoction, although it frequently seems to be distinguished by a certain peculiar crisis, or spontaneous evacuation. Ephemeral, or diary, because of its duration being most-

ly confined within twenty-four hours, and rarely extending to more days. It assumed to itself the title of *Continent* among the ancients, because they supposed it to be without remission and exacerbation, which if brought to more accurate examination, will be found not always consistent with the truth. Lastly, it is named among the vulgar *Courbature*, and by the *Provincial Galls* it is called *mour foundamen*, which vernacular name seems happily to express the nature and cause of the disease. At the first attack, the simple continued scarcely differs from other fevers; and indeed HIPPOCRATES plainly denies that it can then be distinguished from them. GALEN contends for the contrary, asserting that this fever shews itself by indubitable marks. If it were lawful to settle this dispute, between such great men, I could easily believe that both had wandered from the right track. It is not to be concealed that at some times this species of fever scarcely discovers itself, at others is very common. But it frequently shews itself by certain signs, as will appear by the following sketch.

It begins for the most part with shivering and chills, as is common in almost all acute fevers. Heat succeeds the cold, and is in the young and growing very intense. The pulse is found to be full and equal. The patients complain mostly of pain of the head, loins, or other part. Efflorescent pustules often break out, and at length the simple continued fever terminates in sweat or hæmorrhage. Moreover it runs its course, as it were, in one uniform tenor; it is increased by no exacerbations, or obstinate symptoms, nor is it protracted beyond a few days, rarely reaching to the seventh. To these we may add, that the fore-runners of other fevers, namely loathing of food, spontaneous lassitudes, &c. are here evidently wanting. This is an observation of LOMMIUS fully approved in my own practice. The course of this fever declares nothing certain, since there occur similar paroxysms of intermittent fevers; but the solution of each is different, as the termination of this Ephemeral fever is, according to GALEN, short and speedy—and leaves no consequences; while the paroxysms of intermittents are gradually mitigated, even after the sweating is perfected. Yet it is not to be concealed that these marks are sometimes more obscure, because besides intermittents, there occur some symptomatic fevers, which have the appearance of ephemeral: So that, the pathognomonic signs being absent, even experienced practitioners remain in anxiety, lest diseases of a different kind from the foregoing, or from the genuine constitution of the patient, should be discovered. *Affections of the mind*, watching protracted beyond measure, excessive labour, insolation, inclemency of weather,

gluttony, &c. may justly be enumerated among the common causes of this fever. The young, the vigorous, the luxurious, and free from care are supposed to be prone to Ephemeral Fever. FORESTUS observed, that men addicted to holy things, from the *Abbots* to the *Monks*, were more liable to simple continued Fevers; which is void of danger, unless it be diverted from its proper character, by medicine. The inexperienced ought to bear this carefully in mind, that remedies rarely do good in this case, but rather occasion no small damage; which the experienced very well know, who are used to commit the business of cure to a suitable regimen of diet, by which indeed the sick are in a short time placed out of danger.

From the above it is easily gathered, that the principal cure of this fever is performed by the mere powers of nature, unless a vehement heat of the blood, or depraved humors, lodging in the *primæ viæ*, or other accident demand some aid; among which, venesection and emetics claim the preference, which are even used, not injudiciously, by some who are in doubt as to the nature of the disorder. But for the most part, the whole business is effected by diet alone, or by diluents and correctives, not omitting the milder diaphoretics, if obstructed perspiration be complained of. Refrigerants also, and nitrous medicines are thought useful, when there is no propensity to sweat. The bowels in the mean time must be kept free, yet this ought not to be excited by cathartics, unless after the cessation of the fever, nor is there always need of this purgation. Within these limits they are not restrained, whose dull minds have but a smack of the elements of Medical Science; while they terrify the credulous bystanders, by muttering about the danger of the disorder; and therefore draw blood with a liberal hand, and administer medicines of all kinds, even the more powerful; by which indeed some of their patients are tired out, while others, by the powers of the natural œconomy alone, overcome the disorder and the untimely remedy. Nor do these *Quacks* suffer themselves to be disturbed by the unexpected termination of a disease, but rather with a bold face, hesitate not to ascribe the happy event to their own wonderful method of cure.



PUTRID CONTINUED FEVER.

WE are scarcely able to define, from the very intricate writings of the ancients, what is to be understood by *Putrid Syno-*

cha. Nor does its origin more clearly manifest itself, which is supposed to consist in a certain fault of the humors, tending to alkalescence. Whatever be its most remote cause, it seems to be placed beyond all doubt, that from hence arises a certain morbid humor, subjected to the powers of nature, that it may be eliminated through the various emunctories of the body. And this *defecation* of whatsoever kind it may be, or purgation, exhibits the genuine character of this fever; which SYDENHAM therefore denominated the *depuratory Fever*. This physician has truly merited much in the practice of Medicine, who has committed to writing, an accurate history (perhaps too contracted) of various epidemic constitutions.

Some think that they have hit the nail on the head, who being deceived by the word, *putridity*, imagined a real corruption of humors in this fever; and the fætor of the sweat, stools, and urine itself, as the disorder increases, does not a little favour this opinion. But such excretions yielding very similar odour may be discovered in other fevers of a different species, where there arises not the least suspicion of putrescent humors in the vessels. Some, whom this Hypothesis will not suit, have imagined a kind of purulence in the very receptacle of the blood, being induced to think thus, because the urine and expectoration often smell like *pus*; which we think foreign from the Truth. Nor do they conjecture more happily who suspect a putrid dissolution of the Blood, for these trifling reasons, that the blood in this disease often passes its bounds, and causes frequent hæmorrhages; and besides, that this fluid drawn by the lancet seems to become putrid in a short time. Nor do they mistake less, who contend that all the putridity is confined to the intestinal tube; which in their view, is abundantly proved by the very offensive smell of the alvine fæces.

But these are mere *comments*; since we can never conceive how persons seized with this disorder, with these evident marks of a previous corruption of the blood, should not only not hasten to death, but even should be restored to perfect health in a little time: Whereas, a true putridity of the blood and humors ought to exclude every hope of recovery, differing none at all from a *mixed* death, which can not be restored either by the powers of nature or the art of medicine. Moreover, it is well known that many enjoying vigorous health, emit from the mouth and body a fætor remarkably odious to all. Add to this, that if we attend to the family of vegetables, many occur which exhale the worst odor, while of a sound, natural and entire contexture. What hinders therefore, that the juices of animals, free from dissolution or corruption, should put on this appearance. Nor are

writers wanting, in short, who consider the gangrene which is used to accompany this species of fever, as a most certain mark of latent putridity; which plainly contradicts experience. For it is known, that nothing more effectually prevents the putrefaction of bodies, than cold, from which, when extreme, animals are seized with gangrene, or mortification itself, as in an instant. Which phenomenon, clearly obvious to all, if I mistake not, overturns this opinion.

Nevertheless we may observe, according to the illustrious VAN SWEITEN, that the blood and humors, weakened by this fever, when deprived of vital heat, are like mortified parts, more apt to become putrid. For no one is ignorant that blood and urine, in bowls and urinals, when left to themselves, putrify in a short time. Nor is it to be wondered at, that BALLONIUS should assert, that he had observed myriads of worms in blood drawn.

We may add to these, that the bodies of those who die of this fever more speedily putrefy, so that those who dissect them can scarcely bear the sight of them. But nothing can be inferred from hence, since all these occur in various subjects, which had not the least previous marks of putridity. From hence it is evident, of how great moment it is to give appropriate names to disorders, because from this source proceed innumerable errors, which are lamented by the sick themselves. For it is well known that this name, *putrid*, has long been the refuge of *Empirics*, who when they meet with a fever of a hidden character, without hesitation pronounce it to be putrid.

Persons of a sanguineous temperament, are thought to be liable to this species of fever. It often also attacks those who are in the habit of untimely labour after eating; nor does it spare those who indulge in wine and venery. Like other fevers, the continued putrid fever begins with chills and shivering, nausea and vomiting, with pain of the bowels for the most part accompanying the first invasion, also headach, drowsiness or delirium. Intense heat succeeds these, which afterwards abates a little, and again grows stronger. The pulse at first is equal and soft, afterwards hard and unequal, with *subsultus tendinum* and dry skin. There is an exacerbation every day, which is greater on alternate days. But it is for the most part comprehended in periods consisting of seven or three and an half days, so that it is usually distinguished by the fourteenth, or twenty-first.

Besides the pain of the head, sometimes excessive, raging throughout the course of the disorder, other alarming symptoms occur, namely, drowsiness, obstinate wakefulness, delirium, convulsions, and fatal hæmorrhages. Pains are not only felt in the loins and joints, as is usual in other fevers, but they also affect the

breast and right hypocondrium. We say nothing of those which arise from the stuffing and heat of the viscera, and becoming a kind of chronic disease, creep from one part to another, and therefore exasperate the febrile symptoms.

The difficulty of breathing and fever encreasing daily, and varying in the same manner, the patient's circumstances become worse and worse; in the meantime the strength fails, and *restlessness* exerts its greatest *fierceness*. The mouth is defiled with offensive sordes, the tongue, at first covered with mucus, at length becomes rough and blackish. Some complain of a spurious angina, or are seized with a kind of *Ptyalism*. The urine appears sometimes high coloured, sometimes clear or disturbed, but without sediment before the fourteenth day. The *Hypocondria* heave, and the whole abdomen swells; lastly, the evacuations by stool become very *fætid*, or are filled with *lumbrici*. From this complication of signs or symptoms, it is abundantly manifest, that the fever at present treated of, becomes dangerous, or soon approximates to malignancy. For which reason it is no wonder if many have thought both to be one and the same disease. But the putrid fever if it vary not from its character, sooner runs its course. Moreover, there is a certain injury of the brain and nerves through the whole course of a malignant fever, while it is observed to be temporary, and fleeting in putrid fever. Finally, in this last, a depuration is common, but is missing in the malignant.

Here the Doctrine of Crises is of great benefit, lest the powers of the animal œconomy be worn out by ill-timed remedies, and all things turned upside down. The more salubrious and common excretions are made through the kidneys and pores of the skin, but sometimes an *hæmorrhage* serves the purpose of these. The Urine, about the fourteenth day is turbid, and when at rest, suffers a certain feculence to separate itself, and at that time all the symptoms become milder. Critical sweats break out mostly about the same time, or a little later; if they appear sooner they are of no use, unless *fætid* ones procure some relief. Discharges of Blood are much to be desired, provided they are kept within proper bounds. Sometimes also this depuration is effected by viscid, thick, and whitish expectorations. But they mistake, who think them purulent, whom we have above noticed to have entertained a false notion, that the whitish sediment of urine was of the same nature. As relates to vomiting, daily experience testifies that it is seldom useful, even in the time of crises: a diarrhœa about the critical period is more beneficial; nor is it thought hurtful about the decline of the disorder; otherwise a profuse evacuation of this kind is considered danger-

ous, especially if it be serous. Lastly, nothing certain can be said concerning erysipelatous or pustulous eruptions, &c.

From the bodies of such as die of this disease, when dissected, there is little to be discovered. Yet we may see some hurt sustained by the viscera when examined: such as the vessels swelled with black and feculent blood, polypous concretions, as they call them, in the ventricles of the heart, which are formed during the struggles of death. Stuffings and inflammations of different degrees, and finally, putrid appearances, as well as purulent and gangrenous; the lungs, liver, omentum, mesentery, intestines, &c. ulcerated, to which we may add, stagnations of a serous nature, or of a different kind, as well in the head as in the breast and abdomen. We may also mention Worms, sometimes solitary, sometimes collectively, in the convolutions of the intestines. But all these seem inadequate to explain the nature of a putrid fever, seeing they are mere morbid products, or exhibit what may be called morbid injuries, being common in all affections, so that the genuine cause of the disorder, concerning which we are treating, is hid from the eyes of scrutiny.

The *cure* of this fever, usually begins with one or two venesections, if nothing forbid, in order that the inflammatory obstructions as it were may be lessened, which often occasion difficulty to the physicians. But a greater number of bleedings occasion extreme damage, notwithstanding what they adduce to the contrary, who never understood the real character of the disorder. After the vessels are emptied, an emetic affords the greatest relief, by which the depraved remains of digestion, or of any sordes lodging in the primæ viæ are cleared off, from whence an unmanageable diarrhœa originates, by which the sick are worried during the whole course of the disease, and the critical sweats are frequently frustrated, as appears from a multitude of observations. Nor is perhaps too great stricture of the belly to be less feared, which is obviated by suitable emetics, or the milder laxatives. For even genuine cathartics ought to be considered as insufficient, which merely perform their usual offices, unless by stimulating the *organs*, they make them more yielding, and the morbid humors being removed from the parietes of the intestinal canal, by previous coction, become more obedient to purgation, which rarely happens, as we have above hinted, before the fourteenth day. Moreover, diluents, temperants, refrigerants, and nitrous medicines deserve the greatest praise, by which the belly is frequently greatly loosened. Nor are the antiseptic acids, both mineral and vegetable, less to be esteemed, since nothing, perhaps is found more effectual to prevent alkalescency of the hu-

mors, which, laying aside all hypothesis, shews itself by indubitable marks in this disorder, and differs altogether from the fabled putridity.

In many cases near the end of the disease, the use of the Peruvian Bark is of great advantage, by which the powers of the organs, worn down by disease, are restored. Sometimes even cardiacs and diaphoretics are useful, when the endeavours of nature to overcome the morbid matter appear ineffectual. Narcotics are to be used with the greatest caution, lest they throw a kind of cloak over the disorder: But Camphor may be given more safely, which, besides its power of blunting the force of the animal spirits, preserves the blood and humors from a kind of putridity. If, lastly, symptoms arising from diseased brain, are long protracted, through the course of the disorder, or rage beyond measure;* animals cut open alive, and applied to the head, are of benefit, or with the same view let the feet be bathed in warm water, which topical remedies ought not to be despised, because experience testifies that many have enjoyed their good effect. But perhaps nothing sooner relieves the head, than sinapisms or blisters to the legs or soles of the feet. There is the same benefit from cupping, which, I know not why, is almost out of use.



ARDENT OR BURNING FEVER.

IT is called CAUSUS by the ancients, and sometimes also LEIPTERIA. To mention other names, we have thought would be futile and unsuitable. Ardent fever is not widely distant from putrid. Yet the above-mentioned diseases are easily distinguished, although bordering on each other, if the marks proper to each are not superficially attended to. The fever we now treat of, besides the more severe symptoms by which it is marked, is attended by intense heat, with which the intestines are roasted as it were. Besides, the disease is more acute, or runs its course more quickly, as may be discovered about the seventh day, and even sooner; and is rarely protracted to the fourteenth. But it is proper to remark, that various symptomatic fevers occur, to wit, bilious, inflammatory, vulnerary, &c. which in some measure resemble the ardent fever, of which however there are other forerunners. It makes a different progress, and its cause is found

* This barbarous practice has now become obsolete, and with good reason, as artificial heat answers all the purposes of natural. T.

to be quite different, as by the following sketch of ardent fever, abundantly appears.

This species of Fever commences with shivering and chill, or a tremulous coldness; intense and biting heat, especially *internal*, follows this state: and at times while this encreases, the surface of the body is cold; from which symptom sprang the *Febris Leipyria* of the Ancients. The pulse is observed at first to be hard and frequent, and in a little time irregular and weak, with loss of strength. The daily exacerbations are greater on alternate days, and for the most part, come on with a previous kind of chill, so that they appear to present the type of a double Tertian, insomuch that many have not falsely suspected that there is a certain affinity between both disorders, as, in some epidemic constitutions, the ardent fever does not manifest itself until after several preceding intermittent paroxysms. In the mean time, to return to our subject, a thirst rages, that cannot be quenched by any refrigerants, the burning mouth is affected with bitterness, the tongue and lips become dry, and by degrees contract blackness, and are disfigured by various fissures. The patients are tortured with excruciating head-ach, and most obstinate wakefulness, and oppressed with delirium, comatose affections, epileptic fits, and other grievous symptoms. Some vomit, or discharge by stool a kind of rusty bile, and it passes with such a kind of impetus both ways, that this evacuation becomes like the cholera morbus, yea, the bile becoming more acrid and hot, as it were, burns away the *æso*phagus and anus, like a caustic. Hence it is plain, of how much consequence it is to remove this humor, lest by its detention, or mixing with the blood, it occasion the greatest damage. From this source appear to arise heart-burn and anxieties not to be appeased by art, distressing swoonings, obstinate hiccough, fatal inflammations of the stomach and intestinal canal, as well as of the liver, lungs, &c. In some a difficulty of breathing prevails, the hypocondria labour, and the whole abdomen swells. Some are afflicted with wandering pains both internal and external. From the vehement force with which the blood rolls itself along, hæmorrhages arise, which are either fatal or frequently return. The urine is red and lateritious, or like what is evacuated in jaundice. The skin, which, in malignant fevers, is livid, is here found to be yellowish, for the most part wet with sweat, affording no relief, and marked with various efflorescences, and exanthemata.

Violent passions of the mind, long protracted watching, immoderate labour, food that is high seasoned, or of a keen taste, wine and ardent spirits, &c. usually pre-dispose to this disease; vigorous youth, choleric temperament, the constitution of the air,

and time of year, each contributing a share. The ardent fever seems sometimes to run into a genuine malignant, or the malignant, on the first days, has the appearance of ardent fever. Vomiting and purging occurring about the fourth or seventh day, are considered healthy and critical. The judgment by the urine is doubtful, as it rarely deposits a sediment, nor are more certain indications of the event drawn from sweats and hæmorrhages. Lastly, convulsions, delirium, lethargy, impeded deglutition, tumor of the parotids, bloody spittle, anxiety, hiccough, urine blackish or tinged with blood, sweating of the face, &c. are by common consent, numbered among the fatal symptoms. Most of the patients die on the third or fourth day, but rarely on the seventh. If the disorder is lengthened beyond this, there is great hope of a recovery, especially in youth, who bear the severity of this disease better than old persons. Nor is the case always out of danger, after the course of the disorder is finished, for sometimes it creates a spurious intermittent, scarcely to be recovered from; or slow fever, which portends the sufferings of the sick, and often leads them to the close of life.

To mention appearances on dissection, many things remarkable occur in the head, when the brain is uncovered, namely inflammations, purulence and putridity, as well in the substance of the cerebrum, as in its involucra. The *Plexus Choroides* appears vascular, distended, and varicous; finally, a serous or sanious colluvies is met with, both in the windings and in the other recesses of the cerebrum. The breast is affected in the same manner. There are doubtless discovered ichorous and purulent stagnations, not only in both chambers of the breast, but even in the pericardium itself, which is otherwise injured in various ways. The lungs are found affected with blueness, stuffed up, and strewed with gangrenous spots, and adhering to the surrounding parts. The heart wrinkled, and as it were decayed, its *thalami* and *auriculæ* filled with feculent, congealed, or as it is called, poly-pous blood; hence it is that this viscus often swells to a great size. On opening the abdomen, the liver is found full of pus, and putrid, contaminated with gangrene, sometimes dyed of a saffron colour within and without, and very much enlarged, so that the diaphragm being pushed upward, the cavity of the breast becomes narrower. At other times this viscus shews itself schirrous, hard, contracted, wrinkled, blackish, or of a leaden colour, to say nothing of its morbid adhesions to the neighbouring parts. The gall bladder is sometimes empty, sometimes unusually turgid with greenish or black bile, and defiling the neighbouring parts by its transuding fluid; finally, it sometimes contains stones of different sizes. The same mischief, but more rarely, is observ-

ed in the kidneys and other viscera, as also very loathsome stag-nations. Lastly we generally see the vessels running to the *vena portæ*, loaded with very black blood, like pitch.

Venesection is useful on the first day of invasion, if nothing forbid, but not to be practised afterward, unless inflammation and plethora demand; because repeated bleedings, as the illustrious VANSWEITEN remarks, are apt to bring on more vehement symptoms, or convulsions themselves, as has happened in my own observation, even before the flow of blood was stopped. It is therefore best to avoid them, notwithstanding what some practitioners adduce to the contrary, who are used to accommodate themselves to the whims of the bystanders, and are never deterred by the unhappy event of things, so long as they can keep the confidence of the sick. Here by the bye we may note, that they shamefully mistake, who persuade themselves, that by blood-letting, they answer the end of spontaneous and critical flows of blood, because it has been observed an hundred times, that in every disease, a certain critical hæmorrhage is of more service than frequent blood-letting: besides that a hæmorrhage in this species of fever is for the most part dangerous. Emetics, although more beneficial, ought to be given with the greatest caution, and the milder ones are to be preferred, and washed out with copious draughts, otherwise the blood at length becomes heated by this stimulus, the solids become prone to spasmodic contractions, and in a word, a spur is added to the disorder already impetuous. For the same reason, if on account of exuberant bile there be need of purging, manna, cassia and tamarinds in whey, or chicken broth, take the lead of other cathartics. Stimulant injections are not safe, but rather demulcents alone, with milk, butter, oil of sweet almonds, whey, &c. ought to be used. Opiates, which at first view would seem to be proper, on account of the sweet serenity of mind with which the waking patients are affected, are here to be avoided as worse than a serpent. The same may be said of cordials, although the strength be prostrated, which in this case is not deficient, but as it were oppressed. I am aware that many have written of the happy success, with which they have exhibited the above remedies. But it is become customary, as I have often inculcated, for those who are seeking popularity, always to refer the happy termination of a disorder to any, even the most preposterous remedy; for no one is ignorant that many patients overcome both the disease and the incongruous method of cure, by the powers of nature alone. Finally, in the cure of this fever, diluents, demulcents, refrigerants, and acids, are of great value, the salutary effects of which may be easily explained. Nor are ni-

trous medicines of small account, which as sedatives, are conveniently brought to our aid. Whey or chicken water, which are usually taken before any other drink on the first days, give present help. Nor ought we to despise acid julaps, lemon juice diluted with water, emulsions, &c. and *magnesia alba*, and other absorbents afford some aid, which allay the fierce motions of the bile raging in the Abdomen.



MALIGNANT FEVER.

WHAT authors mean by Malignant Fever, can scarce be known from their diffuse writings: nor can we understand them more clearly by their practice, since they designate by this name, according to their own whim and pleasure, various fevers of an obscure nature, if only they be attended with dangerous symptoms. So that this disease may be considered as a mere problem, of very different solution. Yet from accurate observation of its signs and symptoms, the genuine character of this very malignant disorder is easily known. We may admit the name, *Malignity*, although absurd, lest we get out of the beaten track, but far be it from us to give the name after the manner of Empirics, to every disorder of a bad type which occurs, or is attended with unusual or alarming symptoms, or degenerates through preposterous management, since a mode of cure for the most part originates from the pre-conceived opinion, highly injurious to the sick. For SYDENHAM has justly remarked that this assumed word, *Malignity*, has perhaps been more fatal to mortals, than the discovery of *gun-powder*. Nevertheless, in the opinion of the ancients, it was right to call fevers thus, in which the powers of nature were oppressed, so that neither the velocity of the pulse, nor vehemence of the symptoms were answerable, to the destructive nature of the disorder, which as it were lays secret snares for the life; for which cause it is no wonder if many patients are hurried to death by the fearless practitioner. But yet all malignant fevers are not of this kind (*comma*) for many occur which exert their malignity at the onset, as the *Camp Fever*, or *Hungary Fever*, and some violent epidemics, which shew themselves with more intense heat and stronger pulse, and various symptoms exciting the greatest terror. We have just taught that ardent fever sometimes puts on the same appearance, whence it is not to be wondered at, if many of the inexperienced have taken one for the other. For the period of these

fevers is unlike, the ardent fever sooner runs its course, and is mostly confined to seven days, while the Malignant Fever never ends before the twenty-first, and is mostly protracted to the fortieth. Moreover this last comes on as an Epidemic, and is propagated by contagion, from which the Plague seems to differ but a grade, the history of which, for the sake of clearer method, we shall presently treat of apart.

It seems fixed beyond doubt, that the Malignant Fever has its principal seat in the *Brain and Nerves*, the offices of which never continue clear during its prevalence ; nor under any other view can they be rightly distinguished from other fevers. Yet, to say the truth, other fevers, when arrived to a certain grade, do not spare the nervous system, but injuries arising from them are slight and temporary, or merely symptomatic, while throughout the Malignant Fever, they are constant. An argument for the truth of this may be brought from the patients themselves, most of whom were affected with sadness and anguish, or oppressed with want and other difficulties, before they were affected with this disorder. Nor need we wonder if, with the mind sunk, or distracted, they should be more prone to this species of fever. At other times we may tell the *evident causes*, namely a loose way of living, the foul air of Hospitals, Prisons and Ships, putrid effluvia of ponds &c. by which the system of the nerves is variously affected, or drawn into Sympathy. The Malignant Fever rarely invades suddenly, but spontaneous lassitude, or stupor of the members, heavy pain of the head, wakefulness or disturbed sleep, foul mouth, with a tongue covered with mucus and whitish nausea, anxiety, changes of heat and cold, &c. are commonly the forerunners of this fever ; and indeed continue thus for many days, while the disorder lurks concealed or shews itself by doubtful and obscure signs ; until at length it discovers itself openly, and the sick are forced to lie down. At that time, as is usual in almost all fevers, the most are seized with shivering and cold, a frequent pulse follows this trembling chill, with mild heat, so that the danger of the disease might as yet be hidden, if the epidemic constitution of malignity did not excite suspicion. Yet sometimes the first invasion strikes the greatest terror, which more serious symptoms attend, namely, faintings, comatous affections scarce differing from an apoplectic fit ; convulsions, cholera, and most severe pains of the bowels, which resemble hepatic or nephritic colic. In some Epidemic seasons the Malignant Fever does not shew itself, unless after various paroxysms of intermittent or remittent fever, recurring without order, or extending beyond its usual period. We add nothing concerning its other modes of invasion, as an accurate

enumeration of them would rather obscure than elucidate our history, as is plain from the writings of those who seem to have entirely exhausted this subject.

As the disease proceeds, the strength is prostrated, pains both acute and dull, are felt throughout the whole frame. The head affected with the poison, totters; an excessive head-ach follows, with troublesome pulsation of the carotids, tremor of the head, and dimness of sight. Some are perplexed with most severe pain in the bottom of the orbit, or other solitary pain creeping through the different parts. The eyes destitute of their brightness, can not bear the light: The face has a livid, leaden, and dirty colour, and a hæmorrhage of the nose, sometimes breaks out, scarcely to be restrained. In the mean time the mind is beclouded, or disturbed by the fear of death. The wakeful patients hold up false likenesses of things, and babble absurdities, yea, becoming mad, are obliged to be confined with cords. Some fall into a stupor and lethargy, so that they cannot speak intelligibly; others are seized with tremor and convulsions. The tongue, at first covered with a white mucus, becomes dry and rough, and black, as if burnt; is seen all in gaps, and tremulous. The mouth is foul and fœtid, the lips are parched, the rough fauces prevent swallowing; the salivary glands are overcharged, respiration is impeded, heart-burn becomes severe, followed by faintings, palpitations of the heart, most troublesome tossing of the body, &c. The pulse is, for the most part, languid, weak, unequal, or disordered, with subsultus tendinum. Sometimes it scarcely recedes from its natural state, or is found more active. Exacerbations arise once or twice on each day, but not at stated times.

The abdomen, rarely, without pain, is prominent throughout the disorder, and the hypocondria are often greatly distended. The Urine one while flows abundantly, again scarcely passes through its proper strainers, or is confined to the bladder. In some persons it varies none from the natural colour, in others, it is thin, whitish, of a flame colour or highly red, blackish and muddled. Sometimes it exhales a very offensive odour, but very seldom settles. It is well to note, by the bye, that from accurate examination of it, nothing certain can be determined. The Bile degenerates from its proper quality, or becoming hot, occasions various disturbances in the abdomen, whence arise nausea, vomiting, purging, heart-burn, anxiety, hiccough, tormina, &c. The alvine evacuations take place without the knowledge of the patients; lastly, the stools are fœtid, and sometimes contain lumbrici ought, *Epidemic and fatal Dysentery* to be enumerated among the attendants on Malignant Fever? or is it

a disease *per se*, inclining to malignity? This question has been much controverted, and still remains to be decided. But I can easily believe, (not to be thought indifferent) that this implicated disease is mere dysentery attended with aggravated symptoms, or as they say, partaking of malignity. For it is well known, that Small-pox, Measles, Catarrhal Fever, &c. have the same marks in some constitutions. Sweats, rarely salubrious, break out so abundantly in some, that many practitioners, deceived by this symptom, rashly refer the fever we are now treating of, to the *Sudor Anglicus*, or sweating Fever: these sweats emit a fœtor in many, and at times they are cold, &c.

Other circumstances worthy of observation, are discovered in the skin, namely, petechiæ or small spots, not rough nor prominent, but very much like flea-bites, which are spread over the whole body, except the face and hands. Sooner or later these spots break out, and after three days they gradually become extinct and vanish, they often occupy the breast and back in such crouds, that the skin is covered with an uniform intense redness: But *these* afford no signs either of health or death, yet if they become broader, livid, and black, the case is dangerous. There is another kind of eruption which is called Miliary, there are certain small vesicular or crystalline pustules, dispersed over the whole body, at first pellucid, afterwards whitish, which has given them the unsuitable name of (*pour-pre blanc*) *White Spotted Fever*. The above-mentioned spots mostly follow these sweats, and later than the petechial spots; or observing no order, are produced through the course of the disease. They are itching and have a serous humor, they are protracted longer than the petechial, and may recur frequently in the course of the disorder. Lastly, in some epidemic constitutions, miliary pustules, and febrile exanthemata, are produced, either together or alternately.

From what has been said we may learn, that nothing can be inferred relative to the nature of the disease, from these febrile eruptions; and therefore that it is imprudent to distinguish, *spotted*, *petechial*, and *miliary* fevers from other malignant fevers: but rather these symptomatic efflorescences would seem to depend on a certain degree of heat and profuse sweating, or some other cause, hid from our research; since, as we have noticed above, they do not affect the face and hands, which are more exposed to the cool air; while on the contrary, those essential eruptions which give the character of a disease, such as, small-pox, measles, scarlet fever, and Erysipelas, not only appear over the whole body, but assail the hands and face in great abundance. Moreover, we all know, that petechial and miliary eruptions, oc-

cur in other diseases, or those without fever, and that each is often met with in small-pox, ardent, dysenteric, and catarrhal fever. It is moreover known that miliary pustules are familiar in lying-in women, when recovering from a tedious disease, &c. Nor are the symptoms of malignant fever as respects the skin, confined to these limits, for some patients complain of an itching while no efflorescence appears. In others, there arise erysipelas, exanthemata with little bladdery pustules, or of another kind, gangrenous spots, &c. Lastly, inflammation of the parotids, which suppurate with great difficulty, corrosive blotches, &c. These are the more common phænomena of this fever, by which, if well attended to, the nature of the disease is discovered.

We have above inculcated, that Malignant Fever is of longer duration than other acute fevers, but the term of this disease can be submitted to no computation, as the commencement and termination can often scarcely be discerned. Yet nothing forbids the assertion, that this species of fever is never completed before the twenty-first day, and commonly later, namely, to the fortieth, sixtieth, and even beyond: whence they mistake who assert, that they have seen a Malignant Fever of seven days, which was perhaps nothing else than an ardent fever, attended with aggravated symptoms. The anguish of the patients is often exacerbated as the disorder abates, for if the fever about this latter period is more obstinate than usual, and refuses to yield, there is fear, lest, after the manner of retroverted tumours, the remains of morbid matter should fall upon the viscera, and deposit a purulent congestion on the lungs, liver, mesentery, &c. Other evils threaten, even after the disorder is removed; for some are deprived of memory, and forget even their own names, while others lose the recollection of all that happen to them in their sickness. Some are insane for some time, or even all their life, many are afflicted with deafness, or blindness. Some fall into hectic fever, and others, chronic complaints, difficult of cure, and troublesomely tedious. Besides, in some constitutions, the Malignant Fever is followed by intermittent, simple or double tertian fever, not readily yielding to the usual remedies. Finally, none who recover from this disorder are restored in a short time to their former health, but are afflicted with insuperable weariness, and constant distress of mind; nor are there wanting, some who, although safe, despair of life, having felt no fear while death was at the door. Lastly, another danger may succeed, which is the recurrence of the disorder, especially in those who, at the return of health, deviate from the temperate mode of living.

That a right prognosis may be established in so doubtful an affection, while we bear the foregoing in memory, we must estimate the degree of strength both of mind and body. The less they are debilitated, the brighter the hope of health. But an unfavourable omen is obtained from fearfulness and terror, or an unconquerable fear of death. A different presage is gathered according to the varied condition of the body, discovered by a fault in the blood and humors. For this fever is considered more dangerous if it attack one subject to scurvy. Cachectics, &c. scarce recover from it. These general observations being premised, we come to a more accurate investigation of symptoms. The vision beclouded, tremor of the tongue, difficult deglutition, livid apthæ, &c. betoken the danger and long continuance of the disorder. Deafness portends nothing bad, which spontaneously goes off in process of time. Nor is blindness a more unfavourable omen; but many never recover their sight. A ptyalism is favourable, as also, at the decline of the disorder, pustules breaking out about the lips. A prognostic of health is falsely derived from a mild heat, from the pulse becoming natural, from citron coloured urine, not unlike that of healthy persons, because many thus affected are suddenly taken off. They are in great danger who make water unconsciously, who night and day talk nonsense, pick down as it were from the bed-clothes, or draw them together, &c. The belly either very loose, or costive, is cause of much fear: dysenteric, bloody, blackish, or unusually fœtid stools, occasion great difficulty to physicians. Petechiæ, or miliary dark coloured pustules or eruptions, earlier than common, are causes of dread, but death is threatened by their sudden retrocession. Hæmorrhages happening at any time, presage an unhappy event, as confirmed by various unfortunate cases. Lastly, no one is ignorant that hiccoughs, faintings, convulsions, obscure and sad delirium, disordered motions of the hands, comatose affections, &c. are symptoms bordering on death. As to the *Crisis*, all practitioners know that the efforts of nature to bring this about, are inadequate in this disorder, whatever like it may be observed in some about the seventh day. But this work, although attempted, is never completed, which notwithstanding, does not hinder, but that a diarrhœa not exceeding its proper limits, and urine yielding a sediment, afford the greatest help in some epidemics. The same may be said of sweats, especially if the skin be moist, with a dewy vapour of perspiration. Nor is there less encouragement from inflamed parotids, concerning which it is worthy of remark, that these tumors tending to resolution, while the Malignant Fever is prevailing, are, contrary to the usual order, more favourable than

others. Abscesses bursting outwards, often supply the place of crisis; but internal ones, in proportion to their situation, are mostly grievous, unless the matter find an outlet through the trachea, intestinal tube, and bladder. But this is the work of nature alone, and is not to be promoted by art. From all which, taken together, we may collect, that patients recover from this disease, not without the greatest difficulty.

THE EXAMINATION OF BODIES AFTER DEATH supplies few observations, since for the most part nothing occurs worthy of notice. Even the dissection of bodies must be performed with great haste, on account of the extreme fœtor, or the fear of contagion. Nevertheless, the head when opened often exhibits abscesses, both in the interior chambers of the brain, and about the surface of this viscus, and also sanious and purulent stagnations in the windings of the cerebrum, as in the other recesses. The same injuries, but more rarely, are found in the breast. The lungs, changing from their natural colour, exhibit various livid and gangrenous spots, and being sometimes affected with putridity, are easily broken by the touch. The Heart seems sound, but the blood accumulated in the ventricles, auricles and greater vessels, is found sometimes very fluid, and as if dissolved; sometimes thick and in a concrete form, becoming polypous, as some say. The abdominal viscera are more frequently found diseased, the omentum is presented to view, affected with putridity, which is not unfrequently communicated to the liver, spleen, and the other viscera with which it is connected. The stomach and intestinal tube mostly swell to a very great size, affected with spots like gangrene: in some subjects the miserable intestines are torn, and afford an outlet to the alvine fæces. Lastly, the bodies of such as die of this disorder, swell exceedingly, and are *disfigured* after death by dark purple spots, very broad. They putrify in a short time, and emit a very offensive odour. Hence it is no wonder, if, after very hasty examination of the viscera, the bodies are left for immediate burial.

As the attack of Malignant Fever is obscure, so the sick being ignorant of their imminent danger, seldom apply for aid on the first days, or not until a certain advancement of the disorder, which is the cause why so many are defrauded of preventatives, by which the disease is sometimes smothered, as it were in the beginning. For multiplied experience has convinced us, that many, as this species of fever was coming on, being warned by the abovementioned forerunners of the disorder, have by very spare diet, change of air, or by the mere simple and general remedies, escaped the threatening disease, and have evidently

come off safe. We hasten to the remedies which are efficacious, when the Malignant Fever has commenced its attack : yet one and the same method of cure does not suit all, as frequently we must accommodate it to the urgency of the symptoms. For a long time the custom has prevailed, that the treatment of this fever begin with blood-letting, concerning which, however, authors differ. We think this chiefly beneficial, if the strength will bear it, but that it ought not to be repeated without the greatest caution, although inflammation, acute pains, delirium, and difficulty of breathing, seem to persuade to it, as we have often observed that from a repetition of it the disorder becomes more fatal, yea, that death is hastened. It is a very common opinion that the oppressed head is relieved by opening the Saphena, but SYDENHAM, VANSWEITEN, and other experienced practitioners deny it, with whom agrees that most accurate scrutineer of diseases, PRINGLE, who says that numerous venesections do no good in delirium, but rather often excite it, as well in malignant as in other species of fever. If we might say any thing on this subject, we would not hesitate to assert from repeated experience, that delirium is frequently excited by opening the Saphena, and never removed by it; but to oppose a pre-conceived and borrowed opinion, in a doubtful case, appears arduous and difficult, which is the reason that some physicians, consulting their own reputation, rather than the health of their patients, (whatsoever they may think on the subject) without hesitation, vilely and basely suffer themselves to be subject to the prejudices of bystanders, and fear not to commit the life of their wretched patients to the greatest risk.

VOMITS, after the first invasion of the disorder, next to blood-letting, are to be considered among the best remedies, by the help of which the saburra lodging in the primæ viæ are carried off, which otherwise in a short time with the chyle serving as a vehicle, gets to the blood, is distributed through the whole circuit of the vessels; and in the course of the disorder occasions the greatest injury. We have often had opportunity of observing in hospitals, during the prevalence of Malignant Fever, what difference there was between the exhibition or withholding of this remedy, which, to say the truth, exceeds all belief. And indeed SYDENHAM did not doubt that an emetic, even after this favourable time: or in any stage of the disorder, even to the tenth or twelfth day and later, was of use. Nor are experienced practitioners ignorant, that many patients affected with drowsiness, about the height of the disorder, have through this remedy, escaped the jaws of death, when every other hope was cut off. And it is of great moment in this very urgent case,

when the stomach is insensible to this stimulus, that a greater dose be given, or presently repeated, till it produce its effect. This is the *Herculean Club* by which this dire species of fever is frequently overcome. Nor do the judicious physicians forsake this most successful method, unless some peculiar or uncommon appearance of the disease as it advances, evidently forbid; which the illustrious DE HAEN asserts that he sometimes saw in certain epidemics.

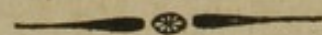
LAXATIVES, to wit: cassia, tamarinds, manna with cremor tartar, may be frequently used after the seven first days, but we must cease from them when any eruption appears, or when there are any signs of threatening inflammation in the abdomen; never omitting emollient injections, which are of benefit through the whole course of the disease. But the strong cathartics are never to be given, unless when the disorder is abating, at which time, even if repeated, they are advantageous. There are not wanting some, however, who are of a different sentiment, and glory in reversing the most ancient precepts of medicine. Absorbents and anthelmintics are useful, if acid saburræ or worms be suspected. But throughout the disorder diluents, temperants and nitrous medicines are much esteemed, which allay the violence of the bad humors, and become the vehicle of carrying off various matter to be excreted. Lastly, acidulous and antiseptic medicines are highly recommended, such as water, or ptisan impregnated with sulphuric acid, than which perhaps nothing can be found more effectual to allay the alkaline state of the blood, and putridity of the humors. While about these last remedies it may be proper to note that the use of vinegar was formerly very common and wholesome among the Roman soldiers, for keeping off the diseases of camps, which, before this preventative was discovered, used to be very destructive to their armies. To prosecute our design: *Cardiacs* and *Alexiterials*, are much extolled in the cure of Malignant Fevers; of this kind are, generous wine, theriac, and other confections of the like nature, the liliū of *Paracelsus*, volatile salts prepared from the family of animals, &c. These remedies deserve praise in some fevers of a bad nature, they are apt to carry off the morbid matter through the pores of the skin, but they do not suit all, as the silly lower class of people imagine; they are often happily joined with cathartics, or the kermes mineral is used, which has the effect of both. As a paregoric and antiseptic of the best kind, Camphor is much esteemed, especially if conjoined with acids. The sedative salt does wonders in delirium. But narcotics are to be cautiously used, even when pains are severe, and diarrhæa urgent. Besides, by the

use of these in this state of things, we have already hinted, that the force of the spirits is very rarely subdued; and that delirium is even exacerbated. The Peruvian Bark is greatly extolled by some, among whom the great DE HAEN takes the lead, and not only an antiseptic power is ascribed to it, but also an alexiterial and diaphoretic; yet by others it is laid aside as hurtful. If this dispute were left to the test of our own experience, we should not hesitate to assert, that this remedy rarely succeeds in our climate, unless it be used by the most skilful hand. It may certainly do the greatest good, when gangrene threatens, while the blood is not more heated than is proper, otherwise it is best to use it with caution, nor do I think that any among us, will dare to try this method often; unless the Malignant Fever should after the twentieth day pass into a legitimate intermittent, or being protracted beyond the fortieth day, and become milder, should, as to the order of its exacerbations, resemble intermittents. It is well known that both have been observed in some epidemic constitutions. I should do a manifest injury to a celebrated author, if I should express a doubt of the histories of diseases which he has candidly and honestly delivered, but whether a happy event after the exhibition of an astonishing dose of Peruvian Bark, while the Malignant Fever was at its height, ought to be referred to this remedy, rather than to others, or than the powers of nature: may, if I mistake not, justly be doubted.

As to external remedies: Vesicatories, so long as the bile is not over-heated, applied behind the ears, to the scapulæ, the thighs or legs, deserve no little praise, since many who were given up for dead, have been restored from the grave as it were by the help of these; for they seem to invite the morbid matter from the head, thus preventing delirium and drowsiness. But we must use every endeavour that the discharge of matter from these be long continued, and by the best means keep open the wound when once inflicted, otherwise such topical applications afford but little aid: to which may be added scarifications, with the application of cups over the orifices. Both these remedies seem especially beneficial, after the recession of febrile eruptions, by which we all know, that the disorder is aggravated, and greater alarm excited; in which circumstances VAN SWEITEN proposes the internal exhibition of camphorated vinegar, somewhat sweetened, concerning which, see the *Medicina Castrensis* of this author. Leeches applied to the temples, allay the violent head-ach sooner and more safely than venesection itself. Pediluvia may have the same effect, as also stimulant cataplasms to the soles of the feet. Lastly, it is well known that pains

THE PLAGUE.

raging in the tumid abdomen, are assuaged by the most usual topical emollients. To crown all, we may add, that nothing hinders more the cure of Malignant Fever, or others of a bad kind, than impure air : hence it is evident, of how great moment it is, that it be often renewed, or by some mode or other improved.



THE PLAGUE.

THIS Distemper, horrible on account of its destruction, and of a most hidden character, which many consider as a judgment from Heaven ; is sufficiently distinguished from other acute diseases, by contagion the most terrible, and by eruptions of a peculiar appearance. The Plague puts on various forms, not only in divers epidemic constitutions, but also in one and the same, so that it is very arduous and difficult to give an accurate description of it. This is abundantly evident from the history of the Plague, which in a direful manner depopulated **Mar-**seilles, and went through almost the whole Province of Gaul, in the year 1720, which the illustrious **SENAC**, one of the first Medical Characters, published by order of **LEWIS XV.** The most common opinion is, that this beastly disorder, infecting whomsoever it meets, and threatening war against the human race, was brought to us from the regions of the East, by infected bales of goods, cloths, cottons, and other merchandize. Nevertheless, many even of the first note, deny this to be so, induced by these reasons, that amazing swarms of cankerworms, locusts, and other insects, and scarcity of provisions, &c. have mostly been the forerunners of this calamity ; so that we may conjecture its origin to be mutually owing to both.

If the origin of Plague is obscure, its genuine character is equally so, nor is the right method of cure more apparent, whence it is no wonder, if physicians, even the most experienced, who have fearlessly exposed themselves to the fury of the Plague, should remain in the dark concerning this most intricate disease.

The Plague shews itself by signs perhaps more evident than malignant fever, and during its prevalence has often been observed to silence almost all other disorders. With how much terror they are struck, who are affected with this disorder, is more easily conceived than expressed. Want of appetite, nausea, spontaneous lassitude, prostration of strength, vertigo, &c

announce its approach ; but, mostly the patients are seized with sudden shivering, with entire dejection of mind, which in a short time brings on delirium, or sleep. At this time many complain of pains in the axillæ or groins, and indeed in the glands thereabouts, swellings are to be seen, more or less conspicuous.

The Plague, in some epidemics, has the appearance of intermittent fever, the third paroxysm of which takes the patients off. Moreover, an aggravated pain of the head, disordered eyes, dimness of sight, pains of the back and breast, tremor and convulsions, anxieties in which the patients are constantly tossing the body, fainting almost to death, hiccough, and other symptoms of malignant fever frequently accompany the Plague. Some vomit up a blackish green and offensive saburra, or discharge worms both ways. Sometimes the mouth is highly fetid, the tongue covered with a quantity of mucus, is sometimes black. The sick are tormented with intense thirst, a biting heat of the præcordia, and most distressing tightness of the breast, with sweats of the worst and most offensive odor, by which all the utensils for the sick are contaminated. The urine is sometimes bloody, nor is the expectoration rarely of the same kind. The pulse in some, scarce different from natural, or languid, weak and contracted, in others is found more vehement, quick, irregular and unequal. The fever at length, with different degrees of heat, takes on innumerable forms from milder to more intense ; at one time it is contained within four or five days, at another it reaches the twelfth or fourteenth, but is never extended further, unless by other accidental causes, among which tumors have the first place, which often suppurate with difficulty. They deviate from the true path, who consider fever as the proper symptom of Plague, wherefore heat frequency and velocity of pulse are expected : But we may observe that this *apyrexia* is fallacious, as we have above remarked, in malignant fever, small-pox, and some other diseases of a bad kind, which yet physicians with one voice, confess, always to be accompanied with fever—hence it seems that there is no Plague without some attendant fever.

Exanthemata and pustules of divers kinds, and parotid inflammation, break out more rarely in the Plague, than in malignant fever : But *buboes* and *carbuncles* occur more frequently ; the first attack the inguinal, axillary, cervical and other glands over the body. Buboes one while immediately follow the attack of the disease, again they appear at other stages of it, and even after the termination of fever. They sometimes suppurate very soon, at other times not till after the twentieth or thirtieth day. But now and then they end in resolution, to the greatest dan-

ger of the patients. Erysipelatous or phlegmonoid carbuncles, attack indiscriminately all parts, and even not unfrequently take place within the fauces : sometimes the buboes are prominent, like a furuncle, and elevated to a point ; sometimes they appear in the form of pustules heaped together, which have a phlegmonoid areola at the base. Finally, there are not wanting some which grow to a great mass, or exceed the size of an egg. A sphacelus, with which these tumors are seized, without suppuration, gives their character. Carbuncles require a long time to heal, whence it happens that the entire cure of a pestilential disease is delayed on their account for months. These are the salutary efforts of nature, by which she gradually throws off the virulent miasmata of the Plague, as also in the small-pox, and therefore we understand why, during the prevalence of the Plague, a prognosis of health is obtained from this favorable depuration of the blood.

Although this fierce disease, which is communicated not only by contact, but by coming near the sick, spares no one, yet it is beyond a doubt, that the courageous who are not affrighted by the contagion, as also those who live abstemiously, and study cleanliness, are rarely attacked by it. By many it is said that persons who are lean, phthisical, gouty, or subject to the piles, and have issues or old ulcers, &c. seldom have this disorder. On the other hand the contagion threatens the timorous, gluttonous, fat and luxurious, &c. Almost all authors have told us that the more robust when seized with the disease are in the greatest danger, and that gravid and puerperal women seldom get over it. Moreover the pulse stronger, and symptoms more vehement, which are of no account in malignant fever, denote a fatal termination in the Plague. Nevertheless, the fallacious halcyon state is not without danger, since by numberless histories it is proved, that many who have had the brightest hopes from these milder symptoms, have departed in a short time ; while others who were threatened with death from the extreme violence of the disorder, have been restored to the number of the living. Nature rarely effects a critical evacuation during the progress of the Plague : But there are for the most part fatal hæmorrhages. A diarrhœa brings almost all to the grave. If spontaneous sweats about the fourth day promise a happy issue, at other times they are of no benefit, even when they break out on the first days ; if delirium succeed, there is but a short time to prepare for death. A tremor of the tongue and hands, fiery and grim eyes, hoarseness, chills recurring without regularity, &c. are so many symptoms bordering on death. But a stupor of mind and body and frequent deliquium animi exclude almost all hope of health,

to which may be added, obstinate sneezing, and hiccough unmanageable by art, which may also be considered as harbingers of death. Nothing is to be inferred from efflorescences of the skin, which shew themselves under the most common appearances, but if they grow black, death is at hand. Buboes are thought very favourable, but if carbuncles appear, the case is doubtful: the latter cause great dread, if they appear before the fourth day. The violent fever, and aggravated symptoms, remit after the eruption of buboes, carbuncles and parotids; but the hope of health is greater, if these tumors shew themselves after the other symptoms have abated. When buboes arise on the fourth day, we may predict a happy event; but the case is otherwise if they break out later. Carbuncles are more to be dreaded, especially if they are formed upon buboes. Tumors of the neck, whether buboes or carbuncles, portend greater danger; especially if violent fever, or other grievous symptoms should hinder their eruption. If they recede, we may mourn, unless the urine after this retrocession, deposit some purulent matter, which all authors testify to have seldom happened. Lastly, persons seized with the Plague die at all times of the disorder, but they are more often taken off within two days, nor are there wanting some who have not struggled with death more than six hours, or have suddenly expired, as it would seem, with no previous illness.

It is known from an accurate history of dead subjects, that the internal parts are diseased in the same manner; there are seen for instance, as well in the viscera as in the membranes, purple and blackish livid spots. Tumors and abscesses are discovered, little differing from external carbuncles and buboes. There are found inflammations, gangrenous and sphacelated spots. Sometimes the size of the heart and liver is found very much enlarged: their receptacles and vessels swelled with very black feculent, and grumous blood. The bile is found rusty and of a blackish green, collected in greater quantity, not only in the gall-bladder and biliary tubes, but also in the stomach and intestinal canal. Moreover, various bodies of those that die of this disorder; are disfigured with very broad and black spots, as if they had been killed with clubs. Lastly, many are found which exhale a loathsome and poisonous odour, so that none can attempt the dissection of them without detriment of his health; for I have known some surgeons, who suffered this penalty of their curiosity in the last Plague at *Marseilles*. To these we may add, that there have not been wanting bodies, which, although diligently examined, both within and without, have exhibited nothing remarkable.

From the foregoing prognosis of this most cruel evil, it is plain to any one, of how much moment it is to persevere in the preventative means, which merit principal attention. With this view, the impure air or atmosphere, filled with pestilential miasmata, is purified by various fumigations, with gun-powder, vinegar, tobacco, amber, sulphur, and different aromatic substances, with which it is commonly thought the contagion can be repelled or extinguished. DIEMERBROECK, from his own experience, highly extolled the smoke of tobacco drawn in and discharged through the mouth by the common pipe, which he says, has very great effect in keeping off the most virulent miasmata of the Plague. The odor of the prophylactic vinegar, commonly called, *Vinegar of the four Thieves*, is more esteemed; simple vinegar, or impregnated with rue, may also defend from the noxious effluvia. The internal use of lemon, or citron juice is highly spoken of among the Orientals, and is not a little esteemed among us; and perhaps the drinking of vinegar is better than all, according to SYLVIVS DELEBOE, who relates that he has kept off the contagion by this remedy alone, and of its very great efficacy many have been convinced, in the recent Plague of Marseilles. Nor are theriacs, mithridates, and other common antidotes and alexiterials to be despised, among which the garlic perhaps holds not the lowest grade; by the help of which, we know that many have averted or blunted the shafts of Plague. But nothing more prevents the contagion, than a mind free from care, solicitude and fear, and a life of temperance; and cleanliness, and neatness, both of body and house. During this calamity, clothing of skins is not undeservedly recommended. Finally, the cautery applied to the arms and legs is highly commended by many, and perhaps excels the other preventatives: because the pestilential miasmata affecting the blood, find an outlet through the open issue, together with the matter, before they reach the viscera.

WE COME NOW to the treatment of it when present, which is never rightly undertaken, without first attending to the nature of the prevailing pestilence, which by reason of the various epidemic constitutions, in the opinion of the most eminent practitioners, differs very much. Indeed by numberless histories it appears that physicians, even skilful in the healing art, when first visiting those affected with the Plague, have mostly gained their experience with loss of life; so that it is often better to wait and to forbear, than to attack this most potent enemy with uncertain weapons. That maxim of HIPPOCRATES, *Quo natura vergit, eo ducere oportet* is of great utility amidst these difficulties, which they ought to keep deeply in mind, to whom

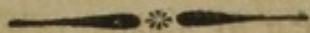
these offices are entrusted. For upon this spontaneous effort well observed, the hinge of cure ought to turn, since it is evident from almost innumerable observations, that this disorder terminates more happily, by eruptions yielding pus, which the laws of the animal economy alone promote, than by any other evacuation. Wherefore nothing is to be done without the consent of the whole system, that the poison mixed with the blood, may be carried to the surface of the body, and this is the principal object of cure. A great apparatus of remedies is superfluous, and even fatal, the more simple and common are only required; among which experience recommends diaphoretics; for besides the very favourable sweats they excite, they are also attended by healthy eruptions. And in truth, from this continued sweat alone, kept up as well by the heat of the bed, as by the powers of nature; histories prove that many who have been deprived of medical aid, but addicted to a regular mode of living, have come off safe.

Having premised these general remarks, it may be well to treat of the remedies singly which the experienced have more successfully used, amongst which, at the commencement of the disease, *blood-letting*, *emetics*, and *cathartics* do some good, while the strength produces and bears eruptions, but they are administered at other times, not without danger. And indeed they are altogether forbidden by DIEMERBROECK, even while inflammation prevails, and *diarrhæa*. *Diluents* do wonders while the bowels are too much relaxed, also temperants, nitrous and anti-putrid remedies: nor are absorbents to be omitted, if the case demand. But *cardiacs* and *alexiterials* are too much, even beyond measure extolled, to which a kind of specific quality is attributed by the vulgar. Yet these medicines do not agree with all, but even do harm, if the blood be unusually heated: in which case judicious practitioners accommodate themselves to the prejudices of the vulgar, qualifying them with acids both vegetable and mineral. *Lilium*, *theriacs*, and the well known confections, powder of vipers, *theriacal vinegar*, &c. are thought useful and efficacious, especially if they be given at the commencement. We say nothing of *Bezoardics*, because their use, formerly highly commended, is now not undeservedly obsolete. Camphor has been very beneficial to many, which besides its antiputrid and diaphoretic power, allays the inordinate motions of the spirits: But narcotics are to be cautiously used: yet these were very common, perhaps too much so in the last Plague. But they afford some relief in *diarrhæa*, so long as the milder ones are prescribed; of which are *diascordium*, *diacodum*, and others of the same kind. Cathartics suit well at the end of the disorder, otherwise they

are forbidden by experienced physicians. Blisters and cupping give present relief, by the help of which the poison is kept down, or a part of it carried off. And by their help it appears that many have escaped death, **DIEMERBROECK** proposes another topical remedy, a bag filled with hot sand, applied to the groins, axillæ and feet, which truly is of some merit.

In investigating the most approved method of cure, we cannot conceal that many practitioners of the first note have candidly declared that medicines have been inadequate to overcome this distemper; the nature of which the **ALL WISE CREATOR** has involved in darkness, so that it may be doubted whether the convalescents from this most cruel disease (which scarcely suffers itself to be discomfited by these combined forces,) owe their health to art, or to the powers of nature. Besides it is evident, as we have just hinted, that many who were destitute of all aid, have happily escaped. **SANCTORIUS** relates, that patients who wanted nothing but medical aid, more happily escaped death, than others who were treated according to the rules of medicine; which those physicians, who were constantly engaged in administering, at the utmost hazard of life, testified, while living, to have often happened amidst the ravages and mortality of the Plague at Marseilles. To crown all, we may add the caution of some eminent men, against this distemper both sticking in imported goods, and lurking in the air, as on both sides there is the same danger; to wit, that every one who is free from public cares, should seek his safety by a speedy and timely flight: which advice, far exceeding the most salubrious *formula* of physicians, is expressed in this little verse; *mox, longe, tarde, cede, recede, redi*. Thus Englished,

“Quickly depart—remove far off,
And don’t return too soon!”



SUDOR ANGLICUS. SWEATING SICKNESS.

AMONG the acute diseases, and of short duration, perhaps the **S. A.** is the most dangerous, and for the most part is not continued beyond the space of twenty-four hours. Hence it is not improperly defined the **Ephemeral Pestilential Fever**, which some without judgment refer to the class of putrid fevers. About the fifteenth century, according to **WILLIS**, (who yet never happened to see it) this disease *sui generis* and before unheard of, appeared in England, which, in a few years being

transmitted to us, I know not how, had the very same appearance. It never spread far by contagion, and the epidemic constitution of the atmosphere rarely lasted beyond three months. Hence it is far from occasioning such destruction as the plague, although perhaps it is more unmanagable, as it takes off almost half the patients seized with it, especially if they be committed to the care of inexperienced persons. Those are considered most prone to this disease, who are of a vigorous constitution, and are convalescent from inflammatory fever. It suddenly and frequently attacks the robust, youthful, and women of a masculine make: but it rarely affects infants, aged, lean and weak persons.

This strange and doubtful disease, originates among us, in an entire prostration of strength, or *deliquium animi*. Some, at the onset, are struck with rigor or spasmodic trembling, although the internal parts are seized with hidden fire. Plentiful sweats follow every attack, which discern the character and fatal nature of this disease, and the patients often very soon, or within twenty-four hours, are sent to that bourne whence no traveller returns. Yet even when the disease is protracted longer, it is not altogether void of danger, but in general it is judged favourable, especially if it reach the fourth, fifth, or even seventh days. Those who are seized with it, being soon deprived of bodily and mental strength, are tormented with vehement heat, and are flowing in sweat. They complain of pain of the loins, and are tormented with intense thirst, and finally are oppressed with difficult breathing, and anxiety. Some labour under grievous palpitations of the heart, most are plagued with heart-burn, and are exhausted with anxieties and frequent faintings. The pulse, in this state of things, undergoes various changes, one while it is found rapid and full, again slow and obscure, and mostly irregular. Meanwhile the wretched sufferers are distressed with fear of death, until reduced to extremity, they fall into delirium, or fatal stupor. The blood rarely issues from the nose and mouth, in the course of this dreadful malady; but often there appear various efflorescences of the skin, not unlike the pustules of small-pox. Lastly, some, after the disorder is removed, are not restored to entire health, but are kept for many months with night sweats, which are often accompanied by divers eruptions of the skin, proceeding from the slightest cold, without any danger threatening. We have above hinted that a kind of fever has been observed, by which also the body flows with copious sweats: this has been rashly taken for the true *Sudor Anglicus*, by inexperienced persons, deceived by the resemblance; but the aforesaid disorders, differ very much in

the manner of invasion, process, and termination, nor does the same method of cure agree with them. We may see an accurate history of this species of fever in the *Medical Journal* of April 1760.

The method of cure ought to have a tendency to promote the sweats for twenty-four hours, and it is well to excite them when they remit, lest the pestilent humor, attempting an outlet through the pores of the skin, should strike inward. With this view, all drink is forbidden for the first two or three hours, after which it is allowed, and nothing else attempted through the whole day. Then properly assisting with blankets, let the patients be laid warm in bed, and let them not be removed from a suitable position, nor feel the cold air, not suffering even the hands, for the sake of comfort, to be exposed, and let them avoid sleep by every means, to which they yield not without the greatest hazard. If the sweat does not flow to our wish, we must solicit it, by frictions with warm towels or flannels, to this end also the best diaphoretics and cardiacs are to be taken. Venesection is of little service as all agree, nevertheless **BOYER** a very experienced physician of Paris, seems to assert that this was repeated very successfully in a certain epidemic at *Beauvais*. Nevertheless, when better informed, he candidly declared that the aforesaid epidemic was of a different character. It is never allowable to urge cathartics before the entire solution. But after this disease, let the patients dread the slightest cold for some time, more than a serpent: for many, by neglecting this caution, have been seized with a dangerous diarrhæa, or have relapsed into the same disorder, more severe than before.

INTERMITTENT FEVER.

THE Intermittent Fever is well known to every one however unlearned and inexperienced, it has several variations, nor are we ignorant that gapings, stretchings, and spontaneous lassitude, coldness, with paleness of the extremities, anxieties and nausea are the forerunners of this fever. Many suffer chills with which they shake in every joint, and some are seized with such coldness, that the legs are insensible to fire applied to them. In the mean time the pulse, which was obscure during the febrile shivering is by degrees *evolved*, heat is diffused over the whole body, the head and other membranes are pained, and other symptoms arise either milder or more severe, until by a sweat

breaking out, all things are restored to the halcyon state. When the paroxysm decreases or is overcome, the urine is turbid, or leaves a sediment, very much like to brick dust. This is the most common process of essential intermittent. But symptomatic fevers and some of another kind, often appear in the same manner: for instance, catarrhal, hysterical and worm fevers, fevers from concealed pus, from obstructions; and many others, concerning which we have elsewhere treated, are sometimes of the same habit, so that even the more experienced are deceived, and many mournful errors are committed with the miserable patients. The genuine Intermittent, also puts on various forms, and often changes as to appearance with another disorder, whose periods nevertheless, recur in the usual order of Intermittents. Of this class are cephalalgia, pains of the eyes or other parts, ophthalmia, comatose or convulsive fits, diarrhæ, &c. It is proper to remark, that the paroxysms of these well known diseases, returning at stated times, are often marked by no conspicuous febrile heat. Lastly, some authors of credit testify that they have observed certain partial fevers, to wit. in one half of the head, in one or other arm, &c.

There are other differences of Intermittents very remarkable; for none is ignorant, that the fever returning on any particular day, is either a *Quotidian*, or *Double tertian*, or *Triple quartan*: and that the fever invading or alternate days is called a *Tertian*. But if the accession of this last, is observed to be double on the stated days, it constitutes another and more rare species of double tertian. When the paroxysm rises, for instance, on the third day, the fever is named a *Quartan*. But if one of the three days is free from fever, it gives an example of a *Double quartan*. Lastly, the fever coming on daily, and double on alternate days, is called *Hemitritis* or *Semitertian*. In fine it must not be omitted that authors have made mention of other species, which recur on the fifth, sixth, seventh, or eighth days, or return every month, or year. But these we have purposely left out, as being strange and foreign from the general order of things.

The proximate cause of Intermittents is hid from our scrutiny, but all are aware that this genus of disease for the most part takes its rise from immature or summer fruits, from misty air, or rainy wind, from marshy places, &c. The first paroxysms of fever are generally mild, but acquire force as they continue; and as we have above remarked, gapings, stretchings and lassitudes precede them, with pains of different parts, paleness of the hands and lips, blueness of the nails, coldness of the nose and extremities, chilliness and shivering; followed by febrile heat, and terminated by a sweat more or less conspicuous. Yet

there are not wanting febrile accessions, commencing with no previous heat, while others terminate without sweat, and even with dry skin. Many patients, as the paroxysm becomes more violent, are plagued with nausea and vomiting; others are kept dosing, or tormented with pains of the bowels. The urine, in great part, during either the encrease or diminution of the sweat, is of a lateritious colour. Sometimes there occur very alarming febrile symptoms, not only with most severe rigor, lasting many hours, followed by extreme heat, but also with the most grievous pain of the head, delirium, and other aggravated symptoms. We have above hinted that Intermittents are often observed, like the continued, to be inordinate or irregular, so that we can scarcely trace their character; unless we closely attend to the manner of invasion, to the particular type of paroxysms, and other antecedent or conjunct symptoms, which properly considered, may give the nature of the fever. But it is well to know, that irregular Intermittents are commonly spurious, or merely symptomatic; such as scorbutic fevers, those which proceed from the formation of pus, or other affection of the viscera; nocturnal fevers attended with very copious sweats, and others which we have already mentioned. Lastly, Intermittents at times associated with other affections, whence arise diseases, implicated and almost inextricable, which give great trouble to practitioners.

Legitimate Intermittents, not deviating from their proper character: such for instance as, according to the usual custom, begin with a chill and end in a sweat, are void of danger, unless the patients are very old, or affected with some chronic disease; and indeed they are often thought salutary, when some long continued affections are suspended or evidently banished, by their accession. The *hyemal* and *vernal*, are shorter than the *summer* and *autumnal* Intermittents, and are justly esteemed more easy of cure. The first, which seem to delight in a peculiar disposition, flee when the latter shew themselves, and these in return are driven off by the others. Yet the vernal are more obstinate, and even change their type, and put off their first appearance, if the summer be cooler or moister; but the autumnal gain strength from a very warm winter. The paroxysms short, and coming on at stated hours, indicate, that the disorder will soon go off. The same may be said if a more moderate paroxysm follow a second or fourth very severe accession; for then it is usual to see the end on the fourth or seventh. The inflation of the abdomen in children, swelling of the legs in adults, pustules about the lips, &c. are preludes of health. We cannot predict a perfect cure after the cessation of fever, unless after twenty

days, or an entire month; for it frequently returns in consequence of unsuitable regimen, ill-timed cathartics, foggy air, inhaling evening vapours, &c. Moreover, if the paleness of valetudinaries, after the fever, remains the same, if the appetite is not restored, nor the strength recovered, if the head aches, or night sweats break out, &c. we may conjecture that the *cause* of the disease has not been properly extirpated: hence we understand why the fever is wont to return after fourteen or twenty days without any manifest cause. Sometimes the worst symptom of Intermittent Fever, *is the forerunner of appoplexy in old persons*, who are even brought to the point of death by the febrile rigor. It is well known that obstinate Intermittents, and those in which the order of accession is disturbed. run into jaundice, dropsy, or other chronic affections. Intermittents, especially autumnal, do not seldom degenerate into fevers of a continued or bad kind, and on the other hand, continued pass into Intermittents; and we have above noticed that malignant fevers put on the appearance of Intermittents. Lastly, Intermittents undergo many other changes, but of less moment; for instance, the simple legitimate tertian often runs into the double tertian, the simple or double quartan, which seems evidently to prove that all the species of Intermittents are of the same character, or are mere modes of one and the same affection.

The dissection of bodies has exhibited nothing besides morbid products, either to my own observations, or those of other strict examiners of nature. In this account may be included a black and thick blood, filling the receptacles and larger vessels of the heart, of those who die in the cold fit. After tedious Intermittents and their attendant affections, schirrous obstructions and abscesses are found chiefly in the liver; but rarely in the pancreas and mesentery. The spleen has various appearances, sometimes dry and wrinkled, sometimes much enlarged, with its proper capsule in gaps, at other times affected with putridity, and becoming fluid when handled, like the lees of wine. Sometimes the viscera are met with very much contracted, or receding from their native colour, and as it were burnt. But the epiploon as to its principal part, is seen consumed by putrefaction. The vena portæ for the most part is turgid with blood, the biliferous vessels are filled beyond measure with a blackish green liquor. Lastly, among other things worthy of notice, there are found a kind of stones in the gall-bladder, flatulencies and constrictions in the intestinal canal, prominent tumors in the peritonæum, and mesentery: various stagnations, &c.

The *Cure* of Intermittents is not to be hastened, but rather avoided; they who, impatient of delay, attempt a check of the

fever, suffer an early punishment. Wherefore we ought not to use even the most noted specific until after the third or fourth paroxysm, so that by first properly examining the process of the fever, there may be no doubt of its character. Nor is this delay futile, for at that time after premising venesection and an emetic, or cathartic, let diluents and temperants be freely used, not omitting a suitable regimen as to diet. The use of a specific is not only safer after these have been premised, but often the fever subsides before this remedy is used. Yea, and it has often happened to my observation, that the most simple water drank for three days and more, abundantly, or to six or eight pints every day; has removed not only recent fevers like a charm, but also those of long standing, and which could not be mastered by any other means. Hence it is not improperly observed that hunger is a famous remedy for this fever. Therefore (a venesection being premised, if the strength will bear it, which sometimes in case of plethora may be repeated) an emetic given at the proper time, has often, by extirpating the cause of the disease, removed every care, especially if the gall-bladder be emptied by the evacuation, from the abundance of porraceous and rusty bile; which perhaps conceals the genuine seed of the disease, as I remember to have observed a hundred times. This remedy is so much esteemed by the experienced, that it is for the most part repeated, while autumnal fevers prevail, or where the tongue covered with mucus, bitterness of the mouth, and nausea indicate it. We must abstain from venesection and vomits in the height of the paroxysm, whatever others may say, who glory in leaving the beaten track, that they may gain the admiration of fools. Yet at that time, we may open a vein if the heat be intense, or the pain of the head violent, or other symptoms of the like kind, urge it while there is plethora, nor must we then forbid emetics, if the patients complain of much nausea. Otherwise nothing is to be attempted, *during the hot fit*, but the heat of the blood is to be allayed by diluents, temperaments and nitrous medicines; after these have been sedulously gone through, we may begin with the specific, if the case require it.

The *Peruvian Bark* has the preference above all other febrifuges, which have now almost altogether gone into disuse, but it does not suit in all cases, nor is it thought innocent, if given at a wrong time. This medicine, (the *Quinquina*) is rarely necessary in vernal fevers, which mostly yield to proper diet and diluents: as to the rest, this febrifuge is not safely prescribed, until after several fits, by which the febrile humor is, as it were, scattered; for if this caution is neglected, the medicine not only does no good, but becomes hurtful, although the fever should

be moderated. Those who are skilled in the art, know that many patients have fallen into serious disorders, by the premature or ill-timed use of the bark; namely, into jaundice, and obstructions, dropsy, asthma, comatose and convulsive affections, and others more obstinate and dangerous than the fever to be removed: so that it is frequently better to recal the fever in this case, to which end some prescribe the spirit of sal ammoniac. Moreover this approved specific is not given with safety, as the paroxysm comes on or prevails, nor does it agree better, a little before the invasion of fever. If this method has *done well* with many, it has, in the opinion of SYDENHAM, been very *hurtful* to others.

We ought never to doubt that the blood and humors, are gradually freed from the febrile matter, by the help of sweats: hence we understand why, from the untimely use of the Peruvian Bark, many disorders arise much more dangerous than the fever for which it was prescribed: This is the opinion of the more celebrated practitioners, which, notwithstanding *borrowed* experience, is daily proved. Nevertheless we may sometimes vary from this rule of practice, yea, it is necessary, for instance, when the patients already reduced by violent fits, or advanced in years, are brought into imminent danger; in which state of things, it is advisable to try as they say, a doubtful remedy, or without delay, to call in a more powerful one. In other cases the celebrated febrifuge is not safely exhibited until after three or four paroxysms. Even the Quinquina ought to be given with certain limitations: lest through the mischievous custom of quacks, who continue the use of this bark even during the fever, the situation of the patients should become worse. We can scarcely prescribe with safety more than two or three ounces, in divided doses, through the course of this disorder. Otherwise, as we have often seen, from the immoderate use of this febrifuge, various chronic diseases have arisen, such as obstructions, dropsy, hæmoptisis, &c. Wherefore when the fever will not yield to the designated dose, we must try another method, to wit, have recourse to other bitter vegetables, to aperients, to preparations of iron, mineral waters, &c. There is nothing yet established with respect to the regimen of the sick, while using the Peruvian Bark, since authors run into contrary sentiments on the subject: some direct a full diet for the patients, some think the abstemious ought to be persisted in. We consider it as certain that each method has happily succeeded, but doubt not that the latter is the more safe.

In treating of *exotic febrifuges*, to which camphor is often favourably added, it is well to observe, that this is frequently

given to no purpose, if the febrile paroxysms are protracted longer than is common, or recur later than usual; it is also thought to be inert, against febrile accessions without chills and sweats. In both cases temperants are beneficial, namely, suc-cory, dock, hartstongue, crystallis mineralis, sal glauber or vitriolated tartar, and the like; by which, given at proper times, the powers of the febrifuge are not at all lessened. Nor does the Peruvian Bark always succeed to our wish, in legitimate Intermittents, although given with a judicious hand; which makes it necessary to recur to other febrifuges: namely, camomile flowers, sal ammoniac dissolved in warm water, an infusion of sage or Virginian snake-root in white wine, or any other of the same quality, which are truly esteemed exquisite remedies, if they are repeated hourly or every two hours. Also lemon juice diluted with water, theriac, whole pepper corns, powder of vipers, &c. are much esteemed. No one is ignorant that gentian, the lesser wormwood, and other bitter plants, which were in very common use before the quinaquina was known, are not without success. In the same class may be mentioned *the urine of a boy or young man*, which when given in the dose of a wine glass full every day, has not perhaps its equal, in eradicating obstinate fevers, and is a remedy which I have oftentimes known to be effectual. Lastly, mineral waters, as well *cold* as *hot*, have a place here, which, after other remedies have been given in vain, have mostly effected a happy cure.

The ash bark pleases some, to which they add sal absynth: but there is little confidence to be placed in this febrifuge, as also in numberless others, with which books abound. Yet sometimes it is of use to know every thing of every sort, since, as occasion requires, one or other may be successfully used by men of experience.

If there should follow a *febrile rigor*, as sometimes happens, it *threatens death* to the *old and infirm*: nothing should delay the preventing or moderating of it, by large draughts of tepid water for two or three hours before the chill. With the same view is administered a ptisan of Sarsaparilla, a decoction of borage and burdock, and other diaphoretics, which when opportunely given, have snatched many from the jaws of death.

A narcotic also merits notice, if nothing forbid the draught a full hour before the febrile rigor, which when thus administered, is enumerated by some among the most excellent remedies. Oil of cinnamon may be of no little service in those difficult cases, or oil of cloves, which may be applied to the scrobiculus cordis in the form of liniment. Yet this is to be remarked, concerning stimulants exhibited as the disorder advances, that they some-

times convert intermittent into continued fevers. The same misfortune may be the consequence of heating the surface of the body with pans of coals and blankets, by which the patients are as it were preposterously buried. Nor does obstructed perspiration from taking cold, occasion greater mischief, by which the fever becomes more obstinate and dangerous: which is often experienced by those who, before a complete diaphoresis can dispel the febrile matter, rise impatiently from the bed, sooner than is proper. But cathartics ought not to be given without caution after the fever is removed, lest it return, and the patients suffer a relapse; which SYDENHAM and other eminent authors testify to have frequently happened, with whom our own experience forbids us to deny assent. Many also have thought that injections could not with safety be applied in this situation: Yet both remedies ought to be thought innocent, if the fever cease spontaneously, or a febrifuge be carefully administered, to which purgations *per alvum* may be added. If, lastly, an Intermittent should pass into a continued or remittent fever, it will recover its former type by venesection or a cathartic.

Moreover the Peruvian Bark, like other febrifuges, is no less suitable in disguised Intermittents, which are hid, as it were, under the appearance of another disease; than in those that are apparent at first view; provided that the manner of treatment of the most conspicuous disease be not neglected; to wit, by mixing the remedies indicated in this last with Peruvian Bark or its substitutes; that is to say, cephalics in comatose affections, antispasmodics in convulsions, pectorals in lesions of the lungs, cordials in faintings, demulcents in the various fits of the cholic, as also for pains of the other parts, which also require anodynes, venesection &c. To these remedies, used as occasion requires, the addition of the Peruvian Bark, (while the general indications are premised and usual cautions attended to) has a wonderful effect: and indeed it is necessary that in some cases a febrifuge be given very freely, to wit, for preventing or lessening the oppressive symptoms attacking the heart and brain, and on this account to be sometimes considered as forerunners of death.

Forasmuch as children refuse the Peruvian Bark because of its ungrateful taste, a certain dry extract is prepared from it, which has the name of *Sal de la Garraye*, and is given, as a succedaneum, in a less dose; or a syrup is made of it, more agreeable to their palate, and having nearly the same effect. Lastly, if these medicines of whatever kind, are obstinately refused to be taken by the mouth, it is proper to have recourse to febrifuge injections, which seem to possess the same powers. Nor ought these to be considered useless for some adults, who cannot bear

the Peruvian Bark, as they may thus receive a whole ounce of this bark, injected three or four times a day, until the fever is subdued; which being driven off, the use of them is to be continued, according to the usual method, to prevent a return of the paroxysm: so that for an entire cure, a pound and a half of this bark ought to be used. Garlic bruised and bound on the wrists, and soles of the feet, is highly extolled by some. Finally, it is known that there are numberless *empirical topicals*, approved of by the ignorant vulgar, which physicians despise: yet they are not without medical virtues, and sometimes it is evident they have done good. It may be doubted whether they have not borrowed their virtue from the firm confidence which the sick have placed in them. For we have seen some carrying a little paper folded up and marked, upon which (placed before and having a kind of ridiculous appearance) was inscribed a sentence taken by chance from some poet; restored beyond expectation to their former health. Moreover it is universally known, that joy, anger, terror, and other passions of the mind, in addition to the other causes, have dispelled this fever. Experience proves that a fall from a height, or other misfortune, has sometimes had the same effect. And indeed, no wonder! since every physician knows what effect perturbations of the mind have on the animal œconomy. Nor is it of small service, that practitioners should investigate these phenomena of nature, although foreign from the general order of things, that by well attending to them, the judgment of their cure might be directed.

QUOTIDIAN FEVER.

HAVING premised what respects intermittent fever generally, it remains that we mention the most common and remarkable species. In this class the *Quotidian Fever* or that which recurs every twenty-four hours, has rashly been placed; since from the manner of its appearance, it is vastly different from genuine intermittents, and discovers the cause to be more obstinate, namely a depraved diathesis of the blood, or diseased viscera. But nothing forbids us to follow the order that is most acceptable to all. The legitimate Quotidian, which appears most commonly in the spring, and sometimes prevails as an epidemic, occurs more rarely than other intermittents. Returning with equal paroxysms, and at a stated hour, it sufficiently differs from the *Double tertian* and *Triple quartan*. Indeed it is well known, that the first, third,

and fifth paroxysm of the Double tertian are in the same ratio, and observe the same order as the first, fourth, and seventh of a Double quartan. Moreover the Quotidian commences with a light chill, succeeded by milder heat, and a less active pulse, and ending with little sweat. The paroxysms mostly short, rarely double, continuing from the sixth to the seventh hour in the morning; are sometimes followed by pain of the head, heart-burn, inflation of the abdomen, &c. This species of fever is protracted to months and years, yea, it is said, that a certain person who died at ninety-five years of age, had laboured under it sixty years. It is proper to remark that the Quotidian often comes on in disguise, to wit: under the form of pain of the head, gout, rheumatism, colic, &c. &c. and that its accessions continue sometimes twelve or fifteen hours, or longer. Some say that the quartan sometimes runs into the Quotidian. It may be doubted if they have not mistaken the Triple quartan for the Quotidian: Since we have already declared, that there is no affinity between them. Certain symptomatic fevers, namely, from hysteria, suppressed menses, &c. also imitate the Quotidian, but their paroxysms do not arise at stated hours, and recur without order.

The Quotidian, although of longer duration than other intermittents, is mostly void of danger; unless through preposterous treatment, transcending its proper limits, it runs into a continued or slow fever: hence it is necessary to delay and supercede it, by a suitable method of living, until we can ascertain its genus or kind. From a view of the phenomena of this fever, we may conjecture that its *fomes*, as above hinted, is concealed in the *primæ viæ*, or in the viscera subservient to digestion. Wherefore the *saburra* lodging in the stomach and intestinal tube, is first during its clear intervals to be removed by vomits and cathartics, notwithstanding the opposition of those who boast of their success by venesection.

Yet bleeding is not to be forbidden, when the blood is hot and abundant in the vessels: But it remains the judgment of wise practitioners, that otherwise it is to be omitted. After the depraved relics of digestion are carried off, let aperients and preparations of iron fill every interval, the virtues of which emulate and even exceed tonics. Stomachics and bitters are also called in to our aid, nor is the Peruvian Bark to be lightly esteemed, observing to administer it according to medical rules, which, besides its febrifuge virtue, appertaining but little to this species of fever, obviously possesses a stomachic and roborant quality. But those have never yet dreamed of the legitimate

mode of cure, who preposterously persist with this febrifuge Bark, after the mode of treating other Intermittent fevers.

TERTIAN FEVER.

THIS most common of fevers of the same kind, does not clearly manifest itself until after the third day; since it scarcely differs from others in the manner of invasion, or often imitates a more serious disorder. It comes on every other day, or every third day from the first attack at stated times, or a little earlier, and most frequently returns in the early part of the day. Its paroxysms, preceded by a chill, are completed in from six to twelve hours, by the breaking out of a sweat, yet it is sometimes protracted to twenty and even thirty hours. The fourth paroxysm is generally observed to be more violent and longer, but the following ones for the most part become milder and shorter. The stronger and more feverish paroxysms are succeeded by genuine apyrexia or intermission; but if they be weak, the pulse seems somewhat feverish in the intermediate time. The shorter they are, the more freely the sweat breaks out, but it is less or even deficient after longer ones. We have already noticed that malignant fever is often produced in the form of Tertian—this is dangerous, when the fits recur without any order, and are extended beyond their prefixed bounds; and especially if the sick complain on the intercalary days of head-ach, anxiety, loss of strength, &c. when no vestige of fever remains. Moreover, many symptomatic fevers, such as hysteric, verminous, and others as above mentioned, resemble Tertian: but each of these species of fever has its peculiar forerunners, which being rightly attended to, save the judicious from error. The paroxysms recurring on alternate days produce the *Legitimate Tertian*, but when they return every day, they are called *Double Tertian*. Two fits arising within the space of twenty-four hours, with an intercalary day, give another species of *double Tertian*. TULPIUS, who may be credited, mentions another, the paroxysms of which come on twice every day, hence called the *Quadruple Tertian*. Moreover, among the fevers of the same kind is enumerated the *Semitertian* or *Hemitritis*, which if but a slight attention is given to the return of accessions, will appear to consist of quotidian and simple Tertian, since the accession returns on a certain day, and becomes double on alternate days. But that species of fever is seen plainly to recede from the character

of Tertian: and rather, on account of the terrible symptoms with which it is attended, resembles malignant or pestilential fever: add to this, that it is propagated by contagion, and this Herculean disorder often prevails as an epidemic in *Italy* and *Germany*: but is very rare in our country.

The legitimate Tertian, and especially the vernal, terminating in seven revolutions for the most part, and the morbid matter of which is carried off with the usual degree of heat, is not only void of danger, but often salutary; for by its help are sometimes rooted out, obstructions, cachexy, convulsions, and other chronic affections even not to be subdued by the most powerful remedies. The paroxysms later than usual denote the going off of the fever: if they come on sooner than common, there is fear lest the Tertian, departing from its own character, should run into the continued. We have above noticed, that the attacks being longer and irregular, with restless intermissions, are cause of no less apprehension. Sweat is looked upon as a purely critical evacuation in this species of fever, which being checked or impeded, the future paroxysm exerts greater severity. Vomiting and diarrhæa sometimes serve the purpose of sweating, but the urine rarely answers this end. Pustules breaking out about the lips are preludes of health, chiefly in vernal fevers. Lastly, a long continued Tertian, or one that has been improperly treated, frequently leaves behind it chronic affections. The Double Tertian is thought more difficult of solution, on account of the shorter intermissions allowing less time to exhibit remedies. The hemitritis or semitertian evidently almost equal to malignant fever, which mostly is accompanied with inflammation, and the paroxysms of which last twenty-four or thirty hours, and longer; is justly numbered with the fatal diseases. If the sick recover, beyond expectation from this dire affection, let them beware lest the usual return of it elude the art of medicine. The viscera of those who die of this disorder exhibit, on dissection, nothing but obstructions, inflammations, putridity and mortification.

The Cure of this species of Tertian, begins for the most part with venesection, if the strength will admit, then we must attend to the primæ viæ with emetics, and the next day, unless a paroxysm prevent, we use cathartics, that the sordes lodging in the receptacles of digestion, may be thoroughly carried off. By the exhibition of a specific afterwards, the fifth or sixth paroxysm is easily checked. Besides the Peruvian Bark, and other bitter febrifuges, which possess peculiar efficacy against this fever, other remedies are used, to wit: tonics, diaphoretics, aperients, and diuretics; among which nitrous medicines hold no mean place: but all these ought to be deemed superfluous in legitimate

and vernal Tertian, which commonly ceases of itself, or yields to general remedies. If the Tertian tends to malignant fever, the other method above treated of is to be recurred to; nor does the semitertian, a fever, as above mentioned, related to malignant, require a different treatment. Having premised what is necessary, temperants, antiseptics, and nitrous medicines; diaphoretics, absorbents, cathartics, and others above described, are beneficial. It is found, from observation, that the Peruvian Bark is inefficacious or hurtful against this last. To conclude, we may add that *simple water*, affords a wonderful succedaneum for this remedy: this taken for every drink, or abundantly used for three or four days, will overcome a simple or double Tertian, sooner and safer than the Bark itself, even the very best. Besides *Quinquina* of inferior quality, or preposterously administered, is of no little damage; but *water*, unless the strength evidently fails, ought always to be considered innocent. Lastly, no practitioner is ignorant that by the use of this specific Bark, the fever only lies dormant, and will afterwards return: but they are in no danger of its return, who are cured by the help of water. But alas! what pity, that a remedy the most common, and of no price, suits but few! nor are there wanting some who, without experience, think that this very slender diet cannot be administered with any safety for many days, to whom we will add nothing, but the saying of PLINY: "*Qui volunt decipi, decipiantur.*"



QUARTAN FEVER.

TO what has been above delivered concerning this very obstinate species of fever we may add, that the paroxysm, not very violent, as to the chill or hot fit, returns every third day, mostly in the afternoon, and is not extended beyond six hours, indeed it ends in a shorter space of time, so that it is sometimes contained within one hour, and ends with little or no sweat. Yet it is expedient to note that some patients, after the seventh paroxysm complain of sweats every night, which are rarely protracted beyond a month. Moreover the Quartan, by reason of the great appetite for food with which it is attended, becomes incurable. Nor must we omit that blood drawn by venesection is covered with whitish or yellowish crust, which we may observe as we go along, is rashly considered a sign of inflammation. We have noticed above, that the paroxysms of the double Quartan come

on the first and second days, the fourth and fifth, the seventh and eighth, and so on, afterwards: but in the *triple Quartan*, there is an accession every day, but in both fevers the paroxysm invading on the fourth day answers to the first; and every third day in the same manner, it returns to the last; and by this mark the triple Quartan is rightly distinguished from the Quotidian.

It is known that the Quartan is sometimes protracted to *many years*, yet with many lucid intervals, especially in the aged and melancholic, for BLAW testifies that he saw a Quartan of twenty years duration. Hence it is no wonder, if both patients and physicians become *impatient* of its long continuance. They affirm that this species of fever does not attack twice in the course of ones life; which does not contradict experience. Yet the Quartan is divided into longer intermissions of two or three weeks, and more, which frequently deceive the patients, who are led to believe themselves safe. Moreover, the series of paroxysms is very easily interrupted, or longer intermissions obtained; but sooner or later, from various accidents, or from neglect of a proper rule of living, the fit returns. It appears, from a number of practitioners, that child-bearing, hæmorrhoids, peripneumony, small-pox, or any acute disease, frequently drives off the Quartan. But if many diseases are remedies of Quartan, this in turn eradicates epilepsy, hypochondriasm, nephritis, gout, and other incurable diseases. Lastly, it is commonly said that Quartan promises long life: yet this fever, during the chill, takes off many that are debilitated, or advanced to extreme age, contrary to the antiquated adage of the *Provincial Gauls*, which runs thus. "*Febre cartano n'a jamai fa souna campano*," or a Quartan fever never brought any one to the grave.

Nevertheless this species of Fever, to which the cachectic and melancholic are obnoxious, draws after it various evils, such as jaundice, dropsy, schirrous obstructions, chronic cough, asthma, &c. The same may be said of the double and triple Quartan, which are considered to be even more obstinate species, unless they recover their pristine form, to wit: of simple Quartan.

SYDENHAM says, that he never saw a Quartan in England cured before seven months; but we do not hesitate to assert, from experience, that it is otherwise in our climate. Yet we must not hasten the cure, nor is the Peruvian Bark to be exhibited without the utmost caution, which may cause the greatest mischief in this fever, especially if, as often happens, the liver is affected. Nor does this febrifuge agree better with the *symptomatic Quartan*, which has its origin from lues venerea, scurvy,

cachexy, and other disorders, &c. requiring a dissimilar treatment. As to the legitimate Quartan, we must first attack it with dieting, diluents and temporants. Venesection rarely agrees, but an emetic gives instant relief, the efficacy of which is wonderfully favoured by a cathartic draught on the following day: nor are these evacuations to be repeated throughout the disorder unless necessity urge. As respects the Peruvian Bark, we think this ought not to be used, until after the seventh paroxysm at least, nor to be discontinued when the fever ceases, but rather to be administered some time afterward. Yet we must confess that its return is not prevented by this febrifuge alone, whence it is necessary to use other remedies, to wit: roborants and aperients. Among the first are sage, betony, southernwood, sweetflag, cinnamon, and others of this kind: But the *Cascarilla* excels all these, which has the title of a specific in this fever.

Of all the officinal aperients, which it would be fastidious to recount in this place, the best are mineral waters, both cold and hot, by the help of which the matter of disease is carried out of the intimate recesses of the vessels, and the cure is completed; so that the patient by this means is freed from the fear of a relapse. When other remedies fail, it is expedient to recur to these, as to a *sacred anchor*. Nor are other articles wanting which have their own merit, namely antimony, calomel, and other mercurial preparations; sal ammoniac, magnesia, and other absorbents; bitters and diaphoretics, of which above; which not only suit in the genuine Quartan but also in the double and triple. Lastly, considerable benefit is derived from bathing, farming, travelling, &c. To crown all, we may add, that if the whole business of cure is committed to nature, this fever will sooner or later terminate by the powers of the animal economy alone: which happy event patients have sometimes enjoyed, while in the use of inert remedies, to which nevertheless this spontaneous cure is often attributed. Hence so many silly and spurious observations with which books are filled.

REMITTING FEVER.

VARIOUS names are given to this, for by some the Remittent is called *subintrans*, by others *continens*. It holds a middle place between continued and intermittents, but seems to tend more to the latter, since from closely observing the order of remissions we discover the tertian, double tertian, quartan type,

&c. besides, that intermittents often run into remittents, and these last into intermittents. Yet some fevers, concerning which presently, seem to follow the character of continued, so that we can scarcely refer them to their proper genus, unless the examination of the urine come in to our aid, the lateritious colour of which discovers the nature of intermittents. The remitting fever commences with a slight chill, and the following fever, rarely intense, is terminated by a sweat more or less conspicuous. In some, while the paroxysm proceeds, a ptyalism breaks out, but for the most part they evacuate a flame coloured urine, which deposits a kind of sediment at the time of remission. This kind of fever is attended with vomiting, diarrhæa, cholera, convulsions, &c. especially if the periods are irregular. It is also accompanied with pains fixed in one or other part, and scarcely differing from those of pleurisy, colic, rheumatism, &c.

The *Legitimate Remittent*, when it has its own course, is commonly not more dangerous than the intermittent, but the *irregular* and *anomalous* is doubtful, the paroxysms not submitting to any order as to time. When epidemic, it is often accompanied with inflammation, yea, as some say, it is allied to malignity. The *Remittent* in the type of a quartan, is thought more obstinate and dangerous, since it often runs into hectic fever; or marasmus, dropsy, &c. follow it. *Remittent* fever is not without its critical evacuations, for it appears from numberless histories that sweats breaking out, or saliva flowing, afford no little ease, and indeed the urine depositing a sediment, is sometimes of benefit.

To come to the *Cure*. A venesection and vomit being premised, it is favourably treated with bland remedies, such as diluents and temperants. For what great injury a tumultuous administration of remedies occasions is fully proved by multiplied experience. Antiseptics are often opportunely used, bitters and stomachics not unfrequently relieve, nor does experience forbid the milder diaphoretics; but these remedies ought to be given with a judicious hand. Lastly, the *Peruvian Bark* joined with temperants, commonly succeeds to our wishes, provided the bowels are kept open as is necessary, with laxative draughts, or suitable injections. But if these observations concerning intermittent and *Remittent* fevers should seem more contracted than is right, we may have reference to an anonymous treatise on this subject, lately published at Tournay (*Tornæsanis Typis evulgatum*) the author of which, second to none in extensive fame, has strenuously endeavoured to promote the cause of medicine.

PLETHORA. FULNESS OF THE VESSELS.

IT is obvious to all, that a life of idleness and retirement, the long continued and free use of exquisite dainties, in which they mostly indulge, who seek to excel others in debauchery; are the chief causes of *Plethora* in early age. But it proceeds sometimes from another cause, unless it be congenital, namely, from the suppression of daily or accustomed discharges, as well spontaneous as those caused by art; by the help of which perhaps the consent is kept up between the solids and fluids, which being deficient, the viscera appear inadequate rightly to perform their offices. But we will not longer tarry with these matters which are hid in dark obscurity, and only mentioned in a transitory manner. To return therefore to our design: Besides the foregoing, from the proper attention to which, there arises no light suspicion of *Plethora*, the blood shews itself by other marks to predominate in the body, by the amplitude of the veins, according to the various degree of corpulency, being more or less conspicuous; by the florid colour of the skin, by the heat of the whole body, by a propension to venery, by a redness diffused over the countenance, and inflamed eyes; by more profound sleep, and encreased pain of the head, by difficulty of breathing, which is encreased on ascending steep places, or any other motion; by numbness of the joints and spontaneous lassitude; for the powers are overwhelmed by luxuriant blood: and lastly, by a disposition to fever, inflammation, hæmorrhage, &c. A fuller habit of body ought to be considered as a doubtful sign of *Plethora*, since it often happens that fat persons do not so easily bear loss of blood, as lean ones; because the sanguiferous vessels, immersed in fat, cannot keep their proper consistence or density, by reason of the surrounding compression: nor can we more rely on the florid colour of the skin, which sometimes seems to depend on a peculiar or rather unusual constitution of body, than on too much blood. For a *true Plethora*, which does not take place except by a gradual encrease, is to be distinguished from the *spurious*, or that turgescence of the vessels as it were sudden, owing to the existing effect of the rarefaction of the various fluids, which last, every one knows, arises frequently from febrile heat, insolation, running, or rather excessive motion of the body; from gluttony, or drinking liberally of ardent spirits, which tippers drink under various names. Ought *Plethora* to be ranked among diseases, or only in the list of their causes?

This we leave to the decision of others: But it is incumbent on us, to give an accurate history of the symptoms which

accompany this condition of the body. In this number we include vertigoes, convulsive fits, apoplexy, cephalalgia, obstinate ophthalmy, fever, inflammation, hæmoptysis, and other hæmorrhages; suffocative catarrh, palpitation of the heart, gout, and other disorders arising from congestion or stagnation; which, although they have a peculiar and difficult character, yet require much the same method of cure, which especially has a view to lessen the mass of blood.

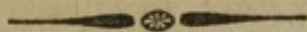
The *Cure* of *Plethora* turns upon this hinge alone, which is performed not only by blood-letting, but also by a strict regimen, namely, by low living, labour or other motion of the body, short sleep, &c. These are principally useful, if the increase of the mass of blood has occasioned no injury to the viscera, or this fluid has not burst forth from its proper vessels. But when it is the consequence of any suppressed evacuation, it is of the greatest moment, that by all means and without delay, it be restored thoroughly. Yet venesection is not to be defrauded of its due, by which, as it were instantly the receptacles of the blood, swelled beyond measure, are emptied, and thus the excess of this fluid is obviated—this is chiefly serviceable in young and pregnant patients: but it is not to be too often repeated, lest the vessels, through the contexture of the solids being broken, should offer but weak resistance to the impelling fluid; by which means, the humors, robbed of their accustomed elaboration, become unable to perform their offices. Therefore let those beware who indulge in that worst of habits, *very numerous bleedings*, lest they promote other diseases, distressing to the wretched patients. Nor does venesection suit all plethoric cases, as many occur, even of athletic habit, who cannot bear the loss of any quantity of blood: nor are there wanting some, who so much dread it, that they faint at the sight of a bleeder. In both cases leeches may be applied, by the help of which blood may be taken at pleasure, without any succeeding disadvantage. The quantity of blood being lessened by every means, cathartics, diuretics, diaphoretics, and other evacuations are not altogether useless; by which some part of the confused humors of the blood are subdued, and the vessels emptied by the same means: but these medicines are administered in vain, unless the way be opened by venesection, diluents and suitable regimen. If, lastly, the excess of blood should be filled with a depraved diathesis of humors, it is evident that there is something of cachexy. We add nothing concerning the treatment of *spurious Plethora*, since it is manifest, that this is easily removed by diluents and temperants, nor requires any other cure.

ÆSTUS MORBOSUS. MORBID HEAT.

THIS kind of sickness is most common to youth, nevertheless nothing has been said by authors on the subject. It frequently invades persons of a sanguineous or bilious habit; as also those of very warm passions. It sometimes preceeds the ephemeral fever, and like this species is called by the vulgar *courbature*; nor is this state of the body unlike that which the Provincial Gauls, and *Occitani* call, *mour foundamen*. It is commonly supposed that this disorder arises from mere heat of the blood, often equal to that of a fever, but it does not escape the experienced, that the nervous system has much effect in promoting it. Lying out at night, or immoderate study, the practice of feasting, and the use of exquisite dainties, drinking freely of wine or ardent liquors, immoderate exercise, arduous and excessive labour, profound meditations, close study, venery, &c. are so many evident causes of this affection. This ill health is scarcely discerned when subsisting within certain limits, so that they who are seized with it, scarcely seeming to be sick, seldom call a physician. The case is different if it rises to a certain height. *This state is attended* with spontaneous lassitude, pain of the head, interrupted sleep, &c. In the mean time the head and bowels grow hot, or burn with internal fires; but this heat rarely extends over the whole body. Hence it is no wonder if it be not noticed, when a thermometer is applied to the armpits or groins, which nevertheless does not hinder fire from being struck out of various parts of the skin, and little sparks to flash. The tongue is sometimes observed to be dry, and many have great thirst. The pulse is in a middle state, between the natural and febrile. Many complain of night sweats, from the violent heat. In some there is diarrhæa, and the urine is voided of a flame colour. The appetite mostly languishes, or is quite lost, and digestion becomes slow and troublesome. Finally, various efflorescences often break out on the skin, and the blood itself bursts from the lungs, kidneys, and other inclosures. Although the *Æstus Morbosus* may be considered as the first grade, or forerunner of ephemeral fever, as we have hinted, yet the solution is not undeservedly thought more difficult: for an ephemeral fever portends nothing bad when following the *Æstus Morbosus*, and indeed is mostly salutary, since by its means the first disease is as it were terminated, which otherwise is thought more obstinate, and not without danger: for it is proved by hundreds of histories, that from a neglected *Æstus Morbosus*, not only the affections already enumerated, take their

rise, but also various inflammatory fevers, or diseases of another kind, which endanger the lives of the sick. This however does not hinder a favorable judgment of this species of disease, if a proper and timely method of cure be adopted, or the whole business, with a suitable diet, be left to nature.

Blood letting obtains an eminent place among the more efficacious remedies, nor are the milder laxatives of little use, if given with the same caution, or, we may persist in the use of humectants, refrigerants, temperants, obtundents, and even depurants, if there be any suspicion of latent morbid matter. It is well known that from these are prepared ptisans, apozems, gruels, emulsions, &c. by frequent draughts of which the disease is as it were smothered in the cradle. Among the rest, plants of the cichoraceous kind, nitrous and acid substances, are justly extolled. Whey is also much praised, or milk itself, unless a weak stomach hinder. Nor are the mineral waters above mentioned given with less success, which seem to emulate or even excel the virtues of other medicines. Sometimes sedatives, and even narcotics, do good, provided they are not given until after the remedies generally premised. Lastly, cooling clysters, frequently injected, are of no little benefit, nor are bathings omitted by the experienced, with which the remaining cure is often, as it were, completed.



LOSS OF STRENGTH.

ALTHOUGH this disease seems scarcely to differ from the last, and is often implicated with it, yet by establishing a proper diagnosis, it is easily distinguished; for the one comes on by slow degrees, and not without a gradual encrease, while the other may be contracted in a short time, from recent causes. Besides, Loss of Strength is ominous of danger, and requires a different cure. Nor does that symptomatic prostration of strength coincide with it, which attends faintings, paralysis, and other serious disorders; since the exhausted powers now treated of, constitute a disease *per se*, as it is called. Want of food, excessive loss of blood, great discharges by the bowels, kidneys, skin, &c. great journeys, hard labour, immoderate study; the passion of love changed as it were into rage, *onanism* or that depraved custom which is always kept secret with the most baneful subtilty, &c. usually bring on Loss of Strength, which in proportion to the source and degree are either void of danger,

or of *serious and doubtful issue*, or even fatal and bordering on death.

Although from a view of the causes just mentioned, the genus of this sickness is plainly discovered, it is also known by peculiar marks, which are as follows. Those who are seized with this malady can scarce stand upon their feet, or go in a staggering way, their minds are gradually confused, and the joints affected with a kind of numbness. They fall into various species of fever, attended with delirium, fainting, and other alarming symptoms. Sleep by which the strength is renewed, is driven away: the organs of respiration are impeded; the belly mostly remains costive, and the other excretions are performed with difficulty. Hæmorrhages are not unfrequent from the nose, mouth, &c. scarcely to be stopped. I remember to have observed in a certain debauchee a dropping of the same kind thro' the urethra, occasioning alarm by reason of its duration. In this calamitous state of things it is easily gathered that the blood is deprived of its balsamic particles, and that death is at hand. Nor are instances wanting of patients who before the disease was formed, have been suddenly taken off by Syncope. Lastly, some, after the disorder has been brought to its crisis, being constantly bed-ridden, drag out a life of uneasiness and afflictions, and in the course of time descend to the grave. Yet sometimes those who have been reduced to the greatest extremity, and given up for dead, have been recalled as it were to the number of the living: this hope of cure brightens, if the viscera have contracted no damage. Hence it remains by consequence that the prognosis must be various, according to the degree of disease and difference of phænomena. Besides nothing certain can be determined concerning the event, unless there be a right idea of the remote cause, which notwithstanding is often immersed in very great obscurity, by the wilful secrecy of the patients.

This affection ought to be treated with the milder remedies: Wherefore, in this case there is little benefit from cordials, analeptics, and other well known stimulants, or roborants highly extolled by the vulgar, which rather provoke than restore the strength; but almost the whole business, with a suitable regimen, is to be committed to nature. Rest of mind and body promotes this, which is not undeservedly recommended to restore the strength. Nor is change of air to be lightly esteemed, as is proved by frequent experience, by the help of which many have been restored to their former health, without any other remedy. In the mean time the weary are to be sustained by aliments of easy digestion; but fever and a depraved disposi-

tion of the stomach often prevent, so that the first duty at such times is, to mitigate the fever with diluents and temperants, and to carry off the sordes lodging in the stomach, by mild cathartics, and then the tone of it may be restored by the use of suitable stomachics. It is well known that the richest aliments, are, broths or juice expressed from boiled flesh, gellies, a species thereof called *Cibus Albus*, and hundreds more, belonging rather to the culinary than medical art: But many are not aware, that this species of aliment is not always rightly digested in the stomach, on account of a deficiency of saliva, which is drawn out by mastication alone; so that many can eat bread and flesh without disadvantage, whose stomachs loathe broth itself, which it is expedient to remember.

Hence it is evident of how great moment it is properly to observe the powers of the stomach, and select aliments best suited to it, lest by preposterous cookery we make the condition of the patient worse. Nor does one and the same method suit the lean and the fat, for the first can scarcely bear the evacuations, which have the best effect on the others. Besides the aliments, called *Euchyma* are given with advantage to the emaciated, which rarely benefit the fat. Experience teaches that milk alone, all other circumstances suiting, is of advantage to both. But analeptics taken from the shops, and especially cardiacs, which only have momentary effect, are of little use to either. For these stimulants are calculated to encrease the heat of the blood, and hence do much hurt, unless skilfully administered. Nevertheless, when the causes and phenomena of the disease are rightly traced, and a suitable diet instituted, the aforesaid remedies may lend a helping hand, especially in phlegmatic and aged patients, whose blood may be supposed less liable to effervescence.

But here it may not be concealed that preparations of iron, and even the Peruvian Bark have been highly extolled by the celebrated TISSOT, who was well skilled in the practice of medicine; for this excellent author, who has often brought his opinion on this subject to the test of experience, asserts that these have often been of service in this affection, contracted by too great expenditure of semen. Yet concerning the virtues of these remedies, with deference to this approved author, we think that further enquiry should be made. As to venesection there is no doubt that it is hurtful in this disease, wherefore it is forbidden by the experienced, unless great pain of the head, vehement fever, or obstinate hæmorrhage, demand it. Cathartics are not less to be feared, which may yet be given in urgent cases, for as we have hinted, these last are of service in depraved digestion, which all practitioners know, becomes some times al-

arming, when the strength is exhausted. Lastly, if these cautions are neglected, it is obvious to any one that even an approved and rational mode of living will be futile.

SCARCITY OF BLOOD.

THIS affection, concerning which authors have been silent, is nothing else than an *emptiness of the blood-vessels*. This genus of disease not unfrequently, indeed almost always, lies concealed, which is brought to light by dissection: nor have we brought what we have to say on this subject from any other source. We suppose this very *intricate* disease, from conjecture alone, to be the consequence of unaccustomed fasting, or immoderate loss of blood, either by venesection or hæmorrhage; but these marks are doubtful and fallacious, since it sometimes happens, by reason of a peculiar constitution of body, by which all the excretions are as it were checked, that after long protracted hunger, fevers arise which yield only to venesection; which indeed would seem to argue, that the receptacles of the blood, in this case had not been depleted or emptied beyond measure. Nor is it more certain, that this disorder consists in an excessive loss of blood, as it is sometimes found by accurate observation, that from the greatest loss of this fluid, not only the mass is not lessened, but on the contrary encreased; and a plethora follows, the cause of which we have above explained. From which we may infer, that even after a deficiency of aliment, or long continued loss of blood, this disease does not necessarily follow. On this account the disease will be involved in thick darkness, unless the causes particularised precede; and that it depends on a vitiated state of the blood, I have more than once observed in some cachectics, and especially in chlorotic girls, in whom the catamenia have been suppressed. Which is well worthy of observation.

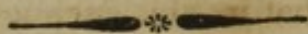
Hence it is plain, with what difficulties the diagnosis of this disease is surrounded, so that often there would need an *Ædipus* to decide. Amidst such straits, we will candidly open some things drawn from our own store, which, if they do not satisfy the mind of the enquirer after truth, may at least afford a hint of this latent affection. Wherefore those affected with this hidden disorder, are gradually deprived of strength, and complain of obstinate hissing of the ears; the appetite languishes or is wanting, and the gaiety of the countenance is often obscured. Many afflicted with diarrhæa, or diabetes, others have profuse sweats

day and night; some who are apt to faint, are suddenly taken off. Sometimes the ancles swell, and a serous fluid is poured into the cavity of the breast and abdomen. As the *complaint advances*, the patients are in general deprived of sleep, sigh deeply, and give up almost all hope of recovery. Nor are there wanting some, who being overcome with grief, or oppressed with perpetual fear of death, become deranged; until sooner or later they bid a last farewell to terrestrial things. If in this state of things the disorder proceeded from hunger, or profuse discharge of blood, we might with some truth infer that the vessels were empty: But sometimes, to say the truth, these signs are wanting; and even the forerunners are absent, so that this fatal disease is then concealed, and escapes the most scrutinizing.

What we have frequently observed in examining the dead bodies after this disorder, would exceed belief. We have seen some as if without blood, so that on opening even the head, thorax or abdomen, not even a drop of blood has escaped, just as if the parts dissected were composed of mere wax. The small vessels being diligently examined were found altogether empty, and the larger appearing half empty. Both have been met with, turgid with flatus, which was easily seen through the pellucid veins and arteries of the brain. Moreover, it has not escaped the notice of those who have had numerous dissections, that air has often been found in the aforesaid receptacles. We saw scarce a vestige of blood in the brain of a certain virgin, who died suddenly; and who had been bled an hundred times within a year, I know not for what reason. We have observed almost the same phenomena not many years ago, in the body of a Nobleman, of florid age, who died of a sudden fainting fit, after he had been nearly restored to health from peripneumony; in which he suffered numerous venesections; for after the usual dissections, not even a drop of blood distilled, and the vessels of the brain appeared turgid with mere air. Yea, the ventricles of the heart, strange indeed to tell, afforded scarce a vestige of blood.

It is of little use to mention the *remedies*, which, while living, they took who died of this disease. But among those who got safely through, there is nothing established concerning the character of the disease, since want of blood never discovered itself by evident marks; so that we can advance nothing certain on this subject. Taught by various observations, we hesitate not to assert, that most remedies are futile, if we except those that respect digestion, and may gently restore the tone of the vital organs, among which rhubarb and preparations of iron hold the first place, which, when all other things agree, ought not to be thought

ineffectual. But since the above-mentioned remedies are unequal to the restoring the mass of blood, aliments of easy digestion are to be brought in to our aid, therefore care must be taken to select suitable ones and give them in due quantity; for on this depends the chief cure—since every one acknowledges that in this case, more is to be attributed to the mode of living, than to Pharmacy. Moreover, pleasant walks, very agreeable journeys, and other delightful exercises of any kind, which by exhilarating the mind, strengthen the digestive and blood-creative organs, have been of the greatest service. To conclude: We may add that the disease is rarely simple, but mostly implicated with others: Hence the greater difficulty of cure.



RETROCESSION OF EVACUATIONS AND ERUPTIONS.

EVERY practitioner is aware, of what great consequence it is, to be rightly acquainted with this most familiar kind of complaint. It embraces, as appears from the title, the suppressed natural evacuations, the checked morbid humors, to wit, bloody, purulent, or of any other sort, and the retrogression of tumors and eruptions of different kinds. Wherefore fevers arise from *impeded perspiration*, mostly ephemeral; pains, defluxions or inflammations in various parts, diarrhæa, &c. *Confined expectoration*, as well in acute as in chronic complaints, brings on serious symptoms, which is very easy to be understood. *Suppressed urine* is no less dangerous; obstructed biliary glands are the forerunners of various affections. *Translation of milk* occasions various uncomfortable feelings. The *retention of the blood* usually discharged by catamenia, piles, and hæmorrhages, has violent effects in the body. *Reabsorbed Lochia* occasion very great mischief, or the *revulsion of purulent matter* from the accustomed sources; and so of other distillations and transudations from the eyes, nose, ears, mouth, genitals, anus, head, axillæ, feet, &c. from the impeding or repelling of which arises a host of disorders, to remove which we strive in vain, if we attend not to the nature of their genuine cause, which nevertheless is mostly unobserved by the unskilful. Whereas it was thought adviseable to treat separately of checked perspiration, of costiveness, of *suppressed spitting*, urine, hæmorrhoids, milk, menses, and lochia; we have therefore enumerated those species of

disorders only, which pertain but little to the articles mentioned; in which class are the *cessation of accustomed hæmorrhage*, the *drying up* of long continued ulcers, either spontaneous or artificial; the suppression of various oozings or distillings from different parts; and lastly, the retrocession of tumors or other eruptions of the skin.

If *hæmorrhages* which have become habitual, such as hæmorrhoids and menses, *do not return at stated times*, there arises gradually a plethora, from which frequently are generated acute fevers, pain of the head, ophthalmia, true and spurious angina, erysipelas, difficulty of breathing, hæmoptysis, internal inflammations, and especially pleurisy, peripneumony, and other affections of a bad kind, which bring the patients into hazard of life. Every one must see that in this case *venesections* are of great service, as also a suitable diet, diluents also have their share, and the milder cathartics, gentle diaphoretics and other evacuants, which are to be selected and administered as occasion requires. From *exhausted ulcers* proceed serious misfortunes, which even threaten death, if without delay the former discharge is not promoted, or a new ulcer opened; that the matter mixed in the blood, may be driven out from the vessels, and the humor turned into this channel, which otherwise is apt to run in upon the liver, lungs, brain, &c. This most destructive and fatal consequence may be prevented by *blood-letting*, since practitioners have rightly observed, that spontaneous hæmorrhages have been of great service: But these purposes are more happily obtained by *cathartics* and *diuretics*, being more agreeable to nature; as it has often been observed that purulent matter deviating and mixing with the blood will find an outlet, merely through an effort of the animal æconomy, by stool and urine.

But *transudations* which partake neither of blood nor matter, when repelled, are less dangerous, though they require the same *cure*, which consists of venesections, cathartics, diuretics, diaphoretics, and salivants; by means of which the morbid matter, arriving at the various strainers, is drawn out of the vessels. But they go more safely to work, who by every means attempt the return of the former discharges, as other remedies are often found ineffectual, which I have frequently observed after an imprudent suppression of the perspiration of the feet, by the ill-timed application of astringents, which preposterous method was immediately followed by vertigo, tinnitus aurium, difficulty of breathing, heart-burn, pains in different parts, by which the distressed patients are vexed, until the former transudation is entirely removed. In a word: all prudent practitioners have this view in every suppressed evacuation, namely, to bring them

back, or attempt some other purgation, which may answer instead of the suppressed flow, and to this end they are persuaded that depurants are beneficial.

A method very similar is to be practised after the retrogression of cutaneous eruptions, or repelled tumors. It is known that the recess of the former is of dangerous tendency in acute diseases; to wit, in measles, small-pox, erysipelas fever, scarlet fever, petechial fever, &c. unless the patient be instantly relieved by diaphoretics, warm bath, blisters, &c. Although the regress of chronic eruptions, namely *scald head*, scab or itch, tetter, &c. does not threaten immediate danger, yet it is not void of risk, since various effects may follow, which give great trouble in the cure; to wit, ill-conditioned fevers, furious delirium, epilepsy, convulsions, head-achs, blindness, deafness, suffocations, sharp pains of the bowels, &c. to prevent and remove which, every endeavour should be used, by the administration in proper time, of the remedies just mentioned, namely, venesections, cathartics, diuretics, &c. not omitting caustics to the skin, the efficacy of which is confirmed by the practice of the most celebrated physicians. Almost every one knows what great danger threatens from the retrocession of tumors, such as parotids, buboes, carbuncles, &c. for which reason every thing must be attempted to prevent a metastasis, and the morbid matter must be determined to all the outlets of the body, to which end, the helps above mentioned are of use, the method of giving which is similar.



PAINS.

PAINS are different in degree, and spare no part of the living body. For instance, the most severe rage in the teeth, ears, stomach, intestinal canal, kidneys, &c. they exercise less tyranny in the liver, lungs, spleen, and other viscera of the same structure. They are multifarious in fleshy and membranous parts, which are often the seats of rheumatism, gout, lues venerea, hypocondriasis, scurvy, cachexy.

Moreover this troublesome sensation, in whatsoever part it fixes, is different in its manner, for one is heavy, another pulsating, pungent, lancinating, eating or ulcerous, hot or burning, itching, &c. the *heavy* pain often attacks the head, kidneys, and other abdominal viscera; the *pulsating* rages about the compages of the cranium, and in all parts where pus is formed, and by

this mark especially we guess at internal abscess. Membranous parts are torn by *lancinating and pungent* pains, and are more severe where there is the greatest tension—of this kind are pleuritic, sciatic, colic pains, *spinæ ventosæ*, as they are called, &c. The *eroding* or *eating* pain accompanies ulcers, and affects the lungs, kidneys, uterus, &c. The *burning* pain attends erysipelas, lastly, the *itching* pain affects the skin. To these we may add that obscure sense of pain about the precordia, or that tightness of the breast called *anxiety*. Moreover all are acquainted with those spasmodic pains, or that *most troublesome torpor*, commonly called *cramp*. Nor are we to omit that obscure and tedious sensation in those parts, which is not unfrequent, and called *restlessness at night*, or *chatouillement*; caused by a titillation of the soles of the feet, or the spurious costæ of the loins, although it often excites immoderate laughter. There are, lastly, pains from *compression*, contusion, distension, a wound, burning, cold, &c. which assume innumerable forms. Hence we may learn, that pains are distinguished into two kinds, to wit, from the nature of the irritating cause, and from the peculiar texture of the part.

Pain, without any external cause, upon whatsoever part it falls, is seldom essential, inasmuch as it principally depends on some primary acute or chronic disease. If it attack the trunk or joints, in acute diseases, it denotes some critical motion: But a continued pain of the breast and abdominal viscera, threatens inflammation, suppuration or gangrene. Nothing forbids the conjecture, that this pain indiscriminately invading the healthy and sick, affecting every part, which intermits, or creeps from one place to another, arises from some spasmodic affection of the nerves. But we must bear it in mind, that those familiar pains with which both valetudinarians and healthy are afflicted, for the most part proceed from a *fourfold source*, often deeply hidden, to wit, from rheumatic, gouty, scorbutic and venereal, of which enough and more has been said in its place. Nor are pains of the same kind wanting, which have another origin, or proceed from passions of the mind, convulsive affections, or impeded perspiration. Lastly there occur a host of pains of another kind, from obstructions, tumors, or other injury of the viscera, from some matter, from extraneous bodies, &c. concerning which elsewhere.

Since the genuine *nature* of pains often lies hidden in obscurity, it is no wonder if nothing certain can be said of the *event*. Yet sometimes it is allowable to predict. For instance, pains of the head, back and joints, during fever, are considered free from danger, as they mostly cease when the disorder goes off, or indicate an approaching crisis, for they denote a salutary hæmorrhage.

hage, when they affect the eyes, temples or neck. Evacuations of a serviceable kind, often follow internal wandering pains. When pains affect the loins, they usually indicate the menses, hæmorrhoids, or flow of urine. Very great pains of the head, having no respite, presage delirium or coma. If violent internal pains, in obstruction of the viscera, inflammation and abscess, suddenly vanish, there is no little suspicion of gangrene. Wandering and intermitting pains are rarely ominous, but those which do not intermit, and are obstinately fixed on any part, are of doubtful prognostic. Lastly, metastases of pains in spurious pleurisy, gout and rheumatism are not void of fear. We add no more on this subject, as they will be treated of here and there in this work, in order that we may offer some observations on *the seat of pain*. Wherefore, the genuine nature of various pains is not only involved in great darkness, but also frequently little appears as to the part affected, so that we can scarcely trace them by conjecture, for it is expedient to note that the disease has not always its seat in the part pained, for pain of the head frequently depends on depraved digestion. From disease of the lungs, the glottis is drawn into sympathy; from obstruction in the abdominal viscera, proceed pains of the back and breast; patients laboring under calculus of the bladder, or inflammation of the prostate, complain of pain of the penis; various affections of the intestines, very remote from the anus, occasion tenesmus; to say nothing of innumerable other examples taken from dissection.

From the foregoing it is gathered, that the cure is to be directed to the cause of the disease, which nevertheless is very obscure, and indeed, is often the cause of much difficulty to physicians; but most practitioners slightly attending to this investigation, or entirely overlooking the inextricable cause of the disease, turn their attention to a merely palliative, or general treatment, until the disease becomes more evident, or is terminated by the spontaneous efforts of nature. With this view, venesection merits no small praise, which notwithstanding, is not suitable in all cases: but in all pains, diluents and demulcents freely taken, are usually required. Anodynes, and even cathartics are useful, while there are no marks of obstruction, inflammation or gangrene. But their use is forbidden, as well external as internal, in arthritic and rheumatic pains: otherwise narcotics merit no little praise, either internally or externally used. We have noticed above, that intermitting pains are frequently subdued by the help of Peruvian Bark, or any other febrifuge, but this specific is not to be given without the greatest caution, since there want not fevers, subsiding at intervals, which

will not bear to be treated with this remedy, but are rather exasperated or prolonged, which those who are entrusted with the health of their patients, ought to retain carefully in mind. But nothing does more good in the management of various pains than *revulsion*, by which the motion of the blood, humors, or nervous fluid is directed to another part, which effect is produced by evacuation and *irritation*. Wherefore, besides venesection, which is often prescribed with this view, leeches, dry cups, or with scarification, vesicatories, and caustics may be used: nor, is the actual cautery, composed of moxa, to be despised: the most ancient use of which the Chinese, and other orientals very much extol. The simple warm pediluvium, often affords considerable relief in obstinate head-ach, when other remedies have been without effect. Nor is friction of the joints, in this case without its virtues. Finally, nothing is of benefit in the cure of pains, as we have already inculcated, unless we have first a knowledge of the natural cause. For instance, we must examine whether the pains are owing to any organic injury, whether they may be referred to any other primary disease, as scurvy, lues venerea, &c. whether some part may not be removed out of its natural place, as in distortions, luxations, fractures, hernia, &c. from the close attention to, and examination of which, the judgment is to be formed.

CATARRHAL AFFECTIONS.

DEFLUXIONS of humors are known by manifest signs when affecting the head, neck, nose, ears, lips, teeth, fauces, glottis, larynx, bronchia and lungs: But they do not shew themselves clearly, or they resemble another disease, when they prevail in other parts; even although they be attended with a fever *sui generis*. Hence it is that many, deceived by a spurious appearance, begin the cure of this disease, by unsuitable remedies. But genuine Catarrhal Affections take their rise with light chill, recurring at intervals, followed by a continued or intermittent fever, mild or violent, attended with want of appetite, anxieties and spontaneous lassitude, and is moreover usually protracted to many days. In the mean time arise pains, which not only attack the parts first affected, but also extend to others, even remote. If the humor fall upon pervious parts, suppose the nostrils, trachea and bronchia, there is occasioned a discharge, by which the morbid matter finds an outlet: but if otherwise, ob-

structions arise, more or less conspicuous, or swellings tending to inflammation. There are perceptible defluxions of the eyes, nose, fauces and lips; Catarrhal Affection of the larynx and lungs, is known by cough and hoarseness. Stuffing and pains of the head, neck, ears, &c. are complained of by the patients. Swellings of the face, head, neck, ears, are evident to the sight, or touch. Although the first stages of Catarrhal diseases, which are contained within two days, are never alarming, yet they are not without danger. Catarrhal Fever is not rarely protracted to many days, namely twelve or fourteen.

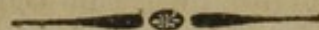
Beside those very simple and common Catarrhal defluxions of which we have just treated, there are others of a *worse nature*. Of this kind are *Catarrhal Fevers* of malignant character, inflammatory or gangrenous quinsy, stuffings of the lungs bordering on inflammation, erysipelas of the face, rheumatic defluxions, apoplectic fits, and numberless others which put on the appearance of a different disease, by which to be sure the more judicious or experienced are not deceived; seeing they always have Catarrhal Fever accompanying them; and by this mark may be distinguished from similar ones. Moreover, *suffocative Catarrh* is to be expunged from the list of defluxions, which, although it requires the same nomenclature, differs vastly from the species enumerated.

They commonly suppose the access of cold air, by which perspiration is impeded, to occasion all the natural species of Catarrhal Affections. But we may truly doubt, whether they may not rather be referred to the entrance of some heterogeneous matter lurking in the air, through the pores of the skin, and lungs, than to the mere check of an innocent humor which can easily find exit, as daily experience proves, through the kidneys, stool, or other outlets of the body. Nor do those Catarrhal Affections alarm one, which frequently invade those who expose themselves when very warm, to the cold air, especially if the chills are easily removed by a good fire, since the type and degree of this disease are of a different nature. Besides it is well known, that Catarrhal Affections sometimes prevail, and become epidemic, even in the hottest time of summer; and that this disease also does not spare the fearful, even though shut up in a warm room, and even confined to bed, which argues beyond all doubt, if I am not deceived, that suppressed perspiration is falsely accused as the cause. From this we may infer, that this disease for the most part depends on a *peculiar constitution of the air*, never to be discovered by the thermometer. Yet we do not deny, that this heterogeneous matter whatever it be, with which the air is filled, gathers some

force from cold, and that its effects at that time, are more obstinate and severe. Besides, *malignant Catarrhal Fevers*, gangrenous quinsy, fatal defluxions of the lungs, &c. have a certain deleterium, which taken by the pores of the skin and lungs, and mixed with the blood, usually occasions great damage, which it would be absurd to refer to the coolness of the air alone, closing the pores of the body. Besides various phenomena of epidemic constitutions seem to oppose this opinion, although generally accepted, by which it appears that the morbid matter, perhaps otherwise invincible, is carried off by evacuation alone, to wit, running of the nose, expectoration, a flow of sweat, or looseness of the bowels, to which we may add the urine, which often, in this case, is found to be a relief to the patients, when it is thick and turbid.

Wherefore, if Catarrhal Affections arise from a certain matter in the air, taken in through the pores of the skin, or any other pervious part, an evacuation through the same spiracula, seems likely to be the more *salubrious*. This is attempted by the spontaneous efforts of the animal œconomy, or the milder diaphoretics are exhibited, joined with diluents and demulcents, by means of which a certain insensible perspiration is promoted, until a bland sweat breaks out, which, by whatever cause it be excited, the patients may favor if they keep their beds, and observe the rules of diet. Besides all know, that vapour baths and steamings are serviceable to the same end. Nor are evacuations by stool to be thought useless, whether natural or artificial, but this evacuation is to be cautiously directed, lest it hinder another. *Emetics* are also recommended in some epidemic constitutions, by which the disease is wonderfully smothered in its commencement. Sometimes theriacs are of benefit, or cardiac and anodyne confections of the same nature. Nor must we omit narcotics, While the primæ viæ are freed from obstruction, otherwise they are forbidden by the skilful, as nauseous and hurtful. *Hypnotics* are also thought hurtful, if the head be pained, or the bowels costive: Lastly, the aged must be cautiously treated with these remedies, lest they die with untimely drowsiness. There is much controversy among physicians concerning venesection, while the Catarrh is prevalent, and perhaps the dispute is yet undecided; yet from repeated experience it is our opinion, that this species of sickness, when epidemic, is longer protracted in many, after blood-letting; and indeed sometimes becomes dangerous: but is never checked and lessened thereby; so that we can not use this remedy without the greatest caution, even when fever rages, and difficulty of breathing is urgent, or other more aggravated symptoms come on, whatever they may babble

to the contrary, who insist that it is highly necessary at the decline of the hot fit. Lastly, the work would grow to an immense size, if we should annex all the medicines usually exhibited against Catarrhal fever. It would indeed be empty and superfluous, since the design of this work requires me to treat of peculiar defluxions separately in their place.



CACHEXY.

IT is well known that by this name is designated that *dyscrasy of the blood and humors*, or depraved condition of them, which is known by a loathsome colour of the skin. The young and old are thought obnoxious to it, as also those who are recovering from tedious disorders. That is called *Essential*, which takes its rise from foul air, from bad victuals, and from a peculiar vitiated state of the humors. But *symptomatic*, which is the consequence of any disease, to wit, scurvy, schirrous infarctions of the viscera, putridity, purulent congestion, or any other kind, or of some fault of the viscera as well pectoral as abdominal. But this difference is often scarcely discerned in practice. Immoderate hæmorrhages and very numerous venesections are apt to bring on *Cachexy*: and the like effect follows the suppression of sanguineous discharges, and preposterous treatment of intermittents, or untimely stopping of a quartan, &c. It is universally acknowledged that *Cachexy* is bordering on *Leucophlegmasia*, but it differs much from *chlorosis*, which has nearly the same appearance, since the yoke with it is soon broken, and on the contrary it exasperates the other. Even the jaundice is of another nature, although it is very often attended with a vitiated crisis of the blood, since this royal disease may be subdued in a short time, and *Cachexy* does not yield, unless to a long continued cure. Nor do they judge more properly who refer scurvy to *Cachexy*, or consider it as the last grade of this disease, since there are scorbutic patients evidently free from *Cachexy*; and many cachectics, who have never had a scorbutic taint. Yet it is well to note, that the aforesaid diseases have often been implicated with this very one: and here is perhaps the genuine source of error.

A livid colour of the face, or greenish or leaden, a paleness of the whole body, leanness or slight swelling of the skin, more conspicuous in the face, eyelids, and extremities, which sometimes retain the marks of the fingers pressed on them; are so

many signs of Cachexy. The sick have frequent chills, and complain of difficulty of breathing from any motion of the body. The pulse is found slow and compressed, a slight fever coming on towards evening: it is sometimes found unequal and intermittent, with palpitation of the heart. Want of appetite and flatulency follow these, with tormina, and swelling of the hypochondria; from the same source proceed belching and discharge of flatus downward, especially after having taken food, with a various and unequal state of the bowels. In the mean time the urine is turbid and whitish, in this unhealthy state. Spontaneous lassitudes come on, the joints are numb and swelled throughout the body. The mind as it were beclouded, and the sleep becomes very profound. The legs swell in the evening, then œdema takes its place in the morning. In some, lastly, the sweats are fœtid, and various efflorescences of the skin break out, which, although they often refuse to be mastered, yet give little trouble.

This disease seldom threatens death, if the viscera be faultless, otherwise they scarce admit of cure. For it is obvious to even the rude and inexperienced, that this eludes every art of physicians, if it proceed from any incurable defect there. Besides the more slow the progress has been, the more obstinate it is esteemed. But this disease when contracted from an ill-cured quartan, or other intermittent, is removed by the return of fever alone, after the choicest remedies have been used to no purpose. Lastly, Cachexy continuing till old age, even when the viscera are restored, draws after it marasmus and dropsy, or shews the type of these fatal disorders.

From *anatomical observations*, as well my own, as those taken from the writings of others, we learn, that the larger vessels, especially the hepatic are turgid with concrete, black and feculent blood, nor are the diversified affections of the intestines derived from any other source; for the viscera are found to be affected with livor dry, wrinkled, schirrhous, putrid, and filled with tubercles or small hydatids, abscesses and anomalous tumors are discovered, with caries of the ribs and vertebræ. Lastly, there occur stagnations either serous, purulent, fœtid, &c. This general view of enjuries being premised, let us come to the peculiar ones, or those proper to each part.

The Liver for instance, is seen discoloured, whitish, leaden, covered with spots; or rough with granulations and tubercles, of great size. It is at times very large, again contracted, and having congestions of divers kinds, and sometimes filled with hydatids. Its vesicula bilis distended, sometimes with green and very acrid fluid, sometimes watery and without any saltish

taste, and containing a sort of gall-stones. The *spleen* in some is found large, in others compressed and wrinkled, and hard as a stone. The *omentum* varying in size, stuffed and adhering to the neighbouring parts, or putrid. The *pancreas* and *mesentery* are tainted with the same diseases, as also the *kidneys*, which are met with filled with calculi. The *breast* not unfrequently exhibits the same injuries, to wit, stuffing, purulence, putridity, and morbid adhesions, the *pericardium* in some, filled with a limpid or sanious fluid, the *heart* is seen very much enlarged, although its thalami and auricles are deprived of blood. The small branches of the *arteries* and the *valvulae* themselves are seen filled with a kind of cartilage, stone or bone. Lastly the covering of the *cerebrum* being taken off, there are sometimes found, as well in its windings, as in the other recesses, bloody and sanious stagnations; hydatids growing to the vascular net-work, &c. all which however do little good when seen, unless the acumen of the mind be directed to the phenomena of the disease.

A cachexy which is occasioned by any other primary disease requires no peculiar treatment, since when the original disease is removed, the crisis of the blood is restored in a short time; but when it depends on no other affection, or arises after it is past, it demands a peculiar method of cure. Wherefore, if it arises from suppressed menses, hæmorrhoids, or other accustomed discharges of blood, every effort should be used to restore these evacuations, to supply which, venesections are advantageously employed. But on the other hand if it originate from immoderate flows, the whole business almost is to be left to nature; after checking them, and attending to a suitable diet. For experience has generally taught that remedies have not only been inert, in this state of things, but have been often hurtful. If, lastly, Cachexy takes its rise from the itch, or any other efflorescence on the skin being repelled, it is expedient to have recourse to the method of cure above described.

From the foregoing it is clear, of what importance it is, in curing the dyscrasy of the blood and humors, that strict regard be had to the first passages. With this view, emetics and cathartics are first prescribed, as well the milder, as the hydragogues, and afterwards stomachics. These being premised, and not omitting diet, temperants, hepatics and bitters are exhibited, as also depurants and antiscorbutics; which very much oppose this vitiated crisis of the blood. Nor are aperients, diuretics, and sudorifics of less service, which occasion the *moleculæ* of the humors to be more easily excreted. Those especially recommended and frequently used, are rhubarb, cremor tartar, arcanum duplicatum, diaphoretic antimony, and the antihecticum of Por-

TER. But the martial and roborant medicines take the palm, which if administered in time, and after the proper things have been premised, perform the office of the most exquisite aperients. To restore the crasis of the blood, the various mineral waters are not unsuccessfully brought to our aid; as also the cold martial water, which, traversing the interior recesses of the body, have the power to repair the dyscrasy of the humors. Lastly, pure air in a sunny situation, agreeable excursions, &c. are much recommended. And to conclude, it is of service to add, that Cachexy rarely yields to a tumultuous method of cure, and therefore there need only the more bland medicines, together with a suitable diet, to which more is to be attributed than to the pharmaceutic art, especially if this affection be kept up by any latent organic disease. Hence they err, who, blinded by their own hypothesis, think that this affection must be attacked with cathartics and diuretics alone, and see nothing else in the cure than to turn the morbid matter to the intestinal outlet or direct it to the kidneys. This is the notion of the medical vulgar, which many of the sick have to bewail.



SCURVY.

THIS species of putrid cachexy as they call it, prevails among the northern nations, and the inhabitants of marshy countries; and frequently invades sailors, soldiers, and others of the lower class of people, who want wholesome food, and the other conveniences of life. Yet the rich and the noble who live sumptuously; ought not to be considered free from it, nor does it spare infants themselves. The Scurvy is most easily contracted after serious diseases. The learned and studious are disposed to it, and grief and sadness, and heavy cares bring it on. Moreover it is esteemed by many of the most eminent physicians, as the last grade of hypocondriac affection; whether properly or no, let those judge who are aware that Scurvy may even be propagated by contagion, or by various well known causes, to wit, bad food, impure air, &c. besides that infants, evidently free from melancholy, have often been attacked by this disease. EUGALENUS, no mean author, to whom however we must give cautious credit, laboured much in seeking out from almost all diseases the seeds of latent Scurvy: some practitioners embrace with both arms, his hypothesis which makes fools of the unskilful; these delight to call every disease they meet with by this title,

where they are ignorant of its nature. But the illustrious LIND has opposed this opinion with powerful arguments, and from repeated experience plainly denied that this affection was so familiar as was commonly supposed. He appears to have almost exhausted this subject, lest physicians, deceived by their affinity, should rush precipitately into error often the most fatal. There arises another doubt, concerning this scorbutic constitution, of which, if I mistake not, RIVERIUS makes the first mention, which frequently attacks those who live high and at their ease. We can scarce conceive this condition of the body to differ in degree from that kind of Scurvy, which is contracted at sea, and disappears immediately on returning to shore. But there is a certain disease having nearly the same marks, to wit, both affections shew themselves by sores of the mouth, and exanthemata, and seem to require the same remedies. But if these said similar diseases are subjected to more accurate examination, and their evident causes rightly weighed, it will readily be believed that they have a very different nature. but we will leave this doubt to be solved by those who have more leisure. It is commonly thought that Scurvy is sometimes hot, at other times cold; but this very recent division arises from no other source than age and temperament. For it is taken to be hot in youth, and in the sanguineous and bilious, but cold in old, melancholic, and pituitous persons. Hence appears a rational method of cure, and we understand why refrigerants do not agree in all cases.

The genuine Scurvy appears with soreness of the gums, peculiar efflorescences of the skin, and shooting pains diffused through various parts. But in some these marks are wanting, or occur in a doubtful way. Whence it is necessary to inquire into other circumstances, from the concurrence of which a diagnosis of this disease may be discovered. To mention the evident marks: Almost all who are seized with Scurvy, complain of insuperable sadness, and are oppressed with fear of death, they are kept wakeful, or have a sleepy vertigo. Many are apt to faint, and complain of very severe head-ach, and weakness, torpor and tremor of the joints. In the mean time the face is puffed and pale, the mouth is fœtid, the teeth become loose, and the tumid gums project beyond the row of teeth, lose their natural colour, suffer the blood to ooze out, and are eaten by exulceration or putridity. Nor does this destruction spare other parts of the mouth, hence it is no wonder if the salivary glands sympathise, and therefore afford greater extent to this foul distemper, stinking and filled with sanies, which gives no little trouble to the patients. Then, as the disease advances, the putrid soreness of the mouth creeps through the trachea to the lungs, and

from this additional cause there is a very disagreeable fetor of the breath. The pulse is found slow in some, unequal and intermitting, sometimes it becomes more frequent, and a *fever* which is called *scorbutic* follows, which returning in no order, shews a doubtful type; during this there sometimes appear exanthemata, very much resembling flea bites, and vanishing in a short time, which by the ignorant or careless are called by the name of *petechiæ*. This fever mostly shews itself under the form of intermittent, but the paroxysms return more frequently, and not at stated hours.

To proceed. Many patients complain of constant palpitation of the heart, tightness of the breast, or acute pains of the sternum, ribs, and back, like those of pleurisy. The scorbutic virus exerts its greatest rage in the abdominal viscera—fœtid belchings and hiccough arise from too great injury of the stomach, and unusual swellings of the epigastric region, or of the whole abdomen after eating. In some the œsophagus is so constricted, that food and even drink can scarce get to the stomach. The spleen is very often diseased, hence heavy or acute *pains*, of the left hypocondrium, often swelling, which mostly creep to the other side. Amongst various tormina of the belly, a most severe colic pain exercises the greatest tyranny, which sometimes resembles a nephritic fit, sometimes the colic from lead. The belly in the greatest number of patients is loose, with putrid or dysenteric stools. The urine is fœtid and lateritious, nor are the sweats of a sweeter smell. In the mean time wandering pains affect especially the joints and legs, and not unlike venereal pains, are worst at night, and encreased as the fever encreases. Some authors have treated of these pains under the title of wandering gout, and scorbutic; others have declared them to be related to rheumatic pains. Have not both been deceived by the affinity of the two, and been wide of the mark? We leave this to be settled by wiser heads. In the mean time the scorbutic patients can scarcely stand on their feet, walk with difficulty, and even go lame, until the legs fairly give out, as well from atony as from retraction of the muscles, or from swelled and stiff knees, which particularly happens to infants. In some the connections of the bones are deprived of their synovial liquor, which causes a crepitus in a certain motion of the part. Yea, many have said that even the vertebræ are affected with this disorder.

The skin of scorbutic patients, except the face and hands, is marked with red, purple, livid, or black *spots*, sometimes very small, and as we observed above, like *petechiæ*, are very numerous. But more frequently they are broader, even to the dimension of the palm of the hand, nor are they wanting on the

legs, of much greater extent. Sometimes *pustules* break out, especially in infants, while the aged are vexed with an itching scarcely to be allayed. In some there are swellings equalling the size of a pidgeon's egg, which for the most part affecting the head, recede after two or three days, and frequently return. The legs are infested with ulcers spreading far and wide, and very obstinate, discharging nothing but sanies, and in which proud flesh grows up, and prevents their healing. At length the blood, scarcely to be restrained, often breaks forth as well from the ulcers as from the nose, mouth, stomach, intestines, &c. concerning which, by way of conclusion we may add, that whether it flow spontaneously or be drawn by venesection, it has a livid, greenish or black colour, and sticks so to the cloths, that they can with difficulty be washed out with ley.

These are the principal *signs or symptoms*, usually observed in scorbutic diathesis, which differ little from those which accompany lues venerea, wherefore it is no wonder if the diagnosis of either disease, should often occasion great difficulty to even the most judicious and experienced. Yet if the antecedent remarks are sedulously and sagaciously attended to, and the manner of invasion brought to mind; if the diseased state of the mouth and other parts are subjected to examination, we may trace the character of each disease from nature herself. For the Scurvy, to begin from the mouth, attacks the teeth and gums, but the lues venerea invades the uvula, tonsils and palate: scorbutic pains creep from one part to another, nor seem deeply fixed; on the contrary, venereal pains stick longer in the parts affected and are deeper: the Scurvy affects the abdomen variously; the lues venerea chiefly attacks the head and limbs. Lastly, scorbutic ulcers seem more sordid and moist than syphilitic, &c. But it is easily gathered from the foregoing, that the diagnosis of either is involved in great darkness, if, as often occurs, the foregoing affections are complicated.

My experience proves that the Scurvy is propagated by contagion, and that when contracted in this way it exerts its principal severity: and the most experienced authors assert the same, which nevertheless some of no mean character plainly deny: So difficult it is to extricate truth from falsehood. The more ancient the Scurvy, the *more difficult the cure*, but it causes greater trouble to physicians, if associated with lues venerea. An adventitious Scurvy, such for instance as depends on any slight or accidental cause, is quieted and removed in a short time by the help of art, but when rooted and congenital, or originating from a peculiar constitution of the body, it commonly eludes the powers of the choicest remedies. Physicians know well that in this

state they often occur in hysterical and hypocondriac patients. No danger is to be apprehended from spots on the skin, so long as they do not tend to a livid or black colour. It is said that the hæmorrhoidal discharge is beneficial. Among the dangerous symptoms, difficulty of breathing is numbered. Nothing certain can be said concerning a diarrhæa, since to some it is beneficial, to others of no advantage. Very violent tormina in the intestinal canal, cause fear of gangrene; tumors quickly rising and decreasing threaten palsy of the members, scorbutic ulcers are thought most obstinate; contraction of the knees is scarcely curable, gangrene conspicuous to the view is truly very difficult to stop: Lastly, deep rooted Scurvy, draws after it the dropsy, marasmus, paralysis and convulsions; and some scorbutics, who as above noticed, are subject to fainting, are suddenly given up to the jaws of death.

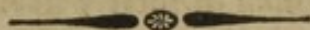
The *dead bodies* are disfigured with spots of a blackish purple colour and very broad, and soon putrify, which makes it necessary to open them hastily; yet when subjected to close examination, they discover the greatest destruction in the abdominal viscera, with sanious stagnations, morbid adhesions, &c. But if the parts are singly explored with care, the *liver* is found diversely affected, to wit, dry, schirrous, and stony, and its surface rough with various tubercles. The *spleen* is found in many contracted, wrinkled, and as it were cartilaginous, or swoln, and of immense size, and not seldom putrid. It is expedient to note of this viscus, that by many it is falsely considered the seat of the disease, since it is frequently found free from fault and altogether blameless. The sanguineous vessels of the abdomen, and especially the hepatic and splenic, sometimes contain tartareous concretions. The *mesentery* is presented to view, stuffed up, schirrous and covered with pus, and its vessels for the most part varicose. The *omentum* scarcely ever appears unaffected, but is plainly seen to be seized with putridity. The *stomach* and *intestines* are marked with gangrenous spots. The *viscera of the breast* often contract the same diseased appearances, but in most patients they are found unhurt. Lastly, the *bones* exhibit many things remarkable, to wit, their connections dried, their epiphyses broken, the ligaments eaten through; luxations, the ribs removed from their cartilages, &c. and, what is wonderful, the bones become soft and as it were cartilaginous. But many think that this is not an unfrequent phenomenon in lues venerea: but exostoses and caries, very common in this last disease, are very seldom observed in Scurvy.

The work would grow to an immense size, and become sickening, if I were here to annex all the remedies prescribed by the

host of writers, who have left nothing untouched, of the inexhaustible fountain of the *materia medica et pharmaceutica*. The design of this work obliges me to cleanse this Augean stable; wherefore, dismissing the useless articles, and such as are prepared for mere ostentation, I have mentioned those more select and approved. All are acquainted with nasturtium, cress, horse radish, and other antiscorbutics, which have rightly gained the name of specifics, but many are not aware that these plants have often been given without effect, or have done harm, unless their doses have been regulated by the precepts of wisdom. For the blood is heated by the long continued use of antiscorbutics, whence arise slow fever, phthisis, marasmus, &c. Hence it appears why the cure is promoted oftentimes by other remedies. These are diluents and temperants, and especially pure water drank abundantly. These views are answered by succory, fumitory, and slightly bitterish plants of the same nature. Vitriolated tartar affords no little benefit, nor is nitre of less merit, especially when hæmorrhage threatens. Lemon juice, and other vegetable acids are not only powerful in removing the present disease, but also take the first place among the prophylactics, which seamen are well aware of. The young shoots of the fir, and tar water are also much recommended. Diaphoretics are of service, while the pains are severe, and exanthemata are coming out. Among which the principal are, diaphoreticum minerale, antihecticum poterii, sal volatile succini, spiritus salis ammoniaci, elixirium proprietatis, &c. When the necessary remedies have been premised, the preparations of iron, have sometimes done good, but they seldom are of use, contrary to the usual order of things, when the viscera are obstructed. Lastly, the cold mineral waters are often used, as also milk, whey, &c. It may be beneficial to give cathartics *pro re nata*, but they are to be cautiously exhibited, and the milder ones are to be selected. By some the Peruvian Bark is praised, and not undeservedly, yet it is well to note, that the long continued use of this Bark, in the cure of intermittents, has not hindered the convalescents from falling into Scurvy. Narcotics cannot be given without danger, but if the sick are restless, or pains are predominant, they may be given to relieve the urgent symptoms. The same may be said of venesection, it is not less to be dreaded. Therefore it ought to be banished, unless aggravated and violent symptoms require it. Mercury does the greatest mischief, especially if it excite salivation, therefore laid aside by the more judicious, although some contend that by this remedy they have removed the Scurvy, who, it is fair to suppose, have taken lues venerea for Scurvy. Nevertheless the cure is to be undertaken with anti-

venereal remedies, if the foregoing symptoms are mixed with them, but to be managed with the greatest care in this case, lest we should *rouse a hornet's nest*.

Amongst *external remedies*, the best are gargarisms prepared from specifics, detergents and astringents, to wit, nasturtium, water cresses, hyssop, columbian seed, pomegranate flowers, red roses, the wood of guaiacum, and mastich, pomegranate rind, or Winter's bark, camphor, amber; sal ammoniac, alum, and other mineral acids—to which may be added tincture of gum lacc or myrrh, spiritus cochleariæ, &c. Some are fond of honey and barley water, others give nasturtium, cochlearia, sorrel, berberries, &c. to be chewed. Camphor is exhibited externally to prevent gangrene. Lastly, for contracted joints, that species of lesser houseleek called vermicular, is much approved both for internal and external use. Marine salt is applied with success, warm to the legs, and the hot baths, near the end of the disease, usually complete the cure.



LUES VENEREA.

THIS proteiform affection, which is sometimes rendered more tedious, and is brought to light, both by the internal and external use of warm water, appears in the form of almost all diseases; but it is well to remark, that this experiment has not succeeded in all. The Lues Venerea discovers itself by almost innumerable *signs*, or, is attended with such a troop of *symptoms*, that we can scarcely, for order's sake, confine within proper limits, even a sketch of it. Yet this genus of disease appears more remiss, and less violent and distressing in our times; or as some think, its virus is exhausted by time; or by the discovery of a safer method of cure, a few years past, is more easily and generally removed, so that those who are seized with it, can more confidently have recourse to well tried remedies, before the disease become deep rooted, and bring on certain destruction. It is commonly said, that the Lues Venerea, till then unheard of, was about the end of the fifteenth century, brought by the Spaniards from America into Europe. It is true indeed, that this disorder was first openly known in our country about this time, but whether it was formerly taken for leprosy, then very common, although now rare, is a doubt, which we leave for others to solve.

The *first sign* of Lues Venerea, is best learnt from the candid relation of the patients, not desiring to conceal their wickedness. For this disease putting on so many appearances, is more clearly understood when we have an open confession; but otherwise its diagnosis is very intricate, which thus shews itself. This affection for the most part appears a short time after embracing an infected woman; but sometimes does not become manifest until after many months, and even years, lurking for a long time in the blood without harm. Yet most patients complain after an impure coition, of heat of the genitals with strangury, and about three days afterwards a gonorrhæa comes on, of which we shall treat below. The prepuce and sometimes the glans penis, is seized with inflammation, little ulcers, pustules, tubercles, and fleshy excrescences, &c. and the penis incurs danger of a much greater degree, to wit, an inflammation, which after arriving to a certain height, threatens gangrene. In many the testicles swell with inflammation, and from this source proceed at length hydrocele, sarcocele, and varicocele: buboes swell out, concerning which in their place. The anus is infested with fici, mariscæ, condylomata, rhagades, and scissuræ, or even fistula itself. The hæmorrhoidal vessels swell exceedingly, and often run into suppuration, or take the nature of callous carcinoma. These are the *visible signs* of Lues Venerea, which however are not infallible, since it does not seldom happen that gonorrhæa, buboes, pustules, and ulcers of the genitals, stuffing of the testicles, &c. proceed from another source. But the above symptoms afford no little suspicion of the latent virus, if they do not yield to the usual remedies; or if they recur a short time after being removed by any means. The Lues Venerea is sometimes attended with *anomalous fever*, acute, slow, continued, or intermitting. Lastly, to end these general symptoms, some complain of a heat in the palms of the hands and soles of the feet, when otherwise free from fever.

The Venereal virus exerts its rage chiefly *in the head*, for it produces very severe head-achs, convulsions, vertigoes, tremors and palsies. There appear in the face and scalp, as well as in the alæ nasi and corners of the lips, pustules *sui generis*, the series of which affords a kind of evidence of the existence of the disease. From the pericranium there arise cystic tumors, which affect the loins underneath with caries. There take place ophthalmiæ, lippitude and various other affections of the eyes. The ears are subject also to injuries, such as tinnitus, deafness, pain, inflammation, and ulcers. But the mouth gives more certain signs of the latent virus, for the fauces, uvula, tonsils, palate, and though rarely, the gums, are eaten off by wide

spreading ulcers. Nor do the nostrils escape, which are also dug out in the same manner, with caries of the subjacent bones, in the same places creep out polypi, sometimes callous, sometimes having the nature of cancer. As the disease advances, the bony fornix of the palate is eaten off in some: Hence arises a hole that no art can close up, and the voice thereby becomes, as it is called, nasal. It is easy to suppose that from these diverse defecations of the mouth and nose, a most fœtid halitus must proceed. A disease of the *lungs* also favours this fetor, which is known with ease by hoarseness, hæmoptisis, phthisis and asthma. Nor does the heart remain unaffected in this state of things, as we may well conjecture from palpitations and faintings frequently recurring.

The *abdominal viscera* rarely sympathise, if we except the uterus and other organs of both sexes, which are variously diseased, for instance, with stuffings, inflammation, schirrous ex-ulcerations, &c. Moreover, as we have hinted, the inguinal glands often swell, whence buboes occur in this disorder very commonly. The virus seldom attacks the cervical or axillary glands. But from this stock proceed cystic tumors of different size, and appearing in different parts as well as in the head, and lastly, tubercles affect the tendons and ligaments. Many are afflicted with very severe *pains* of the joints, which are so deep, that they seem to reach the bones, and are worse at night. They mightily tear one part or other, or are scattered over various parts, very dissimilar. In the mean time, there break out in many, soft exostoses, or elastic, indolent, or painful, by which the surrounding parts are injured. The *bones* are also infected with caries, whence are produced the most fœtid and obstinate ulcers. There are great *chops* in the palms of the hands and soles of the feet—the toes are lamed by paronychiæ, the nails, hair, eye-brows, &c. fall off.

Lastly, the skin is variously affected, to wit, eaten by phagedenic ulcers, and marked with diversified spots of a blackish, purple, or livid colour, it is also spoiled by scab, herpes, and other pustules, either dry, humid, squamous, &c. Here it is right to observe, that all these signs or phenomena usual in this disorder, never all appear in the same persons, but they each vary in the patients severally, according to innumerable circumstances.

We have already spoken of the difference which occurs between scurvy and Lues Venerea, from the concurrence of signs or congeries of symptoms: but it may be of service to add to these, the parts through which the siphilitic contagion is propagated, to wit, the genitals of both sexes, after an impure coition,

and the lips of the dalliers and whores tainted with their fervent kisses, the mouth of sucking infants, the nipples of nurses, and lastly, the skin of the fœtus, which has contracted this taint through the womb of the mother, affected with little ulcers, pustules, or in some other way. In this class are included gonorrhœa, and swelling of the testes and buboes, which occupy the neighbourhood of the pudenda. Infants are doubtless very often affected by the virus of the mother or nurse, but there is some doubt of other modes of contracting it. Although various histories are in circulation, of mid-wives who received the infection by the hand applied to the womb, or by being otherwise engaged in the chambers of the diseased. It is incumbent in noticing the signs heretofore mentioned, to have respect to the state of the genitals of both sexes. But others occur peculiar to the women, to wit, cancerous tumors of the breasts, suppression of the catamenia, or an immoderate flow of it; stuffing of the uterus, ulcers, &c. and many moreover become barren, and miscarry, or bear children covered over with erysipelaceous redness, and spotted with different pustules or little ulcers.

From the foregoing observations it is evident, that Lues Venerea is almost without danger, if it create no pain, nor obstruct any functions; but on the contrary it is to be considered *dangerous*, when the internal parts are injured, and there arise numerous and grievous symptoms. It admits of difficult cure, if implicated with scurvy or scrophula, where it has by length of time become deeply rooted, it can scarcely be removed. Lastly it is thought incurable if the principal viscera or vital organs have become tainted. The case is of a dangerous nature in infants and old persons. Lues is of little damage to women who menstruate, but it brings a host of bad symptoms where menstruation is wanting at the stated times. Lues, finally, if left to itself, or to the powers of nature alone, mostly ends in dropsy or marasmus.

From the *history of dissections* it is learnt, that the muscles are imbued with a kind of pituitous fluid, that the involucra of the organs, as well as the other membranes, are overspread with various pustules or tubercles, that the viscera are obstructed in different ways, and contaminated by a certain collection of matter, that the cavities and recesses are filled with serous or sanious stagnations. When the head is opened by the saw, and subjected to accurate examination, caries is detected in the bones of the cranium, face and ears. Exostoses are found in the internal surface of the skull, acrid tumors of the dura mater and parts adhering are obvious. The vessels are distended with concretions called polypous, the plexus choroides varicose, and filled

with hydatids; lastly, they are here and there found to be purulent and putrid, &c. The breast also exhibits many things remarkable, when subjected to the anatomical knife, to wit, the lungs stuffed up and schirrous, filled with tubercles and abscesses, ulcerated, putrid and gangrenous. The trachea and bronchia as if eaten with caries, the thymus gland also affected in like manner, which often brings the œsophagus into consent. The *abdomen* shews no little injury, for when the glands are attentively considered, the mesenteric especially, they are found stuffed up, callous or covered with putridity. The lymphatic vessels, creeping about here and there, appear to the naked eye knotty. Every where occur hydatids, phlogoses, abscesses, exulcerations, schirrus, anomalous tumors, &c. Besides, in some the liver, spleen, and pancreas are infected, but with these affections, the uterus, ovaria, vesiculæ seminales, prostates, and other parts of generation, are more frequently infested. Many of the bones are found carious, both of the trunk and limbs, which reaching to the marrow itself contaminates it. There are found some exostoses or asperities, which had been hid before. Various authors have mentioned *mollities ossium*; but we have above doubted whether this rare phenomenon is to be referred to Lues Venerea rather than to scurvy. Nor are the ligaments free, which like the bones, are swelled and carious. Lastly, quicksilver is met with, in those especially who have died while under a mercurial course, not only in the concave base of the cranium, but even in the capsular ligaments of the joints, and in the cavity of the bones, which indeed is well to bear in mind.

To come to the method of cure: It is well known that mercury, penetrating to the secret recesses of the body, is a specific remedy of Lues Venerea, and in most general use; whether it reach the blood through the pores of the skin, as by the help of ointments, plaisters, or fumigation; or is taken inwardly by the mouth, in the form of ptisan, powder, pills, &c. Hence spring numerous methods of cure, which have their respective merits, provided the object be, that the mercury being diffused in the blood, may be retained a long time within the vessels, and be gently carried to the intimate recesses of the body. Care must be taken that it operate without force, lest it occasion ptyalism or diarrhæa, for these evacuations ought studiously to be avoided, since a thousand observations prove, that they are not only useless and vain, but hinder the entire evacuation of the virus, by carrying off the principal part of the mercury, by the mouth or belly.

From the various methods of cure above noticed, *that* seems to have no equal which is performed by the application of Un-

guentum Neapolitanum, carried by friction into the pores of the skin, at proper times—but nothing is to be attempted, until the way be prepared for the tainted humors to yield to the powers of the mercury. With this view, having premised venesection and cathartics, temperants are prescribed, milk, whey, warm bath, &c. nor ought the aforesaid cautions to be neglected in other methods of cure, which would otherwise become inert or hurtful. Nevertheless we may sometimes deviate from this rule, if the case being very urgent will not suffer any delay of preparation. But we must always attend to diet: and that a milk diet, if nothing forbid, is more suitable I have learned by repeated experience.

About two ounces of mercury, from which four or six ounces of ointment are prepared, ought to be used for the whole anointing, having regard to the strength, and indeed sometimes this dose is lessened, but rarely increased. Frictions, to be repeated every third day, ought not to be used more than twelve or sixteen days through the whole course of the cure, which is mostly performed in forty or fifty days. This *unguentum Neapolitanum* is to be applied to the back and joints: for instance, the feet are first to be anointed, afterwards the legs, then the knees, &c. nor are the clothes to be changed during the prescribed administration of the mercury. If the medicine fall upon the mouth, or occasion any great disadvantage, it is best to supercede the anointings, and indeed clean cloathes must be put on, as well of the bed as the body, &c. which change not succeeding we must have recourse to cathartics, that the humors which fly to the head may be diverted to the feet. We must abstain from friction during the catamenia or pregnancy. For tender infants, when infected, the blood of the nurses ought to be impregnated with mercury, that an antivenereal milk may be afforded them, and by this remedy alone many have been restored. Nevertheless mercury given in whatever form, is sometimes inadequate to remove the complaint—this is the reason why judicious practitioners, after administering mercury, take to sudorifics, which complete the cure, namely to guaiacum, china root, and sarsaparilla, which being omitted, the disorder frequently returns, and must again be treated with mercury, though rarely with success: which those who consult the health of their patients, ought not to forget.

When soreness of the skin prevents mercurial frictions, we may try the virtue of fumigations, but with caution, that the head may be guarded from the smoke, which is offensive to the eyes, teeth, and lungs. To this end, are exhibited cinnabar, æthiops mineral, *mercury killed by sugar*, or other mercurial pre-

parations, some add to these olibanum, amber, storax, mastich, turpentine, &c. from which are prepared lozenges, troches, &c. The time of fumigations is from three or four minutes to a quarter of an hour, according to the strength of the sick, and for each fumigation may be taken one or two drachms of cinnabar, interposing three or four days, so that for every term of cure, which is contained within forty or even fifty days, not more than two ounces of cinnabar may be used. It is now ascertained by numberless experiments that this method of cure is not without danger, nor safer than anointing: it is however not to be rejected, since sometimes, in respect of circumstances and accidents, it excels the other methods of cure. It is principally useful in cutaneous foulnesses, and in these cases has been of service to many: but it is a maxim with the experienced that it is often fruitless labour against infected viscera. The weak and lean do not well bear fumigations, phthisical patients cannot admit them without harm. We must by all means guard against the access of the smoke to the breast. And indeed experience proves that some that submitted to this mode, whose lungs had been previously unhurt, have fallen into phthisis.

In the mean time, both methods are often thought unequal to overcome the morbid matter, even after the second or third experiment, wherefore it is necessary to try another, which is twofold, and consists in *mercury* under different forms *taken by the mouth*; or vegetable *sudorifics*. From both of these sources the mountebanks and empirics, more daring than physicians, take their liquors, ptisans, powders, pills, and other arcana, which sometimes answers the expectations of the sick. Nor do these strollers despise some obsolete remedies, the use of which, formerly most noted and approved, I know not by what means has become neglected. Of the greatest esteem are panacea, arcanum, corallinum, aquila alba, turpethum minerale, precipitatum rubrum, and numberless other preparations discovered by chemists, which taken inwardly, get to the blood through the lacteal vessels, and exert their force against the venereal virus, often resisting mercury sent in by the skin, but evidently overcome by these. The manner of using them is simple. The panacea for instance, which is like all the rest, is exhibited every day, *premissis premittendis*, first, in a small dose for instance from four to six grains, this dose may be gradually increased until it become a scruple, and then by little and little diminished in the same ratio, so that the last dose shall not exceed the first. About six drachms of the panacea is commonly used to perform a cure, during which we must be very cautious, in respect of the doses, also in other modes of cure, lest a

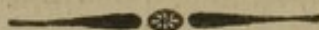
ptyalism be promoted, especially if some signs of this excretion be observed in the mouth; for this is the compass which directs the steps of the judicious. Moreover this mode is not more expeditious than the others, and requires the same cautions and preparations. This is proper to remark, concerning any administration of mercury, that we can not ascertain exactly the necessary quantity for extirpating the Lues, nor tell the exact number of days, to which the cure is to be limited or extended, since the Venereal Virus is sometimes easily, sometimes more difficultly to be overcome. But the judgment of the cure must be directed by close attention to the strength of the patients, their age, sex and temperament, the duration and degree of the disorder, the misfortunes and accidents; not neglecting the accurate observation of all the symptoms as they vanish in process of time. Yet be careful lest the poison, laid asleep as it were, should sooner or later return, which it is not unknown to any practitioner, has often happened, even when all things have appeared to succeed properly, and in those who have not exposed themselves to any danger of a new infection.

Among the various mercurial preparations, no one scarcely denies that *the corrosive sublimate* is mostly to be dreaded, since it holds almost the first place among caustic poisons. Yet the very celebrated VAN SWIETEN brought this hitherto neglected remedy into familiar and very successful use, and now it is plain from very numerous observations, that this article, otherwise the most noxious, affords in a skilful hand, the most exquisite and innocent anti-venereal, so that this eminent author did not hesitate to give it the preference of the rest. Nor is the manner of using it difficult; to wit, twelve grains of corrosive sublimate are dissolved in two pints of rye liquor once rectified; let one or two table-spoons full of this solution be given night and morning, drinking at each dose, one pint of a decoction of barley, with a third part of milk, which decoction affords a common drink. This remedy is not to be used without the necessary premises, and observing the usual cautions, which is to be continued until the symptoms of Lues disappear, and things return to their halcyon state. If the disease occurs of a light nature, and not deeply rooted, it ought not to be used beyond three weeks, beginning with the prescribed smallest dose. But when we have to contend with Lues more virulent, and of longer date, the dose must be encreased, and the cure extended longer. Lastly, in this method, as well as in the others, ptyalism must be avoided—Hence there must be an armistice when this threatens.

The use of *sudorifics*, formerly very celebrated, has now become obsolete, and undeservedly laid aside; such as quaiacum, sassafras, China root, and sarsaparilla: for their efficacy in the extirpation of Lues Venerea is established by almost numberless and very accurate observations. Nor are the more judicious practitioners ignorant, that by this remedy alone, at this day rashly omitted, the syphilitic poison has many times been eradicated, after mercury has been unsuccessfully and repeatedly administered. And indeed, as we have just hinted, it is often brought into use by the experienced, for the safer completion of the cure begun by mercury, or where it seems to have been performed. Guaiacum excels the others of the same nature, and therefore is preferred before them by the greater part of physicians: Nor is the manner of using it difficult, for instance, a decoction of it, in the quantity of two or three wine-glasses full is taken every day, for forty or fifty days, and longer, as the case may require, with which the most abstemious diet is to be used, and the patient ought not to rise from his bed. Another decoction of this wood, which is called *Bochet*, is prepared like a ptisan, for ordinary use, and it is continued beyond the term mentioned, or even a whole month after the cure is performed. Yet it is well to remark, that the lean and debilitated can not bear the force of sudorifics, hence the necessity in this case, of giving the dose cautiously, and in small portions. **BOERHAAVE** relates that he cured a young man of aphrodisiac Lues, with carious bones, after the best mercurials had been given to no purpose, by the decoction of Guaiacum alone given as an ordinary drink, *sweats also being promoted by the vapour of spirit of wine*, and very low diet assisting.

It is expedient to know, that some symptoms even after the disease had been eradicated by either method, have been delayed, and sometimes remained: but experienced practitioners are apprehensive of no relapse, since when the fomes of the disease is extinguished, they are dispelled with the greatest ease, and cease spontaneously in process of time. The *Gonorrhæa* among other *remains* seems more troublesome, but by the help of milk or other demulcents, it is removed with little trouble; as also by mineral and martial waters, and lastly by balsamics and roborants. Pains also sometimes elude the force of anti-venereals, but at last vanish by milk diet; temperants and mineral waters also assisting: all which being of no avail, diaphoretics are profitably administered, nor are topical emollients, demulcents and anodynes to be omitted, which at least cause a truce, until other remedies complete the cure. If scab, herpes, ulcers, caries of the bones, &c. remain, which, however rarely happens, they re-

quire nothing but slight treatment, having no regard to their primary cause. These are the remedies, perhaps too much contracted, which we were to treat of in Lues Venerea. Those who desire more, may read the treatise of the skilful and learned ASTRUC, who has spared no pains in the deep investigation of this matter.



SCROPHULA.

THE Scrophulous Virus, like that of the venereal, often lurks a great while in the body, or is complicated with other disorders, so that its *diagnosis* is involved in darkness. Besides that the Scrophula (*les Ecouelles*) appears to resemble lues venerea, unless they be the mere product of this last affection. For it has often been observed that syphilitic and even scorbutic parents have had Scrophulous children. Moreover, the specific remedies for lues venerea, to wit, mercurials and sudorifics, agree also very well with Scrophulous patients. Lastly, the said diseases sometimes present the same appearance, or are plainly attended with like symptoms, so that we can say nothing certain concerning their difference. Yet the lineage of Scrophula shews itself different, for it is the judgment of physicians, that this often owes its rise to bad food, or to foul and putrid water, to the milk of a nurse that is pregnant &c. Besides it seems placed beyond all doubt, that Scrophula is propagated from one to another, or is contracted by simple contagion, from whence we learn, that this affection is sometimes congenital, sometimes adventitious, and it is of the greatest moment to attend to it in this double point of view.

The Scrophula shews itself mostly by tumors breaking out, which have been called among the vulgar, *Humeurs ou Tumeurs froides*, (cold humors or tumors) yet the internal parts are not considered free, and especially the mesenteric glands, as will abundantly appear from dissections, to be treated of hereafter. Sometimes the disease comes on in disguise, before it discovers itself in tumors, which affect the lymphatic, salivary, and thyroid glands. These prominences even besiege the joints, and attack the cranium, which is not rarely eaten by caries, and they swell out very thickly in the neck, near the ears, below the inferior maxillary bone, and above the trachea which is also affected with caries. It frequently invades the axillæ, groins and breasts, nor does it spare the eyes, nose, lips, elbows, hams,

knees, hands, feet, fingers and toes. These tumors grow upon the membranes, tendons, ligaments and even bones themselves, which on that account swell and become carious: whence arise the most severe pains, and that terrible symptom, very familiar in the Scrophulous diathesis, barbarously denominated *spina ventosa*.

Scrophulous tumors which seem to possess an intermediate nature between phlegmon and schirrus, adhere firmly and are mostly immoveable. One while they rise to a certain mass of unequal surface, and appear conglomerated; at other times they are disseminated like a chain about the neck, mostly of the same colour with the skin, they with difficulty inflame or suppurate, but very often they become callous, and sometimes are like stones for hardness. Ulcers of a bad kind arise from thence, and by their long continuance infants fall into hectic fever and marasmus: they not unfrequently take the nature of cancer, or degenerate into the most loathsome fistulæ. The prominences and inner edges of these ulcers are painful and callous, and are with difficulty brought to heal; but if after long and tedious labour they are closed, the cicatrices remain whitish; these are very conspicuous, and are indelible by any art. There occurs another genus of these tumors, viz. the *cystic* which contains matters of various kinds, or mere limpid and inodorous water. In this class is also to be taken bronchocele, occupying the thyroid glands, which by its size often compresses the trachea, and even the æsophagus. Yet far be it from us to say that all anomalous tumors, which have the name of *Gouetres*, and affect the larynx or other parts, are to be considered Scrophulous, as some rashly imagine, since it appears clearly that these proceed from numberless other causes. They do not judge more properly who think that rachitis, defluxions on the joints, or œdematous swellings of them, fistulous ulcers, achores, &c. (sometimes to confess the truth, symptoms of Scrophulæ) always and indiscriminately proceed from the same source, which indeed contradicts reason and experience.

Nor is the *Lues Scrophulosa* contained within these limits, as we have already hinted, but also produces sublingual tumors, infarction of the tonsils, polypus and ozæna of the nose, opthalmies and *agilops*, or incipient fistula lachrymalis, and other injuries of the eyes. It often also falls upon the breast, hence sarcoses in the trachea and bronchea, hæmoptisis, phthisis, asthma, &c. Nor does it spare the abdomen, for the most part swelling it, besides also the mesentery, which is rightly supposed to be the principal seat of the disorder. It affects the liver, spleen, omentum, &c. Under these afflictions the sick grow tabid, and

are rarely free of fever, or fall into dropsy or paralysis, which last diseases when arrived to a certain grade, bring many to the grave.

The Scrophula usually *invades* infants from four years of age, and adults, but rarely extends beyond puberty. If it pass these limits it is followed by cachexy or gout, or other chronic disease, mostly eluding medical art. When Scrophula takes its rise from waters, aliments and contagion, or from any other external and evident cause, it is generally thought favourable. But it becomes otherwise, if it be congenital or with hereditary taint; of which kind soever it be, it is hard to remove.

Many have supposed that those infants were more obnoxious to this affection, who were of premature genius, nor does experience contradict this. The cure may be successful when the tumors are soft and recent, moveable and free of pain; nor is there less hope, if disposed to inflammation, and not averse from suppuration. But those that are immoveable, schirrous, painful and livid, are most inveterate and obstinate; those affecting the trachea and larger vessels, as also the tendons, ligaments, and bones, are very troublesome. Lastly they are fatal when partaking of the nature of cancer. The ulcers arising from hence, being sordid and virulent, are very difficult of cure; or if by incessant labour they heal, the suppressed virus breaks out at another part, and there a new ulcer is formed, very much like the first. Lastly—caries of the bones of the hands and feet, maxillæ, &c. create the utmost trouble. Finally, to contract all these into one, our *prognosis* ought to be derived from the duration of the disease, as well as from the nature of the parts affected; otherwise it is always dangerous, if the virus pent up in the viscera brings on marasmus or dropsy.

In the external tumors when subjected to the anatomical knife, there is found a fluid ichor, somewhat bloody, or having yellow dregs; in the neighbourhood of these is seen a matter as if fatty, concrete and fleshy, sometimes very much resembling lard, such is often observed in cancers, with the subjacent bones affected with caries. There is discovered a series of lesser glands heaped up as it were in bunches, which sooner or later become the germs of so many seeds of Scrophula, &c. It is plain from examining the viscera, that the internal parts contract no less injury; for when the abdomen is opened, the mesenteric glands are found much enlarged, which sometimes are as large as a walnut, and even a man's fist; they are observed schirrous, callous, and almost stony, or like anomalous tumors, contain a kind of sebaceous, cheese like or purulent matter. The lacteal vessels are drawn into consent, the receptaculum PEQUET-ianum,

and thoracic duct, which are injured in a variety of ways. There occur polypous sarcomata in the stomach, and intestinal tube, adhering inside and outside; the bladder, though rarely, exhibits the like appearance. The liver is discovered wrinkled, dry and contracted, or schirrous, and full of tubercles, and like a stone; also it is of very ample size, and contains abscesses filled with whitish or bloody matter. Lastly, in some it is seen deformed, and receding from its natural situation, with the gall-bladder distended beyond measure. The spleen is diseased in like manner, which is even changed into pus, so that it flows out like pap, and indeed it is found quite decayed. The omentum, pancreas, uterus, ovaria, &c. suffer the same defecations, which is the cause why stagnations either serous, sanious, purulent or fœtid are found very commonly in the abdomen. Nor does the virus spare the internal part of the breast; for the thymus in almost all, is found schirrous and of stupendous size. The involucrum of the lungs is met with thick and callous. The substance of this viscus is schirrous, full of tubercles, purulent and putrid, yea, and in some persons one or other lobe of this viscus is quite decayed, the vacuum being filled with a kind of whitish or gypseous matter. Moreover, exulcerations of the pleura present themselves to view, tumors also growing upon the membrane, with caries of the neighbouring rib. The pericardium shews the same vitiated state, which otherwise is annexed to the surface of the heart, or swelled with water. Nor are there wanting morbid adhesions, and stagnations of different sorts, to wit, serous, lixivial, muddy, and intermixed with particles of blood, &c. floating round the said viscera. We add nothing concerning tumors, caries, and other injuries above noticed.

The principal point of *cure* turns on aperients, incidents and sudorifics. But these medicines are found to be inert or hurtful, unless venesection be premised, if nothing hinder, and after clearing the primæ viæ, we must repair the diathesis of the blood by the help of whey, and other diluents, temperants, depurants and mildly opening antiscorbutics. Aliments of milk often have an excellent effect with this view, but do not agree with all. To the same end are much recommended the roots of wild myrtle, scrophularia, and polypody, as also the leaves of coltsfoot, rue, muraria, nasturtium, cochlearia, &c. Ipecacuana is recommended in the first place in this state of the cure; but cathartics frequently repeated, have in many cases been exceedingly useful throughout the course of the disease. Which being premised, we come to more efficacious medicines, among which are millepedes, martial, gummy and saponaceous articles,

magnesia, and other absorbents; bitters, and especially Peruvian Bark are much spoken of by some. Calomel, panacea, ætheops mineral, and other mercurial preparations are much approved, which used for that purpose, a long time and in repeated doses, have done much good to many. To these we may add lime water, which cautiously exhibited has been held in esteem. Among the more select sudorifics are enumerated vipers, sassafras, antihecticum *Poterii*, and other things of the same kind. Nor are the various mineral waters to be neglected; calcined sponge in the quantity of about one drachm, evening and morning, is among the number of choice specifics. Pumice and other absorbents, seem to promise the same virtues. Also the remedy called *Rotrou* is much recommended, which however is used by few, on account of its difficult preparation, whence it is wanting in the greater part of the shops. There are some who prefer the most common mercurial ointments, but this method ought to be the last recurred to, which we have seen to succeed not happily. The virtues of plantain externally applied have very lately been much extolled, and nothing hinders that they should be tried. Lastly the cautery and seton have helped many. As respects the Scrophulous opthamy, it requires the usual remedies, to wit, venesections, cupping, leeches, blisters, &c. concerning which in their place. We will leave the other symptoms of Scrophula in silence, since they do not demand any particular method.

EXTERNAL TUMORS require a particular cure, which consists in resolvents and maturants. From a proper view of the appearances, physicians betake themselves to one or other method: yet the first attempts are chiefly made with resolvents. Among the innumerable articles which are used at pleasure for each, the best are thought to be the leaves of the dwarf elder, cooked under the ashes, calaplasms of the roots of briony and wild cucumbers, fomentations of lime water, the fumes of olibanum, karab and tacamahaca, diachylon plaster with gums, (de vigo) of cicuta, diabotanium, &c. which having been tried in vain, on account of the tumor refusing resolution, maturants ought to be used, to wit, the more common emollients and digestive cataplasms, by the help of which the matter is sometimes ripened, and an abscess formed, the opening of which, even if mature and fluctuating, ought not to be hastened, that by the detention of the matter the Scrophulous glands may be entirely eaten out. for a similar reason the healing of the ulcer is not to be hurried, but rather cathartics must be exhibited, among which the solution of corrosive sublimate in plantain water is recommended. These last remedies associated with digestives and detergents will eradicate the Scrophulous remains,

which otherwise continuing after the uniting of their edges, are again without doubt re-produced. Nor do experienced practitioners omit even caustics themselves, which if they reach the genuine fomes, do great service. But if the said tumors either whole or open, with tumid veins about their surface, put on the nature of cancer, they defy all the most powerful topicals. Wherefore, nothing can then be given but demulcents and anodynes, unless we can take them out with the knife, which operation requires the skill and dexterity of a surgeon. Nor is it void of danger, if the glands affected, although moveable, should adhere to the neighboring nerves, and greater vessels. It will be safer indeed to attempt those that are prominent with simple ligature: but when they are deeply fixed, both methods of cure are clearly forbidden. It is well to add, before I take pen from paper, that this very troublesome cure of Scrophula is mostly extended to years; since this disease is rarely subdued, unless by puberty, beyond which it is often protracted through the whole course of life, under different forms.

ARTHRITIS.

THIS disease, the Gout, is evident to all if it fall upon the feet or hands with swelling, pain and heat. But it is otherwise in lighter attacks, which are scarcely discovered except by experienced patients. The *diagnosis* becomes more intricate, if the Gouty matter affects other parts, and especially the viscera, without any previous paroxysms, under the appearance of another disease, which the incautious, without the least suspicion of its real nature, often treat with unsuitable remedies. The Gout rarely attacks children under puberty, and those who are castrated, it spares the weaker sex before the menses appear, except chlorotics, who are liable to it—but its greatest frequency is among the old, especially the opulent who grow grey in early life, and often affects hypocondriacs and hysterical persons, especially if the hæmorrhoids or catamenia have been suppressed. An idle and domestic life, high living and delicacy, daily feasting, and the liberal use of wine and ardent liquors, and lastly venery. Every one knows that calculi are generated from the same causes, and that both these diseases proceed from the same source, whence it happens that many are alternately excruciated with Gout and nephritis, and aged persons are mostly afflicted with both diseases. Rheumatic and

sciatic pains come the nearest to those of Gout, but scorbutic and venereal pains are of a different kind, often, however resembling the arthritic and rheumatic, and so imitate their type, that even the more skilful may be deceived.

The Gout, fixing on the tendons and ligaments, exerts its rage in the feet, hands, knees, and elbows: yet it does not continually tear the patients, but recurs by paroxysms rarely without fever: *The affected part* painful and swelling, is now seized with slight inflammation, attended with heat, redness, and a sort of pulsation; and again it appears ædematous and as it were flatulent, with torpor and cessation of the pains; hence the division of Gout into *hot* and *cold*. The pain therefore appears under various grades, one while mild and obscure, of which the sick scarcely complain, again it is most violent and exerts itself like a tyrant, so that it is in a wonderful manner exacerbated by the slightest touch of the clothes. About day-break it mostly abates and ceases, so that it does not become worse by any inattentive motion. The arthritic matter more frequently leaves the part affected, first, that it may rush upon another part, namely the knees, hands, &c. and the distress of the patients is protracted, until an itching coming on, there is hope of the paroxysm soon terminating.

ATTACKS OF GOUT upon the feet, are not continued beyond about fourteen days, in the young and vigorous; but become longer, and are extended to many months in the aged and weak—but in proportion to their living, and other numberless circumstances, they suffer various ways, in respect of duration and severity. There is no certainty concerning the intervals of accession, or intercalary days, but mostly they return at stated times, unless their accustomed periods are interrupted by the passions of the mind, or a loose manner of living. There is great likelihood of there being obliterated in chronic Gout, when the pains, although mild, become continued, unless the dog-days should give them a kind of cessation. As the disease advances, the fingers and toes become stiff, crooked and variously distorted, and unable to perform their offices. Callosities protrude from the phalanges, occasioned by a certain cretaceous matter, impacted on the ligaments and involucra of the tendons. For which reason the Gout is called *knotty*—which tubercles sometimes opening, afford an outlet to the aforesaid concretions.

Yet the Gout invading old persons for the first time, is not attended with severe pains, nor subjected to the ordinary periods. It is well to add that, when this affection at any age, is associated with its relation rheumatism, as often happens, this last disease seems to obtain the predominance.

It is the universal opinion that Gouty persons are subject to belchings and flatulency, to costiveness and piles, to strangury, &c. But the greatest misfortunes follow from a metastasis of the gouty matter, which receding from the joints, threatens the viscera; wherefore if it be transmitted to the cerebrum, there arise head-achs, delirium, vertigo, lethargy, apoplexy, palsy and trembling. If it attack the external parts of the head, there follow ophthalmia, ear-ach, tooth-ach, quinsy, &c. If it fall upon the breast, it excites catarrhs and inflammations, phthisis and hæmoptisis, asthma, anxieties, faintings, &c. If it affect the abdominal viscera, there arise nausea, vomiting, loss of appetite, diarrhæa, dysentery, heat of the stomach, or most severe heart-burn, colic and nephritic pain, &c. in persons thus affected, the urine when at rest, lets fall a kind of gypseous sediment. Besides many complain of a certain tightness about the ilia and hypocondria, or a troublesome sensation in the bowels. When the Gout is concealed under these appearances, the nature of the disease is easily discovered after the most usual attack is past, but it lurks obscurely, unless there has been a previous accession in the feet or hands, which, it is well known to physicians, has often happened, in advanced age.

Congenital Gout, or contracted in childhood, is thought *incurable*: the adventitious when recent may sometimes be subdued. But the chronic and deeply rooted, from whatever cause it proceed, is with difficulty put to flight. SYDENHAM, in truth the Prince of his cotemporary physicians, who has minutely described this disease under which he laboured, may serve as an example. For this great man candidly asserts, that having tried all remedies for thirty years unsuccessfully, he, together with those, who denied remedies, or for fear of expence, employed no physician, was still afflicted with most obstinate Gout. Moreover, we every where meet with those who have complained of Gout through the whole course of their lives.

As it respects the paroxysm, the most acute pains betoken the shortest and clearest interval, so that they have been esteemed as the salutary efforts of nature, even in those who avoid delicacies. We may also augur well concerning a swelling of the pained part, soon running to inflammation, which like a critical defluxion, promises the first intermission; thick, turbid, and muddy urine also predict the end of a paroxysm; the examination of which the ancients did not despise in all the affections of the joints. Gout becomes weaker by age, but its paroxysms are longer, so that the sick are evidently without the usual intermissions. It is proved by multiplied experience, that an attack of Gout has been of service in quartan fever, asthma and dropsy,

and that old Gouty persons have been longlived. This kind of sickness is not dangerous, if the morbid matter affects the joints only; but the thing is more doubtful, if the viscera, namely the heart and lungs are reached. There is less danger, if the disease falling on the primæ viæ occasions vomiting, diarrhæa, or even dysentery. Since a number of observers testify, that these evacuations have been frequently salutary.

ANATOMICAL EXAMINATION exhibits in the articulating knobs of the bones a certain cretaceous or sandy matter, by which, not only the tendinous involucra and the ligaments are covered, but, also the bones themselves removed from their proper situation, are invested. Yet it is of use to remark, that none are found in the ligamentous capsules of the joints. Stony formations are found in the brain, heart, lungs, &c. and small sand and calculi in all the receptacles of the urine. The kidneys are presented contracted and wrinkled, the spleen callous, the liver granulous, &c. to say nothing of other appearances common to almost all diseases.

There are not wanting *remedies* for Gout, of a prophylactic and palliative nature, which otherwise, as already hinted, is with difficulty removed, especially in old persons, the contracted pores of whose skin, denies egress to the usual effluvia of perspiration. It is best to abstain from every cure *during a paroxysm*, and the whole business must be left to nature, or very low diet, unless the violence of the pain should require lenients and emollients. I can easily believe that venesection cannot be attempted without danger, at the commencement of the attack, for that this is rarely of service in plethoric cases, and often prolongs the stage of the disease, and not rarely brings the sick to their end, is plain from hundreds of histories. I am aware, that blood-letting during the paroxysm, has sometimes dispelled pain from the affected foot like a charm. But whether this rash method, in opposition to the efforts of nature be free of danger, we leave for examination to those who are not ignorant, that many sick of divers diseases, have at last paid by death for this ill-timed relief. Cathartics ought not to be prescribed, unless in case of urgent necessity. But nothing forbids the keeping of the bowels free by enemata. By the use of narcotics, which SYDENHAM was perhaps too much addicted to, daily practice testifies, that the Gout becomes more obstinate: but far be it from us to impeach those, who, following the footsteps of this eminent author, comply with it when very urgent, during the violence of the pains.

It is not allowable indiscriminately to use the *topicals* which are proposed against the Gout, for by the untimely use of reper-

cutients and narcotics, the morbid matter leaves the joints; hence arise metastases, from which are gathered prognostics of death. But emollients and resolvents must not be omitted, among which the most approved is a cataplasm partaking of the virtues of both, prepared of milk, crumb of bread, and elder, or chamomile flowers. By some physicians of credit, the leaves of burdock are recommended, they are assisted by ashes applied hot. Vesicatories not unfrequently afford immediate help. Lastly, the actual cautery prepared from the Chinese Moxa appears to excel the rest: which I have known by experience to have succeeded very well. Lint, or other vegetable matter prepared in the same manner, for this purpose, were used by the ancients; who without dispute have given this kind of burning its due praise.

WHEN THE PAROXYSM CEASES, nothing is more necessary for the physician than to prevent its return. They may attain this wished for point, who indulge in a diet suitable to reason, and abstain from flesh and wine. It is proved by repeated experiment, that a milk diet alone takes the palm from all other prophylactics. A certain nobleman about sixty years of age, given up to every kind of delicacy, and now tormented with Gout, so that he could neither stand on his feet, nor take hold of any thing with his hands, through DIVINE INFLUENCE, resolved to abandon his depraved manner of life, and come out from the mire of his lusts; and believed it necessary to follow a life of virtue, that he might be reconciled to the offended Deity, and might make amends for his wickedness by even a late repentance. Therefore discarding his pleasures and desires, he allowed himself nothing but pheasants boiled with no condiment, bread, and water, as his only aliment: by which mode of living, he not only received a foretaste of *eternal salvation*, through the mercy of HIM who searches the recesses of the human heart, but gradually repelled this now inveterate and knotty Gout, and without thinking, entirely eradicated it. It is also recorded in various histories, that some Gouty persons who had formerly lived high, being reduced by adverse fortune to the greatest want, so that nothing but bread and water was given them, have exchanged their Gout for poverty. Of so much avail is thin and spare diet, to drive away affections of long standing.

To return to our subject. Soap ought to be ranked among the best remedies, and for reaching the deep recesses of the body, and mildly clearing the obstructed vessels, has not perhaps its equal, while a suitable regimen may prevent any hurtful effect from it. Bitters and stomachics are advantageously given, among which are the Peruvian Bark, chamædris, chamæpitis,

epithymum, and theriac. Nor ought sudorifics and antimonial to be omitted, which when given judiciously, have happily succeeded with some. For some time past, the internal and external use of the warm mineral waters, has been in no little esteem. Moreover a certain degree of exercise of the body has done much good, nor are frictions without their use. Cloathes made of flannel have been much esteemed. I have seen them answer very well in some, while they used day and night, socks or shoes made of hairy skins. A bath prepared of grape-husks, has done good to many Gouty persons. A sudden sousing of the warm mineral upon the part has done good. Lastly, some have been fond of a liniment made of oil of turpentine, and muriatic acid. As to the general remedies, although they have reference to my method, I will add nothing.

There are other ways of cure to be employed *for metastasis of the morbid matter, called anomalous Gout, vulgarly Goute remontee*. We have already mentioned that local narcotics, and repercutients, riotous living, anger, and other aggravated passions of the mind, promote this misfortune. There is no part of the body either internal or external, to which this wandering matter may not fix itself, whence is derived a host of diseases, but it more frequently attacks the brain, lungs, stomach and intestinal canal, kidneys, &c. which when they attend the primary disease, occasion great apprehension for the patients. Wherefore every thing must be tried, to invite the Gouty humor mixed with the blood, back to the joints: with this view let a vein be immediately opened, and especially of the foot, for we have more than once known from experience, that by the section of the saphena, the devious matter has returned to its pristine seat; which plainly argues that it is unsafe when the Gout rages. Cathartics give immediate relief, by the help of which the morbid matter is carried off by the intestines, wherefore, when these succeed properly, physicians care little about the return of the Gout to the joints, who besides are aware, that purging, as well during the paroxysm, as in the intercalary days, has been beneficial to the greater part of Gouty persons.

Diaphoretics taken from the three kingdoms may supply the place of purgatives. Roborants have the same effect, as well aromatic as bitter, to wit, nutmeg, zedoary and Peruvian Bark, which seem to excel the others. Musk is also recommended by some, when the Gouty matter attacks the stomach. Yet sometimes alkool martiale, and numberless other medicines, which are given *pro re nata*, and for different symptoms, yield their share of benefit, all which being taken together, are not equal to anodynes, which nevertheless ought to be banished, if the mind is

beclouded, and the organ of respiration impeded. Local stimulants do not yield to these, to wit, vesicatories if the case be urgent, sinapisms and other vellicants of that kind. There are some who apply burgundy pitch alone, which often mildly and without pain answers the purpose of blisters. Others dip their feet in hot water, or wrap them up in skins of sheep or other beasts, fresh from the slaughter. Nor ought we to omit leeches to the hæmorrhoidal vessels, which I remember to have often done wonders. Yet when these have been ineffectual, I know of nothing safer than to persist in repeated cathartics.

RHEUMATISM.

ALTHOUGH authors do not separate Rheumatism from gout, appearing as relations to depend on one and the same cause, or joint neighbors, as they say, to this disease, yet they ought to be rightly distinguished, as well on account of the part affected, as in respect of the event and cure. The *Rheumatism*, as falling upon the membranes and involucra is more easily subdued; but the gout as affecting the ligaments, becomes more obstinate; but one very easily runs into the other, or both exert their force at the same time, in the same subject. Whence arises a kind of anomalous gout, which among us is called *Rheumatisme gouteux*. The disease of which we are now treating, affects the joints, neck, back, maxilla, scapulæ, breast and abdomen, one while it seizes the whole muscular compages, or suddenly passes through them, again it fixes on a peculiar part, which when it leaves, it invades another; this last has the vulgar barbarous name of *torticolis*, if it affect the muscles of the neck; it is called *pleuretis spuria*, *fausse pleuresie*, if it fall on the pectoral muscles. When fixed on the *lumbar* muscles, it is called *Lumbago*; and it is known by the title of *Ischiades*, if it occupy the part of the same name, or the coxa and neighboring parts. Taking cold when the body is warm, houses that are damp or recently built, a lazy idle life, gluttony and venery, the suppression of the menses or piles, or other usual discharge of blood, repelled eruptions, &c. are so many *causes* of Rheumatism. SYDENHAM was of opinion that those who indulged long in the use of Peruvian Bark were more prone to this disease: but experience contradicts this.

RHEUMATIC PAINS, like those of gout, are subjected to various grades. When they are very intense, the muscles be-

come unable to perform their offices, or excite dread by every motion, lest the pains should become excruciating.

This disease is called *frigid* by some, if it have no fever attending it; but *hot*, if with fever, which by the bye it is well to remark. For the most part however it takes its rise with *shivering and fever*, nor do the pains come on until the second or third day, which sometimes suddenly fall upon all the parts, or only affect one part, and often moveable are propagated from one part to the other, so that in the same paroxysm it wanders through many parts, which it is well known, does often take place in youth. Rheumatism partaking of gout shews also the same type, which is therefore by some denominated *arthritis vaga*, wandering gout, in which the part affected swelling up, is covered with redness, as with genuine gout. *The Rheumatic fever*, from which the slight attacks are free, is mild or vehement, continued or intermittent, and lasts a short time; but the pains are longer protracted, and often exacerbated after the fever is gone off, and do not leave the part till after thirty or forty days, and indeed are extended to years, or through the whole course of life.

Rheumatic pains, like those of the venereal and scorbutic kind, are most severe in the night, if we except that *lumbago* is perhaps more fierce, which, therefore by some incautious persons is taken for nephritis, especially if from any other cause the patients should vomit. It may be noted, however, that these affections are not seldom associated, which to be sure is not to be wondered at, when we reflect on the affinity between gout, Rheumatism, and calculus. Moreover, it is expedient to know, that the most inveterate Rheumatic pains are for the most part kept up by the venereal or scorbutic virus, and that pains of this kind are often lurking under the form of very obstinate Rheumatism, which inexperienced physicians ought to bear deeply in mind. Lastly, for the more accurate *diagnosis* of Rheumatism, we may add, that blood drawn from a vein is covered with a greenish crust, as in pleuresy: from this similitude has arisen the grossest error, for which many of the sick have suffered dearly: for many have persuaded themselves that Rheumatism was an inflammatory disease, to be subdued only by repeated blood-letting, and physicians adhered to this preposterous method of cure, so long as this now obsolete hypotheses prevailed.

The Rheumatism is commonly *void of danger*, unless from an improper diet, or preposterous means, the morbid humor, leaving its genuine seat, should fall upon the brain, lungs or other viscera: whence have proceeded symptoms, which as in anomalous gout, occasion no little fear. It is often terminated by

sweat, and sometimes by cutaneous eruptions; or the flow of urine, menses, or hæmorrhoids, betoken a crisis. It is thought more obstinate, if it fix upon any peculiar part, but rarely portends any evil. A cessation of either, or intermission, indicate the disease to be more easily cured; but it happens otherwise, if they be wanting. When the disorder becomes inveterate, in the same manner as from gout, the fingers are bent by the dry and shortened muscles, and are twisted into protuberant knots, yea the bones are sometimes moved out of their proper situation, or become agglutinated: hence it is plain why the joints become unable to perform their offices, and are altogether without motion, and some patients are obliged to betake themselves to bed. Lastly, the Rheumatism, as we have above inculcated, is more easily cured than gout; for although the Rheumatism is more familiar, yet all know that old arthritic pains are more apt to recur.

The *bodies* when dissected, exhibit the muscles so contracted and dry, that they look like tendons. There occurs a kind of matter gelatinous, sandy, and growing upon the membranes and aponeuroses. The bones present to view, grown together, or adhering, and even pushed out of their sockets. Other injuries of which we spake, when treating of arthritis, we have purposely omitted. Yet it ought carefully to be remembered, that what has been said should be understood of *chronic* Rheumatism; but in the recent there appears no injury, or if any, it eludes the keenest sight, which is the cause, why the joints afford nothing worthy of note, even when subjected to accurate examination.

The *cure* during the fever, is to be undertaken by blood-letting, especially when the parts diseased are affected with tension and redness, and it is to be repeated whenever this occurs, within three or four days from the first invasion, beyond which it is best to abstain from it, lest the disorder should be protracted, nor ought the blood to be too freely drawn, within these constituted limits; since opening a vein three or four times at most, is sufficient, whatever they may say against it, who rashly think that blood is to be drawn so long as the fever remains, and pains are severe; induced by this reason, because the blood taken shews an inflammatory disease, which we have already declared is but a mere notion. MARQUETUS, an author of credit, relates that he had, like others, for a long time used very frequent venesections against Rheumatism, but that by experience he knew, that this disease treated by this method was lengthened to months and years, wherefore being better taught, he betook himself to cathartics and sudorifics: by which means, discarding venesection

tions, the disorder before most obstinate, fled in a few days; which is truly worthy of observation.

Sometimes it is expedient, after the first bleeding, to promote vomiting, that the saburra lodging in the stomach, may quickly be carried out *per viam regiam*. Cathartics, if necessity do not urge, must be laid by until the end of the disease; excepting the milder laxatives, which, together with *enemata*, lubricate the bowels, which is of the greatest moment in this disease, as is plain from observations repeated over and over. While the paroxysm lasts, we may profitably use diluents, temperants and refrigerants, to wit, whey, nitrous ptisans or apozems, pulvis temperans, &c. Nor are diuretics, depurants, and the milder diaphoretics of less service, but the stronger ought not to be administered without the greatest caution especially while the fever continues, lest we disturb the hornets, or lest the Rheumatic fever become inflammatory, which authors record as having often taken place, from the confused application of turpentine, diaphoretic antimony, spiritus cornu cervi, vipers, and other stimulants of that nature; with which, from experience we freely assent.

As to *anodynes*, they seem to be not more suitable in Rheumatism than in gout, although they assuage the pains, and comfort the sick; for they do sometimes interrupt the powers of nature, while preparing a critical excretion, and thereby protract the disease; and indeed, sometimes favour the impetus of the morbid matter to the brain, not without the greatest danger to the patients. Nevertheless, camphor, which has a place among the sedatives, may safely be given; nor has it undeservedly obtained great praise among practitioners of the first note, since besides its anodyne virtues it is capable of promoting diaphoresis, and restoring the strength of the organs. Lastly, crabs eyes, prepared hartshorn, and other absorbents may sometimes be given with benefit, which answer the purpose of other medicines, in some of the symptoms, with which the paroxysms are attended. But *chronic Rheumatism* demands other remedies, whether continued or intermittent, among which the principal are demulcents, roborants, aperients, *incidents* and sudorifics: namely milk diet, rhubarb, Peruvian Bark, juniper berries and tar water, soap and calomel, and lastly vipers broth, &c. which act as so many prophylactics. Concerning the root of burdock, which some recommend as a specific, we shall enquire by and bye. Finally, other remedies are used, which are known to be serviceable in the cure of Rheumatism.

External applications have their own uses, in the list of which are cold baths, which are spoken of by some as the most efficaci-

ous for dispelling a recent Rheumatism. We hesitate not however to assert, from sufficient experience, that it has not been beneficial to all. Nor are there wanting some, who believed that it could not be used without danger. Among the most common local applications ought to be enumerated, animal fats, deers marrow, ointment of althæa, oil of bays, earth worms and cammomile, poultices of bread crumbs, &c. Nor are *animals cut open alive and applied to the pained part* rejected.* Bladders half filled with warm milk, tin flasks filled with hot water, &c. But when the pains are raging, we may fly to some soothing balsam, or other external narcotics, but with caution. If, lastly, the swelling and redness of the part do not abate from venesections, leeches are to be applied, which perhaps suck out the morbid matter, together with the blood. Blisters may also effect this, than which nothing is believed to be discovered more efficacious and speedy.

Respecting the internal treatment of chronic Rheumatism, let cloths be worn of the softest flannel: sweating medicines are very highly extolled, and not undeservedly: baths of the warm mineral waters of various denominations are exhibited with success, the sick are immersed in lees of wine, the mud of mineral waters is applied, frictions with hot towels and cloths are celebrated. Nor must we omit cauteries and setons, which have often produced wonderful effects. Finally, if the disease is fixed on any part, there is perhaps no better present remedy than the voluntary motion of the part affected; by which, to be sure the pains are exasperated, but the humor being rubbed by the muscular contraction, is for the most part soon dispelled, while the disease is in its infancy. When adhering in the muscles of the neck, it is easily allayed and removed, by *heat itself* applied with moist wool, or in any other way, or fumigations of olibanum, karab, &c. To conclude; it is proper to add, that when Rheumatic pains proceed from the suppression of some discharge, or the repulsion of some eruption, every means must be used to bring back the accustomed evacuations, and pristine efflorescence, which, if they recur, relieve from all care: this ought to be well remembered by those who carefully examine the evident causes of diseases, and for the most part labour in vain by attacking the imaginary fomes of the disease with unsuitable remedies.

* This practice is now rejected. T.

HYPOCHONDRIASIS.

IT is very well known that this affection takes its name from the *hypochondria*, which are supposed to be the genuine *seat of the disease*, and especially are implicated the origin of the veins, which take up the reflux blood from all the viscera concerned in chylification, and collect it in the vena portæ connected with the liver. Whatever doubts there may be about this, it remains fixed among all authors, that this disorder ought to be received into the class of spasmodics, which not only agitates the whole body, but even does not spare the mind: From whence it is that physicians who catch at popularity, and are not ashamed to impose on fools, avoid the proper name as indecent and opprobrious, and designate by the most vague and silly title of *vapours*, the *Hypochondriasis*, a disease allied to *Hysteria*. This disorder frequently comes on from the twentieth to the fiftieth year of age, beyond which it seems to end in scurvy or gout. Hypochondriacs are generally of a disposition prone to meditation, and scarcely permit themselves to be taken off from serious things; given to sadness, they tremble all over at bad tidings, and avoid the company of men, even their familiar acquaintance; anxious for themselves, they are tormented with the fear of some great impending distress, or are continually oppressed with the fear of death. This kind of sickness is never propagated by parents to their children; but commonly *has its rise* from difficulties in family matters, from heavy cares, and various misfortunes; from intense study or excessive labour, so that it is considered as the wretched attendant of literary characters; from the exhausted powers both of mind and body. Nor does it spare those who lead a life free of cares, since the idle and indolent, gluttons and loose livers also bring on this disease. It is contracted by the immoderate use of emetics, cathartics, and anodynes. Lastly, it is caused by the *retention of the semen*, by suppressed gonorrhæa, a checked diarrhæa, and the ill-timed stopping of intermitting fevers.

Flatulencies, troubling chiefly the stomach and œsophagus, by which the hypochondria swell, and the whole abdomen is inflated with rustling of the intestines, and the throwing off of wind upwards and downwards, excite the first suspicion of Hypochondriac affection. There takes place in some, who are frequently spitting, a vomiting of mucous and fœtid matters, and of an acrid and sour nature, which last, as also belchings of the same kind, injure the teeth. A *pulsation in the abdomen*, which is usually referred to the Celiac artery, is perceptible to the touch in some. Almost all complain of pains about the edge of the

false ribs, and indeed sometimes of excruciating pains of the intestines, recurring like paroxysms, which resemble in situation and severity the intestinal, hepatic, or nephritic colic. Anxieties and fear of fainting affect many patients. The urine of a whitish colour, is made oftener than usual, and not seldom with strangury. The breast is confined by a certain spasmodic constriction. The heart is attacked with palpitation and tremor. The pulse is found small and low, intermitting and tremulous. The head is oppressed with pain and torpor, and distressed with vertigo. Sleep is either very troublesome or altogether deficient, and some who not sleeping till day light, refuse to go to bed, or scarcely lye down with their clothes off. The mind is often beclouded and disturbed, so that the sick being overcome with grief, shed tears, groan, and continually cry out, that they shall die of anxiety: or disposed for merriment, shake themselves with laughter. One while they become impatient of their pains, and fearless of death; again they are fearful, and perpetually complain of their clouded brain, and rashly torment themselves with fear of death, which they think is threatening. To these succeed torpors of different parts, convulsions, tremors, palpitations of the muscles, &c. The hearing is dulled by tinnitus aurium, or creaking, or a noise like that of a rivulet. The pharynx and œsophagus are so spasmodically constricted, that deglutition is impeded, or becomes difficult. Some have wandering fever, and complain of cold and heat alternately; as also of various pains, which are spread to different muscular parts, and are called vernacularly, *points de cote*, if they affect the external breast. Hæmorrhoids, sometimes dry, sometimes flowing, which often discharge a large quantity of blood, by which the sick are gradually emaciated, bring up the rear of this troop of signs or symptoms. To the above may be added that this disease sometimes returns, or lifts its head under the appearance of alarming accessions. Afterwards, according to the various diseases with which it is associated, numerous symptoms arise, which have inconsiderately been ascribed by writers to Hypochondriasis. From this source have proceeded their swelling descriptions, filled with vanities and inconsistencies, according to which the Hypochondriasis would seem more like a host of diseases than one.—Whence we may understand how difficult it is to extricate the proper signs and phænomena of this disease from the notions concerning it.

The Hypochondriasis, not unlike Hysteria, (since there is a close affinity between both diseases) when confined within certain limits, is rather a tedious than dangerous pain, and occasions false dread in the patients. It is with difficulty cured, even

when recent, but where it has become deeply rooted it cannot be removed by art, so that both the sick and their physicians become unable to bear with patience its long continuance. Yet it is not without danger when its course is very often disturbed, or it runs into scurvy, cachexy, dropsy, asthma, slow fever and marasmus.

It appears from various observations that the hæmorrhoidal fever taking place, has been useful to some, nor has a vomiting of blood been considered by physicians of the first rank as of less advantage, although, otherwise dangerous. Moreover it is certain that Hypochondriacs have been free from epidemic diseases, even the plague itself. But this good fortune has little benefited them, since from their bitterness of mind and perpetual fear of death, they drag a miserable life, in which they are distressed so long as they are in their senses.

In *dissecting* those who die of this disease, the vessels passing into the vena portæ are found choaked and turgid. I remember to have seen it dilated and enlarged to that degree, that it attained the size and appearance of a genuine intestine. Besides, there are observed obstructions, schirri, purulences, putridity and sphacelus in the liver, spleen, pancreas, omentum, mesentery and kidneys. Sometimes there occur calculi in the gall bladder. The spleen is found sometimes turgid and of very great size, and deformed by the surrounding adhesions, sometimes so contracted, that it would scarcely weigh an ounce, and indeed, it is said to be wanting in some. Concerning this viscus it is well to remark, that there is no room to doubt of it being diseased in Hypochondriacs generally; but it is believed, among the searchers of nature, that it is not seldom found unhurt and faultless, although the other organs appear contaminated in various ways, which plainly argues that this viscus has undeservedly been considered the fomes of the disease. To return to the place from whence we digressed: The pylorus appears schirrous and cartilaginous; the stomach for the most part inflated, and containing a blackish and fœtid saburra. The colon in some beyond measure dilated, the other intestines rarely suffer a like extension. Lastly, there occur every where in the abdomen anomalous tumors, seated especially in the mesentery. When the breast is opened, it exhibits the lungs corrugated, choaked, and scarcely to be separated from the neighbouring parts without laceration. The heart contracted, dry, and grown to the pericardium, its ventricles black and turgid with concrete blood, or filled with a serous and fœtid matter, to say nothing of supposed polypi. Abscesses are discovered in the auricles, aneurisms are evident in the aorta and its branches. On opening the

head, the vessels passing through the brain appear filled with black and thick blood, various purulent and putrid defecations, stagnations of a serous, sanious and mucous nature, &c. Moreover, a serous colluvies poured into various recesses of the body; hydatids collected in heaps, and other injuries belonging to the diseases which hypochondriasis brings with it, are purposely omitted.

The principal point of cure turns here, that the thickness of the blood with difficulty performing its circuit, may be diluted; that flexibility may be restored to the rigid vessels, and too vibratile nerves, lastly, that the distracted mind may be composed to cheerfulness. Venesection, unless urgently indicated, ought to be considered useless or hurtful, besides that many Hypochondriacs dread the loss of blood. Vomits and cathartics often do good, but they ought to be exhibited cautiously and opportunely, especially rhubarb and polypody, which usually bind the bowels already too dry, which indeed is known to every practitioner; besides, they sometimes irritate the stomach, and occasion gripings and flatus, on which account many patients can not make use of them, lest they make bad worse. Nevertheless, some of the laxatives are not forbidden, such as damascene plumbs, Epsom or Sedlitz salts dissolved in a large quantity of water, solution of cassia, and others of the like kind. Nor are lubricating and emollient clysters to be omitted, as well in the paroxysm as in the intercalary days, by means of which the bowels are gently loosened. Diluents and temperants are mostly recommended, and not undeservedly, of which the most commonly used are whey, and succory, capillary herbs, fumitory, water cresses, river crabs, &c. Moreover, milk diluted with Sedlitz waters answers every purpose, or is given as aliment altogether.

Preparations of iron are useful, when given in small repeated doses, and followed by plentiful draughts, and walking up and down. The milder aperients are not without merit, which are fitted without trouble to open the obstructed vessels: wherefore we must lay aside the berries of the winter cherry, millepedes, antimonials and mercurials. Bitters are serviceable to some. But the cortex Peruvianus and aloes, although frequently given, agree with few. Magnesia and other absorbents afford help, especially if mixed with cathartics, stomachics do good, namely the root of elecampane, cascarilla, catechu, extract of juniper, orange flower-water, &c. Antispasmodics impart relief, to wit, the roots of valerian and piony, the leaves of balm and mint, the flowers of the lime tree and madder, pulvis e gutteta, and others of that sort, which act by a kind of seda-

tive virtue, weak to be sure, but innocent. The thing is otherwise as it respects the use of narcotics, so mightily craved by some patients, which are not seldom observed to be hurtful to the head. Camphor may supply the virtues of these without danger, and which I know by experience to have had excellent effects with many. Lastly, among the choice remedies ought to be ranked the mineral waters. Concerning the observations on the virtues of hellebore we add nothing, since we shall treat more than sufficiently of them in the *Materia Medica*.

There is another mode of cure while the paroxysm is violent: viz. we must use our endeavour first to allay the wild motions of the animal spirits. With this view various externals are usually prescribed, for instance, the sharpest vinegar, rue, castor, asafœtida, compound water of balm, spirit of sal ammoniac, oil of amber, sal Anglicanum, and other volatiles, which applied to the nostrils have been of much service. In like manner may be used the smoke of paper, feathers, old leather, &c. Sometimes the immersion of the legs in warm water removes the fit, and friction of them has the same effect: which not succeeding, we must use the more efficacious, namely internal medicines. The more approved are camphor, orange flower water, tincture of castor, guttæ Anglicanæ, volatile spirit of sal ammoniac, or *Eau de Luce*, which although milder comes nearer to it; volatile salts, and many others usually given in hysteric affection, which is nearly allied to Hypochondriasis.

These are the remedies, among numberless others with which books abound, that are called into use by the more celebrated practitioners. But we ought not here to conceal that these rarely do good, and mostly turn to disadvantage, nor is it a secret to some who are wiser than the vulgar, that this disease, not improperly called the scourge of physicians, in many will not suffer itself to be subdued, and indeed it is oftener exasperated by this senseless farrago of remedies. For writers of unblemished credit do say, and it is clear to us from thirty years experience, that innumerable Hypochondriacs, have just so long contended with death, as they have religiously obeyed the advice of their physicians, and indulged in every kind of medicament; and that they have been better, yea and have been restored to health, when, wearied out with their tedious cures, they have bid farewell to them all, or have declined even to sip the most simple. For which reason, there is perhaps nothing more efficacious, (the tedious remedy being more troublesome than the disease) than suitable regimen, aqueous drinks very freely taken, pleasant exercises, as well of the mind as the body. Especially using every endeavour to remove from the sick all sadness, by inspir-

ing them with a hope of getting better. Let solitudes, which are worse than a serpent, be driven away; in a word, let them commit the whole cure to nature, or, according to MONTANUS' advice, let them avoid physicians and medicines: But I know not from what misfortune, or whether it is a symptom of the disease, they repose every hope under the shadow of medicine, so that they not only believe in every physician they come across, but confide even in barbers and strollers, which, to speak within bounds, I have remarked a thousand times.

DROPSY.

A *serous colluvies* diffused through the whole habit of body shews itself openly. The *ascites* is also manifest—There is a watery encysted tumor perceptible to the touch, affecting the peritonium, ovaries, &c. and growing to a certain size: But *Dropsy of the breast and pericardium*, is with difficulty known, and a collection of water in the brain and medulla spinalis is veiled in obscurity. It is our duty in this place to treat of general Dropsy, or *leucophlegmasia*, for we shall discourse of the other species according to order elsewhere. Persons who lead a sedentary life, and inhabit marshy places, are thought to be liable to serous colluvies or Dropsy: Intemperate eaters and drinkers are thought to be prone to it. It is common to the female sex, nor does it spare infants, as we shall shew in the proper place. The ardent and malignant fevers, the small-pox, measles, and other acute diseases are followed by this; it accompanies also obstruction, cachexy, jaundice, scurvy, gout, quartan fever and other chronic diseases. Moreover, the Dropsy follows close at the heels of large hæmorrhages, both spontaneous and artificial, and menstruation continued beyond the accustomed limits of the natural period. Long continued diarrhæa, or other immoderate evacuations produce the same effect, and even the sudden stopping of these when habitual, threatens the same misfortune. Lastly, the Dropsy takes its rise from the premature cure of intermittent fevers; from repelled efflorescences or cutaneous eruptions; from the drying up of ulcers and fistulæ, from ischuria and dysuria, to say nothing of tumors, schirrus, abscesses, internal ulcerations and putridity, which very commonly give origin to this disease.

Anasarca or *leucophlegmatia*, arising from a depraved state of the humors, follows cachexy, as is common in every species

of *serous colluvies*. At the commencement of the disease, and towards evening the *Ædema* surrounds the ancles, which disappears in the morning. Respiration is not freely performed, especially when going up an ascent. Some complain about this time of thirst and slight cough. *As the disorder advances*, an *œdematous* swelling occupies the feet entirely, and is gradually diffused to the legs, then to the thighs and other parts, as if propagated by grafting. (*traduce*) *Ædema of the legs* is not to be considered as a certain sign of Dropsy, for persons broke down by very long journeys on horseback are subject to it, as also those who stand longer than proper on their feet. The swelling is familiar to those advanced in years: it often happens to chlorotic and pregnant women, and in these cases portends nothing bad. Nor yet does anasarca always take its rise from *ædema* of the lower extremities, for if it owes its source to ascites or any disease of the viscera, it sometimes invades the external abdomen, loins, surface of the breast, face and arms, before it appears in the legs and feet. In both cases the scrotum swells to an immense size, the penis is affected in like manner, the prepuce of which often swells to such a degree that micturition is impeded. *During the disease* the urine flows in less quantity, deposits a lateritious sediment, especially when the liver is affected, or any stagnation lurks in the abdomen. The sweat at this time is either deficient, or breaks out more sparingly.

Lucophlegmasia having its origin from too great a flow of blood, or other temporary cause, is easily overcome; but it is thought more obstinate when it takes its rise from the suppression of some usual evacuation, or from the recess of cutaneous eruptions. It becomes easy of cure if it follow asthma, acute or intermittent fever. But the case is dangerous if it arise from a chronic affection and diseased viscera, although it appears to yield to the usual remedies, nevertheless it sooner or later returns. There is no little hope of cure in youth or vigorous age, but it happens otherwise in old age. Moreover, the Dropsy portends death, if the tongue be dry, the cough frequent, and the respiration so impeded as to endanger suffocation; if the pulse be weak and the strength deficient: if, lastly, the urine and sweat recede more than usual from the natural quantity. Nothing is to be feared from diarrhœa in the early part of the disease, but the case is different, after it has continued a length of time, especially if it have no intermissions, since it cannot prevent the effusion of serum about the injured viscera of the abdomen or breast. Lastly, as we have already hinted, an *œdematous* swelling of the legs is thought free from danger, when happening by chance. It is not dangerous in convalescents, since when the strength re-

covers, it vanishes spontaneously ; nor does a swelled face portend any thing bad in acute diseases, though it has often occasioned needless fear to the inexperienced.

Beside the various internal marks of destruction, which every where occur in examining the bodies of those who die of this disease, the viscera are discovered to be deprived of their native colour, obstructed, schirrous, dry, containing pus, putrid, &c. Cystic and vesicular tumors are detected, of different forms and sizes, grown to various parts. In the abdomen, there are found schirrous tubercles, adhering to the hepatic and splenic vessels, the veins turgid with black, and as it were burnt blood, in which at times are concealed sandy concretions. The liver is observed sometimes contracted, sometimes of very great size, discolored, whitish, or without blood, black, lead coloured, as if roasted, marked with various spots of an unequal surface, granulous, rough with tubercles and hydatids, schirrous, dry, of a stony hardness, putrid, containing abscesses, and heaps of hydatids, &c. The gall bladder in many is turgid with blackish green bile, or is filled in some with a limpid, milky, tasteless matter, with bilious concretions, &c. The spleen meets the view, sometimes very much diminished, sometimes of prodigious size, and so putrid as to fluctuate when handled, like a thin pap ; schirrous and filled with tubercles somewhat stony. The omentum appears at one time very thick and schirrous, at another emaciated and putrid. The intestines are seen inflamed, schirrous, ulcerated and mortified, and received one into another. The mesentery, kidneys, uterus and ovaria undergo the same evils. Lastly, the abdomen exhibits other remarkable appearances, namely, anomalous tumors, purulent or putrid, growing to the vertebræ, which are eaten by caries ; hydatids of various size, excrescences rising from the liver, pancreas, or some other viscus.

ON OPENING THE BREAST, the lungs are found ædematous or uninflated, choaked up, or containing tubercles or abscesses, agglutinated to the pleura, or befouled by tabes, or putridity, &c. The heart is seen sometimes small, sometimes of stupendous size ; in many it is found empty, in others full of blood, and contains concretions named polypous. The arterial valvulæ of both ventricles in some acquire a hardness, resembling cartilages, bones or stones. An abscess is rarely noticed on the surface of the heart and auricles, but the pericardium is observed containing a great quantity of water and fetid serum, or evidently dry, and even agglutinated to the heart and auricles. Some authors say that they have seen, as well in leucophlegmasia, as in dropsy of the breast and abdomen, the thoracic duct torn off :

which I do not remember to have noticed. Concerning the head, which exhibits nothing but a morbid product, practical Anatomists have cared but little: Yet, in this, if attentively examined, there are often found feculencies and putrid appearances, as well in the brain itself as in its involucra. The vessels of the plexus choroides swelled, varicose, and intermixed with hydatids; or there are detected serous, sanious and fetid stagnations in all the recesses of the brain; the meninges grown together, &c.

We may safely begin the cure with venesection, if the piles or other accustomed flow of blood be suppressed; nor is it thought ineffectual at the commencement of the disease, in vigorous or youthful age, otherwise I should think it could not be practised without danger. To be sure it causes a respite to the urgent difficulty of breathing, but in the judgment of physicians of the first rank, it is afterwards exasperated and becomes more stubborn. Yet we must not conceal, that there are not wanting some examples of cure performed by repeated venesections or spontaneous hæmorrhages, but that by this unsuitable remedy death has been hastened in many, is also more than sufficiently known. *Emetics*, in the infancy of the disease are used with success, they may also afford some relief after it has attained some age, while the strength will admit, otherwise, they may do the greatest harm. For it is proved by various histories, that some hydropic patients have expired while vomiting. Nevertheless, it is plain from accurate observation, that many have been restored to health by repeated emetics, or spontaneous vomitings. Among these difficulties, the judgment of the cure is to be directed, by rightly looking into, and scrutinizing every circumstance. *Cathartics*, and especially *hydragogues* are in much estimation *in foro medico* exhibited through the course of the disease; by which the latent humors may be carried from the parietes of the intestines; nor can we doubt that many by the help of these medicines have been snatched from the jaws of death: yet they rarely do good, if the disease has been deeply rooted, and there be stagnations in the breast or abdomen. Under these doubts, we hesitate not from repeated experience, to assert concerning this matter, that these remedies would be dangerous, if no relief were experienced in their use, in such case it has appeared more adviseable to cease from them, lest by their ill-timed stimulus the intestines should be seized with inflammation or gangrene, which from hundreds of histories appears to have frequently happened. Among those more generally used, are rhubarb, jalap, orris-root, and elder-bark, gamboge, elate-

rium, diacrydium, sal polycrest, calomel, syrup of cathartic buckthorn, aqua vitæ Germanica, &c.

Hepatics or *aperients* have their share of merit, which are useful to restore the dyscrasy of the blood, to open the obstructed vessels, and cleanse the kidneys. But if the disease attain a certain grade, these medicines are for the most part found inert, of which the more approved are hartstongue, and the capillary herbs, cichoraceous plants, fumitory, agrimony and pimpinella; the roots of parsley and wild asparagus, fennel, madder, eryngo, butcher's broom, rest-harrow, &c. But *diuretics*, without any controversy, take the palm from the rest: Among these are rape seed, briony and squills, the fruit of alkikengi, nitre, lixivial salts, or the ley itself from the ashes of genista, wormwood and juniper, arcanum duplicatum, terra foliata tartari, wine or oxymel of squills, woodlice, turpentine, &c. The powder of toads has had excellent effect with some, when exhibited in the dose of a scruple and more, in white wine. Nor ought the powder of cantharides be dreaded, if the case be very urgent, from the fourth part of a grain, to one or two grains; by which if nothing hinder, the urine is voided copiously. For it is proved that this remedy sold by some stroller, has recalled many from the grave. Wherefore I think, that none, who in imminent danger, has tried all the others in vain, ought to refuse to try this. Many in whom we can place confidence, relate, that they have observed happy success from the use of sudorifics. Lastly, it is said that spontaneous ptyalism has been beneficial to some; but whether this evacuation promoted by art might be equally serviceable, is doubtful.

From what has been said we may gather, that these different *modes of cure* are to be admitted, *cum grano salis*. In truth, having been taught by various experiments on the subject, we candidly declare, that we have seen no hydropic patients cured by means of internal sudorifics, a few by the help of cathartics, but a good many by the timely use of diuretics: whose virtues perhaps are equalled and even exceeded by *roborants*, namely bitters, stomachics, and preparations of iron, of which the best are the leaves of wormwood and lesser centaury, the roots of elecampane and angelica, cassia lignea, juniper berries, catechu, alcohol martiale and other chalybeates, elixir proprietatis, &c. By some the garlic is much recommended, nor perhaps undeservedly, since it emulates the virtues of tonics. Besides which, the mineral waters both hot and cold, are not to be omitted, which nevertheless, although they complete the cure of many other chronic affections, often are useless in this disease when of long standing. Although anodynes do not reach the cause of

this disease, yet they are sometimes called into use, to encrease the force of other remedies, or to promote sweat, if nature seems to tend that way. We add nothing of anti-scorbutics, as they refer to Dropsy of a scorbutic nature.

When all the remedies of which we have treated, have been tried in vain, *abstinence from drink* of any kind has been of great use to many; and this regimen has been protracted to many months, or to a year, in which time, if the thirst is urgent, it is usually allayed with toasted bread moistened with aqua vitæ, and applied to the tongue, or by any other means, so as no liquid is swallowed. Various histories testify, that this mode of living has not only been serviceable in anasarca, but also in ascites and other species of Dropsy. We remarked above, that sweats excited by internal medicines, have done little good, but it is otherwise, when they are promoted by external means, to wit, by the warm air of stove rooms; a bath of warm mineral water; applications of salt, sand, bran, &c. heated by the rays of the sun or by furnace; frictions with very soft cloths impregnated with the fumes of benzoin, frankincense, mastich, amber, &c. Lastly, severe bodily exercise, by which the stagnant humors may be excited, and carried out through the pores of the skin. But it appears consistent with reason and experience, that all these become altogether useless, if the viscera are diseased.

We can not pass over in silence that the skin of the legs swelled beyond measure, is often ruptured, and through these fissures there takes place a kind of stillicidium of the water stagnating within the contexture of the parts, by which not only some patients are relieved, but even restored to their former health. The same effect may follow a wound from burning, or inflicted by any other mode, which I remember once to have seen in a poor woman, who after all things had been used in vain, was hastening to her unavoidable fate, when having had her legs burnt, by the carelessness of the person warming her bed, there followed wounds, through which the serum, diffused through the whole surface of the body found itself an outlet: by which discharge she in a short time was recalled to life, beyond the expectation of all. Instructed by such observations as these, physicians have attempted to bring about a similar flow, as well by the most simple scarifications, as by vesicatories, and the cautery itself. But I know not by what misfortune, it has happened otherwise; for the wounded part has frequently been seized with gangrene, and hence this mode of cure has been discontinued by almost all; which nevertheless we think ought not to be altogether rejected, where the disease resisting the other remedies, refuses to yield, and the sick are reduced to ex-

trémity of danger ; since in difficulties like these, it is better (says CELSUS) to try a doubtful remedy than none. Besides, these wounds are less to be dreaded, if they be inflicted on skin which is of a more relaxed and flexible nature, namely of the thighs and scrotum, and the threatening danger of gangrene be averted by the well known remedies. By way of finish we may add to the foregoing, that all the remedies of every sort, heretofore treated of, and successfully used in the cure of dropsy, are also effectual in guarding against *its return*. For no practitioner is ignorant that many convalescents, after the disorder was removed to appearance, have mostly suffered a relapse, sooner or later. Hence the more judicious physicians, and those who consult the health of their patients, used to direct all their attention to prevent this misfortune, by the cautious administration of the medicines above treated of. The same cathartics, aperients, diuretics, &c. are prescribed with this view. But instructed by multiplied experience, I know of nothing more effectual in this state of things, than tonics or roborants, which by strengthening the contexture of the solids, tend more safely to prevent a new stagnation of water. These remarks on *serous colluvies* may suffice, concerning which the illustrious MONRO, has with unexhausted labour collected and abridged the best monuments of the ancients and moderns.

STAGNATION OF BLOOD AND PUS.

BOTH these diseases mostly incurable, rarely manifest themselves, unless from dissection of the bodies : indeed to give any history of them would be vain and useless, if they did not sometimes become known, and relieved by timely remedies. No one is ignorant that blood extravasated in the recesses of the brain, becomes instantly fatal, and that those who are taken off by sanguineous apoplexy, die from no other cause ; as is abundantly manifest from investigating the history of anatomical practice : Also, that blood rushing in a stream into the cavity of the breast or Pericardium is dangerous, as well from a disruption of conspicuous vessels, as from the dilaceration of an aneurism ; but there is some hope from a stagnation of blood in the abdomen, if there be an evident tumor, or a fluctuation when handled. The species of stagnation above mentioned, are considered less fatal, if they proceed from transudation of the vessels, or erosion of the very fine capillaries, as under these circumstances, the disease being more gradual, is longer protracted, and hence

remedies may be applied with advantage, so long as there be any suspicion of concealed matter, and the seat of the disease do not deprive of all hope of cure. Moreover, *stagnant blood* is found in the bony sinuses of the head, in the internal ear, in the stomach, and intestinal tube, in the bladder and uterus, in cystic tumors, and especially in hydrocele. It is sometimes poured between the cellular texture. I remember to have detected it in great plenty, even to above three pints, between the laminæ of the abdominal muscles, in the body of one who died of another disease, who, while living, scarcely complained of the obscure pain in the part affected. Lastly, there is no part of the living body, in which, after wounds, contusions, strokes, or falls from a height, the blood may not be sooner or later effused.

Stagnations of a purulent or sanious nature, filthy and fœtid, on account of their detention, are well known to even the least experienced. They originate from an abscess bursting in the cavity of the head, breast, or abdomen, or in the peculiar windings of the viscera or other parts, while previous marks of inflammation or suppuration lead to a suspicion of them. But some other stagnations of foul matter, are very obscure, which are owing to another cause, to wit, a peculiar exudation of the viscera, without pain, with no previous inflammation conspicuous, nor any pre-existing abscess, or without any kind of exulceration, which I have frequently met with, while engaged in dissections, in the surface of the brain, heart, lungs, intestines, &c.

This collection of Pus when confined within certain limits, is rarely distinguished from other species of stagnation; and for the most part is brought to light, only by dissection.

It is acknowledged by all practitioners, that serum lodging in any part of the body, is frequently re-absorbed by the little pores of the vessels. But we can not predict so happy a termination in a stagnation of Blood or Pus; so that no other way of cure occurs, beside the evacuation of the confined fluid, which if not effected by the powers of nature, can only be obtained by art. Yet this is often discharged by the spontaneous efforts of the animal economy, into pervious parts, as the ears, frontal sinuses, lungs, stomach and intestines, bladder and uterus, &c. But when these fluids lodge in the bony covering of the head, in the cavity of the abdomen, and other impervious parts, we must have recourse, if nothing forbid, to surgical aid altogether. Of the various species of stagnations, and of the method of cure, to be treated of in its proper place, it has seemed most advisable to add nothing to the general observations, lest I should serve up the same dish twice.

OBSTRUCTION AND SCHIRRUS.

OBSTRUCTION of the viscera, although very common, is mostly obscure, unless it be brought to light by advancing to a certain degree. Nor is the character of the disease more distinct, without the aid of *dissections*, from the history of which, as well as from my own **Observations**, I have thought that it would not be amiss to present somewhat to the reader. For, from these well examined, we have learned, that **Obstructions** occurring every where, both in the breast and abdomen, have different natures; some appearing merely *sanguineous*, and others *lymphatic*. The first, indeed, is rightly thought (setting aside all conjecture) to proceed from a stoppage of the blood-vessels, but the others are commonly thought to owe their rise to the lymphatic tubes of both kinds being obstructed. *Sanguineous Obstructions*, to which the young and plethoric are liable, originating frequently from the suppression of some flow of blood, for the most part affect the *lungs* and *liver*, come on suddenly, and are attended with pain and heat, sometimes they commence with evident *Apyrexia*, sometimes they are attended with fever, and sometimes they run into genuine inflammation, the first grade of which, perhaps they exhibit. *Lymphatic Obstructions* arising from *lymph* or other fluid, are common to the melancholic, phlegmatic, cachectic, and scrophulous and scorbutic, they often attack persons confined with the quartan fever, or other chronic disease: and indeed they sometimes are occasioned by sanguineous **Obstruction**, or inflammation itself. *Infarctus*, commonly known by the title of **Obstructions**, when without pain at first, or attended with obscure pain, proceed slowly, and for the most part cause little uneasiness. But if they continue very long, and attain a certain increase, they pass into schirrus, the forerunners of which they are justly considered. It is well known, that the *viscera* and *glands* are most prone to this species of *Infarctus*. These are the general distinctions of **Obstructions**, which shew themselves with sufficient clearness, not only from examination of dead bodies, but, also from the various effects which they usually produce. But some occur of an intricate nature, and partaking of both, which by reason of the temperament of the patient, and preposterous treatment, now put on the appearance of *Phlogosis*, to which they are allied, again run into mere schirrus, as I have collected from my own observations, both anatomical and clinical.

The blood in the vessels being redundant, or more heated than usual; excessive bodily labour; eating food too warm; feasting too long; the too free use of wine, &c. are so many causes of *sanguineous* Obstructions. *Lymphatic* ones proceed from another source, to wit, from a dyscrasy of the humors, either congenital, or transmitted through the parents; from an idle life; from great cares: deep thoughtfulness; and from an irregular manner of living. Lastly, they may be occasioned by the checking of accustomed evacuations, as well natural as morbid, by the receding of cutaneous eruptions, &c.

Concerning internal Obstructions, to be treated of presently, I have purposely omitted whatsoever belongs to inflammations or schirrous affections of the mouth, salivary glands, neck, breast, groins, axillæ, and other external parts, I shall discourse of each of them elsewhere in order.

The *diagnosis* of sanguineous Obstructions is obscure, the signs of which are little different from the marks of inflammation, especially, if a mild inflammation be followed by no severe symptoms; but the invasion of these affections is different, for the sanguineous infarction or Obstruction may be resolved within two days, or sooner; which never happens in genuine phlogosis. Besides this may terminate by resolution or suppuration before the seventh day; the other although shorter, yet is not seldom more obstinate. Recent Obstructions are very frequently immersed in the greatest obscurity, nor are those of older date sometimes more distinct; for although obstructed viscera in many become larger and harder, yet they do not always become evident when examined with the fingers, especially in the corpulent and fat: this mischief is also concealed, or presents obscurely, if the affected viscus be deep, and depart but little from the natural size. Finally, whatsoever has been said by the generality of physicians in the investigation of this subject, is often fallacious. Yet the liver and spleen are easily perceived by the touch, in lean persons; but the pancreas, mesentery, &c. are with difficulty detected. Moreover, obstructed or schirrous viscera, do not always become prominent from enlargement, but rather are sometimes contracted and wasted: which very often takes place in the liver itself, as every anatomist knows. Hence we learn that examination by the touch alone is often of little use, and that therefore it is necessary to have recourse to other signs, taken from various injuries, to be mentioned hereafter. Nor is there greater certainty of the genuine *seat of the disease*, although it present to the touch, on account of various parts more or less immersed, which meet the pressing finger. Besides, it is doubtful, whether the resisting body

be the affected organ, or a certain tumor growing on it, or formed before it, in the cellular substance, all which we have oftentimes to discover by mere conjecture.

From the foregoing may be gathered, that the *marks* are very often ambiguous, as taken from examination by the fingers, we must then sedulously look for other signs which Obstruction and Schirrus afford, that we may establish something certain from their concurrence. Wherefore, besides the troublesome and dull sensation which is exacerbated by the touch, and seems in many to be excited by a heavy or pressing substance, the belly is prominent, the face pale and tumid, the feet are swelled so as to obliterate the ancles, the breathing is sometime hindered, and cough excited, not only from Obstructions of the lungs, but also from affections of the liver and spleen, To which we may add anxieties, palpitations of the heart, loathing of food, dryness of the mouth, bad digestion, flatulence, belchings, and inflation of the stomach; the belly for the most part loose, and lastly, whitish urine, Meanwhile, *as the disease advances*, the strength is prostrated, sleep is deficient, and fever takes place, which is increased after eating. These are the general marks, by which Obstruction both of the breast and abdomen shews itself; but other peculiarities occur, which discover the seat of the disorder; to wit, impeded deglutition excites suspicion of a Schirrus tumor affecting the pharynx or œsophagus; urgent suffocation shews Obstruction of the lungs. The jaundice denotes impending mischief of the liver. Signs of scurvy with heaving of the right hypochondrium point to the spleen. The mesentery is suspected by diarrhœa and atrophy, especially in infants; continued vomiting mostly arises from injury of the stomach, pylorus, or pancreas: We are apt to suppose the intestinal tube to be diseased when there is violent ileum and dysentery, &c. Respecting the nature of the disease it is necessary to enquire, whether there be any virus lurking in the blood, to wit, venereal, scorbutic, scrophulous, cancerous, &c. for of how great moment it is to evolve these common causes of chronic diseases as much as possible, must be obvious to all.

Although sanguineous Obstructions may be easily remedied, and indeed often disappear spontaneously, yet they are not always free from *danger*, if they are superficially or preposterously treated, for as above hinted, not only inflammations immediately follow from them, but also Obstructions and Schirri, which plainly proves these disorders to have affinity with them; although in process of time they appear to differ much one from the other. It is well known that old Obstructions, and particularly Schirri, are generally incurable, or if removed, do often

recur unexpectedly; but recent Obstructions are easily vanquished, provided they are soon discovered to the physician, which I candidly confess has seldom happened. No wonder if the case should be otherwise, when they have already become deeply rooted, or have contracted such hardness, as to be impervious by even the best of remedies; for it does not escape the notice of those who have been engaged in numerous dissections, that the viscera, both within and without, have been frequently found tuberculous, cartilaginous, sandy and indeed brittle, which to be sure, when thus affected, must evidently resist all remedies.

Obstructions and Schirri after attaining a certain size, by pressure on the neighboring parts, cause inflammation, purulence, putridity and gangrene, which taking place, it follows that every thing must end in destruction. Nevertheless, it is proper to remark, that many whose viscera are Obstructed and Schirrous, being well in other respects, have by suitable diet, protracted their lives considerably. For there occur every where patients of both sexes, afflicted with Obstructions, who have enjoyed life for fifteen or twenty years, and more. Yet the prognosis ought not to be established, unless the seat of the disease be discovered: for it is known that Obstruction of the spleen causes slight fever; and that the liver when affected with this mischief, is much more dangerous; that Obstruction of the mesentery is considered highly alarming, and often the effect of scrophulous virus. Schirrous Obstructions in which the size of the part is encreased, are more easily eradicated, than in those which experience a different effect namely, the emaciated. There is some hope of cure while they are painful, but they are thought incurable, if without sensation. Nevertheless, Schirri that affect the uterus and other pervious viscera, have very exquisite sensation, and soon acquire the nature of cancer. Lastly, Schirrous Obstructions, whatever part they affect, often bring on atrophy and dropsy. Concerning the inspection of the dead bodies, from which, what I have now said is taken, I will add nothing.

The *treatment* of sanguineous Obstructions, usually begins with venesection, which may even be repeated, if nothing forbid, and the strength will bear it, but diluents, demulcents and temperants, afford the greatest benefit, nor are laxatives to be omitted. Yet many patients by spare diet, and plentiful draughts of water, with rest, have overcome the disease. But it is otherwise with respect to Obstructions and Schirri, which the powers of nature are inadequate to subdue, unless they are aided by timely remedies, having regard to the part affected. Although

these kinds of Obstructions ought often to be considered as the product of a previous or existing disease, yet nothing ought to concern the physician so much as to remove it, and to direct the principal scope of cure to this end. Wherefore he must let blood, if the catamenia or hæmorrhoids be suppressed. Sometimes even in other circumstances venesection is of use, at the commencement of the disease, but it is thought useless or hurtful when the Obstruction is of long standing, or become Schirrous. Cathartics afford not the least relief, and indeed usually exasperate the disease, yet they may do good in an urgent case, if there be sordes lodging in the primæ viæ, but in such case the milder ones ought to be employed.

Diluents, temperants, *hepatics* and *aperients* are used with advantage through the whole course of the disease, among which are preferred, whey, the roots of dock, elecampane, asparagus, parsley, butchers broom, eringo and celandine, the herb succory, hartstongue, maidenhair and nasturtium, rhubarb and aloes, borax, sal ammoniac, vegetable alkali, vitriolated or chalybeated tartar, *sal de duobus*, woodlice, &c. by the help of which it is reasonable to believe that the thick juices may be diluted and reduced, so that being rendered more fluid they may find their accustomed outlet, and thus the obstructed organs be opened; whether they exert their action on the vascular contexture of the viscera, is doubtful. These desultory observations may suffice, concerning their *modus agendi*, which, to confess the truth, is immersed in dark obscurity, notwithstanding what *sciolists* chatter, who indulge more than is proper in these scholastic *sweepings*.

To return to the subject. *Incidentia*, which appear to pervade all parts, are not undeservedly extolled by the most experienced. The most approved are the gums, soaps, *antihecticum Poterii*, and lastly, *panacea* or *aquila alba*. These are what are in most use, and by entering the most intimate recesses of the body, are of great efficacy, so long as they are used with the greatest caution, and with proper regard to the viscera diseased, for different kinds are suited to the lungs, liver, uterus, &c.

The custom, moreover, has prevailed, not without reason, as to the use of *Incidentia*, that diluents, demulcents, and temperants be mixed with them, in order that they may preserve the sound viscera from injury. And indeed, in this way intermissions are procured, which prevent the blood already too hot, from becoming more heated, by its motion being accelerated beyond measure. But mineral waters, by penetrating every part, afford an excellent substitute for both, since they have the first place among diluents, temperants, *hepatics*, *aperients*, and even

It is now believed that the rapid motion of the blood

incidents. Both the cold and hot mineral waters are recommended, and it is acknowledged by all, that by the help of these, the diseases of this nature, resisting other remedies of every kind, even the most exquisite, have often been eradicated. In the decline of the disorder, tonic and martial preparations are much esteemed; which nevertheless when inadequate to subdue the morbid Obstruction, do no good, or become hurtful; which those ought to bear deeply in mind, who blinded by the prejudices of the vulgar esteem *iron* as a *polychreston*. Lastly, sedatives, and especially narcotics are rejected by the experienced, which, by alleviating pain, and procuring sleep, wear the mask of health, but have death in their train.

From this *vast apparatus of remedies*, it is not to be inferred that many are to be administered, but rather it is necessary to select them as occasion requires, and according to the patients constitutions. Nor must we adhere too long to the most powerful, since their virtues are lost by constant use. New ones are then to be often thought of, and to supercede the customary ones: for many remedies, which formerly were of service, are found in time to be ineffectual, and even hurtful; wherefore it is expedient to betake ourselves to others, which may be taken from those mentioned above. Whatsoever remedies be given, the senseless farrago of them are to be avoided, which are often opposed one to the other: but we must have regard to a suitable mode of living, by an error in which, it is well known to practitioners that the most troublesome symptoms very often are occasioned. I may add, before I take pen from paper, that the manner of cure turns principally on accurately searching after a certain poison, frequently hidden, to wit, venereal, scorbutic, scrophulous, or of some other kind, for instance, by mixing with the remedies above mentioned, the specifics for these disorders: by the union of which the disease, unless it be evidently incurable, is not only subdued, but even rooted out. Finally, baths and semicupia must not be omitted, nor emollient fomentations, by means of which some help is obtained: but topical resolvents, even the best, are considered by judicious practitioners as altogether inert, and whatever has been advanced concerning their famous virtues has been thought by many to be mere notions, or old wives' stories, which nevertheless I think ought to be received *cum grano salis*.

incidents. Both the cold and hot mineral waters are resorted to, and it is acknowledged by all, that by the help of these, the diseases of the nature are cured, and the remedies of every kind, even the most exquisite, are indicated. In the diseases of the disorder, tonic and martial preparations are much

TUMORS.

INTERNAL TUMORS, sometimes becoming prominent externally, are perceptible to the sight and touch; at other times, being hid within the intimate recesses of the body, they cannot be brought to view but by *anatomical examination*: they very often have their seat in the abdomen, sometimes lie concealed within the breast; but are rarely contained within the bony case of the head, or the sheath of the spinal marrow. They are of different natures, for they are schirrous, or sarcomatous; cystic, or anomalous, and lastly aneurismatic, to say nothing of inflammation and abscess, of which hereafter. There are certain *schirrous tumors* of a fleshy nature differing as to color and hardness, in the viscera, membranes, vessels, &c. attached to, or growing upon the cellular substance, attended with no pain, unless on account of the parts over which they lie, or which they compress. These tumors do not escape the fingers when examining them in the abdomen, unless they lie very deep; but they are often with difficulty distinguished from obstructed viscera. Yet there are not wanting some *marks* derived from my own observations as well clinical as anatomical, which may discover both affections, and are as follow. Obstruction of the viscera, not differing from a solitary tumor, and perceived by the touch, never attains this grade without previous long continued sickness, which is justly considered its cause: but tumors more rapidly commence and encrease, and beyond all expectation, frequently become evident, as it would seem without injury to the health. Moreover obstruction of the viscera for the most part is attended with pallid and swelled face, or attacks cachectic patients; but schirrous Tumors generally affect those of a florid complexion, and who seem to enjoy vigorous health; which I remember to have seen a few years ago, in a certain Helvetian of great stature and bulk, and not above twenty years of age, whose Tumor being attended with most extreme pains, on account of the tearing of the mesentery to which it had grown, rose to such a size in a short time, that it was perceptible even to the sight, which on dissection I found to be tainted with a collection of matter, and putrid.

CYSTIC TUMORS are not clearly known, as they grow slowly and are annexed to various parts, and differ little from the most common external ones, sometimes free from pain, sometimes raging with most excruciating, and recurring at intervals like

paroxysms, by reason of the inflammation which they contain, and communicate to the neighbouring parts, which also in process of time usually put on the nature of cancer. We have above noticed that schirrous obstructions of the viscera are often borne for twenty years and more, but it is otherwise with solitary Tumors, both schirrous and anomalous, which encrease more rapidly, and thereby bring on inflammation, purulence, putridity, gangrene, stagnations, &c. Internal Tumors of both kinds generally proceed from a peculiar and hidden virus, but sometimes they originate from a well known preceeding disorder. Lastly, whatever the pedigree of either may be, they are considered as *dangerous* and *incurable*.

It is obvious therefore, that all the *aperients* and *incidents*, even the choicest, become *futile* and superfluous, and as experience proves, afford not the least aid. Specifics against the virus itself are not more efficacious, for they not only have little power on the part affected, but are thought even unequal to the subduing of the disease. Hence the more skilful physicians adopt a merely *palliative cure*, as well by proper diet, as by the administration of general remedies. Nor would there be more hope from the surgical art, by which alone this melancholy disease could be eradicated, unless they on whom this weighty burden devolves, could forget themselves; for it is proper to remark as we go along, that new and unheard of, yea *rash experiments* have often happily succeeded in fatal diseases, when there has appeared no other way of cure. On which account CELSUS remarks, that *temerity sometimes effects what prudence could not do*. In these difficulties, *cauteries* on the neighbouring parts may afford some relief, by means of which somewhat of the morbid matter is carried off, which being taken away, the Tumor encreases more slowly, if it is not evidently exhausted by the salutary powers of the animal œconomy: which however I do not remember to have ever seen or read of. Nevertheless, there is no harm to be feared from this remedy.

ANEURISMS, mostly conspicuous, are not more easily removed, for, as all know, they admit only of palliative cure. This species of Tumor, as it were coated, I have over and over remarked, arises from a dilatation of the arteries, for they are filled with various coats of dry and compact blood, lying one upon the other, or lamellated like an onion, having a canal pervious at both ends, remaining in the middle or axis of the Tumor, containing after death black or grumous blood, through which canal this fluid had free circulation. It is truly wonderful, that the covering of the arteries attacked with the disease, although expanded beyond measure, gain greater firmness and thickness,

and even sometimes contract the hardness of cartilages, or bones themselves. Aneurisms sometimes attain to a stupendous size, for there occur some which fill almost *half the breast*, or reach from the superior part of the *sternum* to the *maxilla*. The most approved division of aneurisms is into *true* and *spurious*, as respects the external, of which in its place. *Internal Aneurisms*, concerning which I am now treating, commonly originate from some violent exertion in lifting a heavy weight, or in calling aloud, coughing, carrying, child-bearing, &c. Falls from a height, or other contusions may also occasion this dire effect. Some authors have injudiciously mentioned *Aneurism of the heart*, taking the liberty to designate by this title, the very common dilatation of the ventricles, which differs vastly from genuine Aneurism, because the crustaceous lamellæ of concrete blood, lying one over the other, which give the character of this species of Tumor, are plainly deficient. Besides this dilatation of the heart is attended with symptoms evidently dissimilar, which also proceeds and terminates in another way. The coronary arteries of this viscus, are alone affected with this disease, and but very rarely, from which I do not hesitate to assert, after multiplied anatomical examination, the organ of circulation itself is altogether free.

ANEURISMS have their *seat* most commonly in the breast, from which they are sometimes propagated to the parts superior, and often manifest themselves by swellings conspicuous outwardly, as well in the neck, as in the anterior part of the breast, and even the posterior, insomuch that the neighbouring bones and cartilages being broken and diminished, or affected with caries, make as it were an outlet to them. Hence in most patients there is a prominent Tumor of different size, and of the colour of the skin, soft and yielding to the touch, attended also with a pulsation synchronous with the strokes of the heart, and of a circumscribed surface. By these *marks* Aneurisms of the carotids, subclavians, intercostals, and superior aorta are known. But Aneurisms of the inferior aorta and iliacs are mostly concealed, by which last even the vertebræ are rendered carious. Those who are afflicted with this disease in the breast, or in the neighbourhood of the lungs, complain of an incessant difficulty of breathing, and dread lying down for fear of suffocation, many swallow with difficulty, and lastly, some are seized with fainting by the least motion of the body.

Internal Aneurism, though rarely double, excites most acute pains, which being sometimes exacerbated like paroxysms, reduce the miserable patients to extreme danger, to the terror of the bystanders: many feel the pulsation of a Tumor within. In the

mean time the pulse is observed to be contracted, labouring, convulsive, and intermitting, especially in the arm nearest the part affected. *As the disease advances*, there come on palpitations with frequent faintings. But if the veins which carry the refluxing blood from the head, are compressed, there follow headaches, vertigoes, convulsions, delirium, &c. The melancholic, often without any evident previous cause, are prone to this terrible disease, which every one knows to be fatal, inducing marasmus, gangrene, cachexy, and dropsy, especially of the breast, unless the sick are carried off by premature death, namely, from rupture or dilaceration of Aneurism seated in the breast, by which the blood rushes in a full stream into the cavity of the breast or pericardium, as I have often observed in *examining the bodies after death*. Nevertheless this disease mostly lasts for years, but it cannot be subdued by art, and is considered by all as evidently *incurable*. No other method therefore can be taken beside the *palliative*; this consists in venesections occasionally repeated, and a most accurate diet, by attending well to which, the more oppressive symptoms are guarded against, and threatening death put off for a little while.

PHLOGOSIS, OR INFLAMMATION.

I HAVE thought it advisable to premise some general observations on internal *Inflammations*, which shall be treated of separately or under so many heads—these may not only apply to the inflammatory affections to be mentioned in their places, but also to some others affecting parts without the viscera. No one denies, that besides the more noble and principal organs of the body, the glands, membranes, and especially the cellular substance are liable to Inflammation: nor are the abdominal muscles free from it, as I have sometimes had an opportunity to observe. Immoderate exercise, arduous labour, the retrocession of erysipelas, anamolous gout, the matter of rheumatism deviating and mixed again with the blood, the suppression of accustomed sanguineous discharges, eating warm food and delicacies, the too free use of wine, the use of ardent liquors, *usually occasion this affection*. Sometimes emetics, cathartics, drastic purges and poisons, bring on the same. It is excited by strangulated intestinal hernia, by compression, contusion, &c. This kind of affection is common to the plethoric; often attacks the young and

persons of a sanguineous temperament, nor does it spare the bilious.

INTERNAL INFLAMMATION, unless very limited, is always attended with *Fever*, mostly with pain, either mild, acute, or pungent, sometimes lancinating and beating, according to the structure of the part, the increase, and spread of the disease; and lastly, it has a tendency to suppuration. *Inflammatory pain* sometimes ceases, but its truces are fallacious, and sooner or later it rages afresh. The sick complain of heat and pain about the seat of the disease, frequently suffer slight chills, especially if from impatience they change their situation in bed. Blood drawn in the first stage scarcely loses its native fluidity, but as the disorder advances, it seems to acquire thickness, and when congealed and settled, a yellowish and greenish crust is formed in the cup. Yet this morbid constitution of the blood ought not to be considered as a *certain sign* of Inflammation, since in some it is deficient through the whole course of evident Inflammation. Nor does the disease even there become more dangerous, as some have persuaded themselves. Besides, blood of the same kind, or covered with the aforesaid crust is often drawn without even the slightest suspicion of Inflammation, which ought to be remembered by those who heedlessly put confidence in the opinions of the vulgar. *Inflammatory Fever*, to return from my digression, often differs little from *ardent fever*, and even commences with shivering and chill. The pulse is found to be strong, hard, and often unequal. The head aches, there is great thirst, with dry and somewhat blackish tongue: to which may be added a heat in the neighbourhood of the part affected, anxiety of the præcordia, want of sleep, delirium, and other distressing symptoms of fever, which become more severe, if membranes, to wit, the pleura, mediastinum, diaphragm, stomach, intestines, mesentery, &c. are affected with inflammation.

INTERNAL INFLAMMATIONS, as already noticed, are often with difficulty *discovered*, if we except peripneumony, which shews itself by bloody expectoration, but sometimes Inflammation of abdominal and other parts skulks clandestinely, and is only traced by mere conjecture. Yet Inflammation of some of the viscera is known by some signs presently to be enumerated, but other Inflammations of the abdomen shew themselves by doubtful marks. From *throbbing of the abdomen*, and pain attended with fever, we may well suppose present or threatening Inflammation, but it is often difficult to find out what part is affected. Inflammation of the *stomach* shews itself with sufficient clearness by most severe pain in the epigastrium, difficulty of swallowing, vomiting and hiccough, very great restlessness and

anxiety, and coldness of the extremities. From acute pain about the navel, tumid and throbbing abdomen, vomiting and costiveness, we may conjecture that the *intestines* are inflamed. Heavy pain about the loins, with other attendant signs, excite suspicion that the mesentery is affected: if more acute pain occupy the same part we are reminded of the kidneys. Inflamed liver is discovered by the touch; by the same method we may distinguish an affection of the spleen. But it is otherwise if the pancreas and other parts of the abdomen are inflamed, and indeed Inflammation of the viscera or cellular substance is often obscurely known from that of the abdominal muscles, under which last—the sick complain of excruciating pain, especially in coughing and performing the offices to which these organs are subservient. I shall treat of the signs of peripneumony and pleurisy elsewhere. Head-ach so violent as scarcely to be described, accompanies Inflammation of the meninges and brain; as also delirium, by which the sick are driven to madness, and other terrible symptoms. But they are shamefully mistaken, who, induced by mere hypothesis, refer even febrile delirium to Inflammation of the brain and its involucra; which *dissections* daily prove to be false.

Internal inflammations are never without danger, unless they be confined to narrow limits, but they are to be considered more or less *ominous* according to the part affected or severity of the symptoms, and soon run their course, unless they pass into some chronic disease, to wit, genuine schirrus, from which proceed slow fever and marasmus. There is scarcely any hope of cure without resolution, if an *impervious viscus* be affected with inflammation: it is otherwise with the lungs, stomach, and intestinal canal, kidneys, and others which have an outlet through their respective ducts. Hæmorrhages and sweats breaking out about the seventh day afford some relief, but in many they are mere symptoms which answer no good purpose. The urine depositing a sediment about the fourth or seventh day sometimes denotes a salutary termination, otherwise nothing certain can be gathered from examining it. Diarrhæa is serviceable to some, but if a blackish *saburra* be evacuated by stool or vomiting, we may think of death. In Inflammation refusing resolution, pus is mostly formed, and hence proceeds abscess or ulcer; or it brings on gangrene, which in a short time terminates the patients' life. Suppuration takes place between the fourth and seventh days. If the pus, whether in an abscess or ulcer, be able to make itself an outlet, in respect of the structure and situation of the part affected, there is some hope of health, otherwise death is threatening. A slight chill recurring frequently and irregular-

ly, and pulsating pains, with the other signs, are the most common marks of abscess. A lancinating pain denotes an ulcer or erosion. Burning and acute pain indicates gangrene. The sudden cessation of pain declares this fatal event, while the fever and other grievous symptoms rage. If, lastly, the time of suppuration being past, and no previous indication of purulence, the patients complain of obscure, heavy and dragging pain, it is reasonable to infer that the inflammatory obstruction has become a schirrous. All these we learn from *anatomical examination*.

Inflammation of the *pleura*, *liver*, and *uterus*, is considered as the worst, but perhaps that of the stomach is more terrible, and really more frequent than is commonly supposed, this mostly induces gangrene about the third or fourth day, a fatal event pre-saged indeed, and confirmed by various miseries: or it assumes the nature of *schirrus*, from whence arises most obstinate and incurable vomiting, although medicines can be closely applied to the affected part. Pus is rarely formed there, to be carried out by vomiting, stool, or bursting of the abscess, an ulcer only being left which is with difficulty subdued. From Inflammation of the *mesentery*, there arises not unfrequently an abscess, the matter of which is sometimes carried off by the intestinal tube, at other times is effused into the cavity of the abdomen, and fluctuating about the viscera, affects them with fatal disease. I have noticed above, that Inflammation of the lungs, kidneys, and other pervious viscera is less to be feared, by reason of the free egress of the pus; but we prognosticate a happy event in other parts from *resolution* alone, which a few days put beyond doubt.

Although every hope of health, as to parts which have no outlet, depends on resolution, yet in other cases even the most favourable, we must spare no pains in applying timely remedies. With this view a vein must be forthwith opened, and bloodletting often repeated, but concerning this most useful remedy it may be remarked, that it ought to be held within certain limits, lest by taking away more blood than is proper, gangrene be brought on, especially if membranous parts are affected, which I have often observed in practice. Wherefore I do not scruple to assert from multiplied experience, that venesection ought not to be repeated beyond three, four, or at most six times. Nor ought it to be indiscriminately used, as is the mischievous custom, at all times of the disease, since it is thought by the more experienced, to be useless or hurtful after the third or fourth day, unless an urgency require it. Besides there is no doubt that it hinders the formation of pus: as for this purpose a certain effort

of the arteries is requisite, of which these vessels are evidently deprived, when depleted too much. Wherefore it is no wonder, if from the too great detraction of this fluid, this kind of depuration is with difficulty effected, or altogether wanting, and a sanguineous obstruction should degenerate into a mere schirrus, which is proved by the *history of dissections*. To this we may add, that blood is to be drawn with a more sparing hand in Inflammation, which is a symptom of the putrid and malignant fevers of adults, and indeed frequently in this case we ought not to bleed, notwithstanding the clamor of the ignorant, who will never suffer themselves to be removed from a practice which they have rashly adopted.

An emetic at the commencement of the disease, after one or two venesections, has often been of surprising benefit, but it is to be avoided as worse than a serpent, if the belly be swelled and painful, *lest we rouse hornets*. Nor are cathartics more safe, although it is proper cautiously to use laxatives, to wit, cassia, manna, tamarinds, oil of sweet almonds, &c. Meanwhile the belly ought to be kept free during the continuance of the disorder, by means of enemata, which may supply the place of laxatives when forbidden. Diluents, demulcents, and temperants do much good, among which are, chicken water, whey, the most common emulsions, the herb succory, flowers of mallow and althea, linseed, &c. Yet we must not continue too long with refrigerants, lest the heat necessary for resolution or suppuration should be destroyed. The milder diaphoretics, as borage, bugloss, scorzonera, scabious, carduus benedictus, &c. are much recommended—of this class seems to be goats blood prepared, which may not only be given with advantage in peripneumony, but also in inflammation of other parts. Among internal resolvents, the chervil seems to be the best, if we may believe some writers. Absorbents are commended by some, but whether from conjecture, we leave the experienced to determine. Narcotics are rejected by the wiser practitioners, because they usually impart torpor to the vital organs effecting a solution of the disease, and cover it with a kind of veil. Moreover they cannot be given without danger, where there is the slightest fear of gangrene, but paretics, to wit, nitrous preparations, Sedative salt, camphor, mineral anodyne liquor, &c. are often advantageously used.

As to *external remedies*, fomentations and emollient cataplasms, may do some good, bladders half filled with warm milk, *animals opened alive*, their skins while retaining the natural heat, &c. which, besides their virtue of relaxing the more rigid parts, and thereby appeasing pain, seem to possess as oc-

casion requires, the quality either of resolvents or maturants. Sometimes leeches applied to the vessels of the anus are serviceable, especially if they bring on an accustomed hæmorrhoidal discharge. Vesicatories on the neighbourhood of the affected part, have obtained no little praise, by the help of which some part of the morbid matter is carried off. These topical applications answer these purposes, especially in pleurisy and peripneumony, as is well known to every physician. Lastly, narcotics applied outwardly are no less forbidden, than exhibited internally; nor may we fly to these comforts except in most urgent cases.

PURULENCE, OR SUPPURATION.

THE formation of pus, usually follows inflammation; such is the affinity between these two diseases, that one scarcely takes place without being closely followed by the other. That internal Purulence is most common, concerning which I am now treating, cannot escape the notice of those who think it no trouble to examine *dead bodies*; and this is the source from which I have taken what I have to say on this subject, discarding all opinions concerning this effort of nature, with which books abound, and which, by permission of the illustrious men who have *sweated in this contest*, savour more of superfluity and emptiness, than genuine learning. From my own observations, as well clinical as anatomical I find, that there occur *four species of internal Suppuration*, an *abscess* exhibits the first, which is pus contained in a kind of follicle of its own; an *ulcer* gives the second, the third is manifest from a certain whitish, and as it were gelatinous *crust*, which, as it would seem, covers the uninjured viscus, but the fourth is nothing else but a *Purulent obstruction* of the viscera.

To begin with the *first* and most remarkable species of Suppuration: I have already said that pus is formed from the fourth to the seventh day of the inflammatory disease, but it is proper to add, that this office of nature sometimes commences prematurely about the third and even second day of the inflammation; which must be carefully remembered, lest it be disturbed by ill-timed remedies. No one is ignorant, that when putrid and malignant fevers, small-pox and measles prevail, collections of pus often in a very short time fall upon the lungs, liver, mesentery, &c. without any previous mark of inflammation. Besides this misfortune is

very common from metastasis, namely, when from exhausted external ulcers, the purulent matter being again mixed with the blood, falls upon some part or other, without any warning given, as has been over and over observed. Sometimes anomalous or cystic tumors run into Suppuration, and contain not only pus, but diverse other matters, such as stones, bones, cartilages, scales, &c. Every one understands that the size of *internal abscesses* varies, according to the structure of the part, or cause of the disease. I remember once to have seen a person, with liver of stupendous magnitude, which contained eight pounds of pus, of no bad appearance. The poor woman affected with this disease was of low stature, and while living was oppressed with the greatest difficulty of breathing, on account of the diaphragm pushed against the third rib, counting from the clavicles, so that it excited wonder how the heart and lungs could be confined within this very narrow space, and preserve life. I have observed another abscess, perhaps larger, in the same viscera, the matter of which being feculent and very fœtid, made itself a passage by the diaphragm and lungs, through the bronchia, and with such force did this deluge rush to the mouth, that the patient, although of athletic habit, died from suffocation.

The *second species* of Suppuration is less frequent, if we except wounds, to which it also belongs—and the seat of the disorder seems to differ from the *first*, for if pus is formed on the surface, or confines of the viscera, or even in their cavity, it erodes the covering proper to the viscera, or the membrane lining the cavity; hence having overcome this hindrance, the pus unable to be collected, is poured out, whence arises an *ulcer*, which sometimes is widely diffused, or destroys some part of the viscus, and even, horrid to be seen, consumes the whole: which is known by those who have been engaged in many dissections, to have frequently happened in one or other of the lungs. The whole heart has often been found ulcerated, but the erosion creeping upon the surface alone, does not reach the inferior contexture of the viscus. Almost in a similar manner is the internal surface of the larynx injured, as also the bronchiæ, kidneys, and bladder, stomach and intestinal canal, uterus, &c. which viscera, by reason of their excretory ducts, afford a passage to the purulent matter.

The *third species* of Suppuration is performed by *transudation* alone without abscess, or existing ulcer. The pus as it were mild and free from acrimony, is expressed from the viscus; sometimes when fluid, it gives rise to purulent stagnation, as in other species of Suppuration, sometimes viscid and gelatinous, it adheres to the surface of the part injured, like a *glutinous crust*,

which being removed, the viscus is seen entire, yet with evident marks of inflammation. This species of inflammation and Suppuration not only respects acute diseases, but is often observed after chronic ones, in the lungs, heart, intestines, &c. on which account some have doubted of the true nature of this matter. Nor, to say the truth, could we be certain of this effect of inflammation, unless the above-mentioned concrete substance had been often found intermixed with fluid pus, and very well marked, both in stagnations and in abscesses themselves, which, if I mistake not, sufficiently evinces its nature.

Lastly, the *fourth species* of Suppuration is more frequently observed, since the whole texture of the viscera is impregnated or imbued with the matter, without any conspicuous erosion, and mostly without any existing abscess, unless we give this name to numberless little receptacles every where to be met with, which contain very little matter. This is the first grade of putridity, to which the lungs, liver, spleen and pancreas are liable: and the omentum itself is very often consumed by it. Viscera that are compact, when affected with this disease often appear at first view sound; but when the knife is passed into them, the pus collected within their substance immediately bursts out, and flows on all sides. These are such as are discovered by *dissection* of those who die of those affections, and are often very obscure during the patients' life.

Besides the *marks* of inflammation already mentioned, a collection of pus is known by a pulsating, shooting and heavy pain, and by a kind of feverish shivering recurring irregularly. If the abscess occupy the breast, the difficulty of breathing is increased, and the cough excited: if it be concealed in the head after a fall from a height or other contusion, most severe head-ach is excited, with mental torpor, apoplectic fits, convulsions, &c. Abscess in the abdomen is more difficultly ascertained, unless we are aided by examination with the finger, otherwise it is often so hidden as never to be suspected. *As the abscess advances*, or comes to maturity as it is called, the symptoms commonly become milder, and the pulse more yielding, unless the pains are exasperated by the size of the tumor compressing the adjoining parts; or from the erosion of pus, which works itself cavities between the parts endued with exquisite sensibility. Abscesses from *metastasis* of purulent matter, for the most part putrid and sanious, rarely partake of pain or excite fever, no wonder, therefore, if they should be brought to view only by the examination of dead bodies. It is otherwise with those formed near the last stage of fevers of a bad kind, which are followed by pain and throbbing if they invade the liver, mesentery, and

other abdominal viscera, and they excite cough and suffocation, if they affect the lungs. No one is ignorant that ulcers most commonly proceed from the bursting of abscesses, but others, as just hinted, are formed without any previous collection of pus.

Ulcers having their seat in hollow viscera are easily known by the evacuation of pus. We trace others by mere conjecture, although they are not without their marks, of which number are shooting pain with burning in the affected part, slow fever, chronic sweats, tabes, &c. As to other species of Purulency, concerning which authors have been entirely silent, they have hitherto manifested themselves by no certain marks, nor can I say any thing positively on this subject, from my own observations taken from the sole *inspection of bodies*; on which account they cannot be suspected unless from a close attention to antecedent symptoms.

It remains that I briefly treat of the *slow fever*, exceeding for instance the fortieth day, which, although it may be occasioned by almost all chronic diseases, yet is the principal symptom of internal Suppuration. Every internal collection of pus has this as an attendant, at first clandestinely invading, and advancing slowly. The pulse in the first stage, scarcely recedes from the usual and natural standard, but as the mischief encreases, and the patient wastes away, the *fever* breaks out, which often rages to such a degree, as to be considered by the incautious as *acute fever*, which they think to reduce by venesection, to the very great injury of the sick. When the *hectic fever* comes on, it suffers an exacerbation after eating, and towards evening; then follows a constant heat, propagated sharper and more biting to the palms of the hands, the cheeks become red, the tongue dry and covered with a whitish mucus. Meanwhile chills come on at irregular intervals; or the sick complain of simple and momentary coolness of the extremities. The appetite fails, or hunger is excited, the sleep is deficient or disturbed, the strength languishes, the sick are gradually emaciated, the temples fall in, the belly is contracted as if empty, the urine is frequently observed to be fatty and thick, or putrid. Lastly, sweats, especially during sleep, breaking out profusely, colliquative stools, to be checked by no remedies, dry and squalid skin; acute nostrils, hollow eyes, falling off of the hair, &c. are considered the harbingers of death.

It sometimes happens that *abscess* of the breast or of the abdomen is prominent externally, from which happy and unsuspected event it is obvious to any one that we may reasonably hope for a recovery. Besides pus, in whatever part it may be collected, is not unfre-

quently carried off by *expectoration, vomiting, stool, and urine*; nor is this happy event confined only to Suppuration of the lungs, stomach, intestinal canal, and kidnies, but even to abscesses of impervious viscera, the purulent matter of which, by eroding the neighbouring parts, makes itself a passage into the cavities of the above-mentioned emunctories; or by the spontaneous motions of nature, being again mixed with the blood, or re-absorbed, reaches these strainers by the law of the circulation. Nor must we altogether despair in abscess concealed within the bony cranium, the matter of which, by eating through the covering of the brain and bones themselves, finds an outlet through the nose and ears. Lastly, it is expedient to note that the purulent matter, secretly collected in any part, during the continuance of the fever, or brought hither by metastasis from an exsiccated ulcer, mostly tends to putridity, in a short time transmitted to the parts adjacent, in which case we may send for the mourners.

Internal abscess arising from genuine inflammation portends less danger, for besides the ways of evacuation hinted at, pus of the best kind, and collected in small quantity sometimes loses its fluidity, and becomes a hard substance, which in the end occasions slight inconvenience, and is lodged there without danger; this *dissection* teaches.

Even the most skilful can with difficulty cure ulcers seated in the bronchia, stomach, intestines, kidnies, bladder and uterus: but those are thought altogether *incurable* which have no outlet. Both are attended with *hectic fever*, which is followed by sweats and diarrhæa, by which the body as it were melts away. Hence *marasmus* which is not rarely succeeded by dropsy. These ulcers often seem to put on the nature of cancer, especially those of the hollow viscera. But it has been customary to designate by this name those only that affect the uterus. Ulcers of the lungs, kidnies, uterus, and other pervious viscera do not hinder the protraction of life for many years, on account of the free efflux of matter: but where there is no outlet, death is soon the consequence. That species of Suppuration which is formed by exudation, does not perhaps preclude *all hope of cure*, but I can adduce nothing certain on this subject, since this kind of sickness is never known till after death. For a similar reason the event ought to be considered doubtful from a lodgment of pus within the contexture of the viscera, yet this disease ought to be considered far more dangerous, which, as above hinted, exhibits the first grade of putridity, and is always fatal. It is well to add, that this last species of Suppuration, brings the neighbouring parts into consent, unless the sick are taken off by sudden death. All which may be seen by *anatomical dissections*.

From what has been said, we may collect that there rarely appears any way of cure for internal Suppuration, not only because remedies are inadequate to overcome this affection, but also because they are mostly hidden, and do not enter the mind of the physician. It is acknowledged by all both physicians and surgeons, that venesections prevent the formation of pus, it does not follow from this that they are suitable when pus is formed in a part that is not pervious, and therefore denying all hope of future egress; since they tend in this case, to bring on gangrene, or to favour the formation of *schirrus*, which disorders excite more *fear of death*, than pus collected in even an impervious part, which, as already remarked, can make its way by the intestinal canal and other receptacles of the body, or may be re-absorbed, and by the help of the circulation reach the organs of excretion, which double outlet is altogether denied to the former diseases. *The milder laxatives*, if sordes lodge in the *primæ viæ*, may safely be used, but they have no effect on the principal disease. *Diluents* and *demulcents* are beneficially given, the best of which are whey or milk itself, rice, barley, sago, and others of this class, which by covering or blunting acrimony, are of use in seconding the efforts of nature. *Vulneraries*, *detergents*, and *balsamics* are of no small benefit, among which are *pervinca*, speedwell, ground-ivy, self-heal, St John's wort, and lady's mantle, honey of Narbonne, balsam of Peru, or Canada balsam, China turpentine, tar water, Lucatellus' balsam, and others of that kind, which have been of service to many. Nor are the numerous mineral waters impregnated with balsamic substances to be omitted. Concerning the virtues of acids, which are proposed by some, there is some doubt.

As to *external remedies*, there is no room to doubt that emollients and maturants are of great service, if the abscess point externally, or a fluctuation be discovered by the fingers. Nor is the efficacy of detergent injections less manifest, if they can be thrown into the affected part of the ulcer. But it is the opinion of practitioners of the first rank, that *cauteries* far excel other remedies, for in observing the frequent metastases of Purulent matter, it is easy to understand how the motion of the pus when deviating and mixing with the blood, is directed toward this kind of outlet; or it may be favoured by the salutary efforts of nature, which daily experience testifies. Cauteries have no effect against Purulent stagnations of the abdomen, breast and head, which cannot be re-absorbed, by reason of the thickness contracted by retention; wherefore it is expedient to recur to another method, which consists in promoting the evacuation by the surgical art, if nothing forbid, for that this has been fatal to some, is known to

physicians, especially as respects the breast. Sometimes when one or other of the lungs is altogether destroyed, the pus fills the former seat of this viscus, in which case I think no one would dare to make the experiment.

GANGRENE.

FROM examining the history of dead bodies, it is abundantly evident that the internal parts, as well as the surface of the body, are liable to Gangrene, nor is it less obvious that this dreadful disease, attacking either part, is followed by *sphacelus* or *mortification*; by which the part, altogether deprived of its natural heat, becomes black, soft, fœtid, and putrid. No one is ignorant that Gangrene which is conspicuous externally, is either *dry* or *humid*, and we may discover nearly the same difference in the more inward recesses of the body, which, although doubtful, I have thought it best to admit, lest some expressions should occur, which, according to the new nomenclature, might be obscure. The *first* or *dry*, on *dissection*, is known by livid or blackish spots, which not unfrequently attack the pleura, peritoneum, mesentery, stomach and intestines, or other membranous parts, having the nature of involucra, or lining the sides of the cavities. The *second* or *humid*, being the commencement of putrid dissolution, is perceived in the very texture of the viscera; the lungs, liver, spleen, pancreas, omentum, &c. are very often found affected with this mischief. It is reasonable to believe that both species of Gangrene running into sphacelus, proceed from one and the same cause, which produces either effect according to the structure of the part. Another species of Gangrene, if I mistake not, is brought to view in *dissection*, and seems to differ much from the rest; it shews itself under the form of a whitish pellicle, which is easily torn off like an eschar, and adheres to the surface of the viscera. The heart, above all other viscera, is found to be liable to this kind of disease, yet it occurs not rarely in the stomach and intestines, nor does it spare the liver and other viscera. The above-mentioned marks, like spots, projecting scarce beyond the surface of the viscus, shew themselves at first view, and are observed to be sometimes very small, and sometimes widely spread; in some they are solitary, in others very numerous, which last infest the *heart* in great abundance, so that they may be taken for exfoliation or desquamation of this viscus, concerning which it is to be remarked by

the bye, that these membranous filaments proceed from no other source, which are thrown off coughing, or are carried out by stool or urine, which it is justly conjectured are nothing else than pieces of the membrane of the internal trachea, bronchiæ, intestinal tube, and bladder, separated by this disease.

The *first species or dry Gangrene*, mostly arises from inflammation, pressure, too great dilatation or tearing of parts. At other times it is a disease as if *sui generis*, although it does not exist primarily or *per se*, since it is altogether produced by a vitiated state of the humors or blood. The small-pox, malignant fevers, and other acute disorders are often attended with this species of Gangrene. The same is also met with in the bodies of those who die of scurvy, phthisis, dropsy, or other chronic affection. Lastly, a similar species is produced by the depressing passions of the mind, air rendered impure by poisonous exhalations, poison taken internally, or mixed with the blood by the bite of animals, &c.

The *second or humid species*, is most frequently produced by purulent obstructions, as already remarked, but it is also brought on by other causes, which have hitherto escaped our researches. The *cause and character* of the *third species*, differing altogether from the rest, are hid in thick darkness; nor can the event be foreseen, although the viscera affected with it, both in acute and chronic diseases, seem not unequal to the performance of their offices: On which account we must enquire further concerning this matter.

Burning and acute pain indicates threatening Gangrene, the sudden cessation of which denotes the presence of this disaster or of sphacelus. It mostly arises from inflammation, but we cannot doubt that it also proceeds from various other causes, which are either beyond our view, or only reached by mere conjecture. Internal Gangrene not unfrequently draws external parts into sympathy, and by this mark, if other circumstances agree, we may justly suspect it; which indeed has not escaped the notice of physicians, to have often happened in old age. But where these conspicuous *marks* are wanting, the diagnosis of this disease may be obtained from attending well to preceeding symptoms. Nothing certain can be inferred from weak and intermitting pulse, anxiety, prostration of strength, cold sweats, &c. with which it is attended, for these symptoms have reference to almost all diseases. From black, schirrous and very fetid stools, if the other signs have preceeded, we may easily learn that the intestinal tube is infested with Gangrene and mortification, when pains have ceased. It is abundantly manifest that membranous viscera affected with this disease incur great

danger of *laceration*, for I remember to have sometimes observed the ileum burst from this cause, and from the ruptured intestine the remains of aliments rushed out, which collecting by degrees in the cavity of the abdomen, pressed down the inferior intestines, occasioning a vomiting which no art could appease, and which deprived the patient of life. Another rare case, and not less to be dreaded, I have committed to my book of notes, which consists of dilaceration of the stomach and adjacent diaphragm, by which their contents rushing into the breast, brought on such a suffocation that the patient instantly departed.

INTERNAL GANGRENE is very difficult to *ascertain*, and not more easy of *cure*. No one is ignorant that roborants, cardiacs, alexiterials and diaphoretics are much esteemed *in foro medico*, against external Gangrene. It appears consonant with reason that we should attack internal Gangrene with the same means. But antiseptics take the palm, which although of a different character, are not without specific virtues, but it is not easy to explain their genuine mode of action. Those most approved and generally used, are camphor, Peruvian Bark, and spiritus salis dulcis, which, when timely exhibited, and with a skilful hand have snatched many from the grave, before the disease became incurable by attaining to its last grade. But, to confess the truth, those medicines have rarely been given to advantage against the disease attacking clandestinely, and not known before it be deeply rooted, which finally becomes known in many, not until after death, by dissection.

INSECTS AND EXTRANEIOUS BODIES.

WE shall treat hereafter of lumbrici, and other species of Worms lodging in the first passages, as also of cutaneous worms, which especially affect children, concerning which in their proper place. We have therefore thought it well worth the trouble to say something at present, concerning those *multiform Insects*, which may be met with every where in the human body, yet perhaps omitting numberless ones which escape the keenest eye. We must receive with some abatement the immoderately numerous observations on this subject, which are extant, since many have been adduced from the mere whimsies of those who are gaping after filthy lucre, that they may be celebrated, and make themselves admired by their dupes. Nor are there want-

ing silly women who by subtle artifice, feign or contrive monstrous things, that wonders may be told about them. On this account it becomes difficult to discern truth from falsehood; yet we cannot doubt that *worms* are propagated, or *certain animalcula* resembling them, in all parts of the living body. For they lurk in the brain, and excite most violent head-ach, delirium and convulsions, &c. When they infest the sinuses of the ears and nostrils, they excite the greatest pain. Those which are produced in the bronchia and lungs become the most troublesome, unless they are thrown out by expectoration. Among the more rare and noxious are considered those which are found in the very ventricles, and auricles of the heart, and in the pericardium. The most common and least to be feared, are those lodged in the liver, spleen, pancreas, mesentery, kidneys and bladder, as also in various tumors, follicles, &c. As to the form and size of these insects, it appears from their history that some are smooth, others hairy; some have feet, which are denied to others. With respect to magnitude they are mostly very small, but sometimes they are found of great size. Lastly, according to various authors, in whom we may put confidence, some are met with very much like millepedes, leeches, beetles, scorpions, frogs, lizards, snakes, &c. It is wonderful to observe that among these the more dignified are evacuated, as they tell us, by vomiting and stool, which to be sure excites no little suspicion of *fraud*. Moreover there are discovered smaller animalcula of another sort, not only by the microscope, but also by the naked eye, in the blood, saliva, urine, &c. Yet these little bodies are not found alive, if we except the *spermatic* vermiculi, discovered in this fluid when recently ejected, but they are to be seen only after some delay, or a kind of putrefaction. Hence it follows that such as these have had no existence, as some pretend, in the blood-vessels and other receptacles of the living body. They are not less deceived who affirm that little thick worms have crept out, through a wound made in blood-letting: But these wondrous fables please those who are unwary or ignorant of the arts of mountebanks; nor are there wanting some who do not blush to vend their charms and nostrums, and give credit to their stories.

There is no greater certainty in some histories related of *stones and extraneous substances*, although there is no room to doubt that these concretions occur every where in the human body, to say nothing of calculus of the kidneys and bladder, concerning which in its place. Stones are frequently found in the various recesses of the brain; the pineal gland is mostly found gravelly, and indeed it has often happened, that I have observed in *dissec-*

tions, the whole brain filled with little grains of sand, which vitiated constitution of the brain, I have thought could not have occasioned death. But stones of a certain size, ought to be considered fatal in any part of the brain, as from these arise most severe head-achs, delirium, lethargy, vertigo, convulsions, blindness, &c. Sandy concretions are more frequent in the lungs, or bronchia, which by means of coughing are often thrown out; nor are they to be thought less dangerous, when they occasion hoarseness or unconquerable cough, difficulty of breathing, hæmoptisis, and other symptoms which bring on pulmonary consumption or marasmus. The heart itself is oppressed with even stony concretions situated about the valvulæ, from which originate, especially in old age, palpitation of the heart and fainting.

Stones are not unfrequently met with in the belly, they are even formed in the substance of the liver and in its surface, from whence proceed pains, and other phenomena common to various diseases, so that often this kind of sickness is altogether latent, or never enters the mind of the practitioner. The diagnosis of bilious concretions is equally difficult, unless when slipping from the gall-bladder, they wound the ductus choledochus, and by hindering the free flow of bile, occasion the colic which they call *hepatic*. Nor do these false stones grow in the gall-bladder alone, but they are often formed in the intestinal canal, which attain the size of a pidgeon's or hen's egg, and are carried off by stool. Stones of another appearance are sometimes found in the spleen and pancreas, more rarely in the mesentery, unless by this name we improperly call those schirrous obstructions which sometimes resemble stones in hardness.

To pursue my plan: Very numerous are the observations concerning *lithiasis*, or stone, in the first passages, which is generally known by stones issuing from the mouth or anus; but beware of the arts of the fraudulent. There is no doubt concerning stones formed in the testes, vesiculæ seminales, uterus and placenta; it is no less certain that they are sometimes hid within the cellular substance and muscles themselves, nor are the blood-vessels to be thought safe from them. Moreover, stones grow in the margins of the eye-lids, in the nostrils, and are collected in their little caverns, they are implanted in the root of the tongue, and infest the other parts of the mouth. Sandy sweats break forth in some phthisical patients. The gouty and rheumatic matter impacted on the joints seems altogether gravelly.

Lastly, in some anomalous tumors and abscesses there are found stones of many forms, as also bony and cartilaginous substances. In the same are met with, *extraneous substances* that were

swallowed, or taken into the body by some other way; to wit, needles, nails, leaden bullets, seeds of plants, nuts, grains of corn, twigs, splinters of wood, bones, fins of fishes, feathers, &c. The tales exceed all belief, which some tell, of whole knives, forks, and such like things found also in abscesses. By way of *overweight* I may add that stones are also generated in the bodies of different animals, for there are in the museums of the curious, innumerable bezoardic substances, taken out of oriental and western goats, deers, and other foreign quadrupeds. Even toads, serpents, and river crabs have them, the like are rarely found in the ox, the ram, the horse, the stag, &c. to say nothing of the *balls of hair* rolled up in the stomachs of oxen and goats. Nor are there wanting histories of plants growing in the bodies of animals, which therefore, like a little world, seems to contain the rudiments of animal, vegetable, and mineral substances. These are the phænomena of sportive nature, in the explanation of which, the subtilty of the human mind in vain may try its powers.

It is plain from what has been said, that the *cure* of the multi-form affections arising from Insects and Extraneous Bodies, is very difficult, and ought chiefly to be left to nature. It is true that by timely remedies, insects attacking the ears, frontal sinuses, eye-lids, teeth, &c. may be destroyed. By the well-timed efforts of nature, these inhabitants of the bronchia, stomach, intestines, kidneys and bladder may be scattered: but vain are the endeavours of art and nature against those animalcula attacking the brain, heart, liver, and other impervious organs. The same may be said of stones and other extraneous substances, lodged in the different parts of the living body: to be sure by the help of cough, gravelly concretions of the lungs sometimes find exit through the trachea; the very small calculi of the kidneys and bladder often yield to the impetus of the urine; the mouth and anus allow passage for stones and other matters lodging in the first passages: but there is very little hope, if these concretions be locked in the brain, liver, pancreas, spleen, &c. Nevertheless we must not altogether despair in each of these cases, since we are allowed to try the virtues both of anthelmintics and lithontriptics, which, although they seem unequal to the subduing of the morbid matter, yet through the favour of the Supreme Being, may, beyond the expectation of all, be successfully administered.

POISONS.

POISONS, as well as medicines, are taken from the three-fold kingdom, and seem to differ one from the other only in the manner of administering them: since the more formidable Poisons, namely cicuta, corrosive sublimate, cantharides, &c. are daily brought into medical use by practitioners of the first note, but in very small doses. The grade of Poisons is various, not to mention those which respect the bites of animals, of which elsewhere. Some of the worst kind excite symptoms of the most dreadful nature, which shortly or instantly kill; others more slow, do not shew their effects till after some days, months or years, so that for a long time, these last silently lay their snares for life, and resemble a most intricate and slow disease, which in time grows more violent, until having exhausted the strength, and consumed the flesh, it reduces the miserable patients, already worn down with afflictions, to the close of life. From the very prompt and amazing effect which is produced by the arrows of the Indians of both worlds, which are imbued with poison, we may understand that these barbarians are very well versed in this nefarious art; but far be it from us to envy them in this destructive business. What the genuine *character of Poisons* is, it is difficult to find out, and we can argue nothing certain on this subject, from the various experiments made on the bodies of animals, since one and the same poison has different effects in different animals: for example, bitter almonds, and parsley, which are enumerated among aliments, will kill birds; which on the contrary fatten as it is said, on cicutra and hellebore. Hogs also feed on cicuta without harm. Spurge, which goats feed on with avidity, is fatal to fishes and to men. Among poisons, the nuxvomica is justly considered so to dogs and other domestic animals, which nevertheless some have given as alexiterial, not to mention other perhaps innumerable examples of this phenomenon.

The nature of some Poisons is sufficiently manifest. It is natural to suppose that the powder of glass, crystals, and adamant have a mere mechanical effect, to wit, that by their angular fragments, as if by so many little daggers, they wound and pierce the coats of the stomach: It is justly considered that arsenic, orpiment, corrosive sublimate, verdigis, cantharides, &c. are acrid corrosives: there is no doubt that spirit of nitre, of sulphur, of alum, and of vitriol, belong to the class of acid caus-

tics. Moreover, it is likely that stramonium, hyosciamus, night shade, atropa, &c. are narcotics. It has been more than sufficiently proved that the first or caustics exert their principal mischief on the stomach and intestines, but the others, or narcotics do their damage to the blood and humors. But the mode of acting of cicuta, ænante, wolfs'-bane, cherry-laurel, fungi, and the various vegetables which have a place in the number of Poisons, to say nothing of the Poison of rabid animals, viper, rattle-snake, tarantula, scorpion, toad, and others of the like kind, the nature of which is involved in darkness. Another doubt perplexes physicians, to wit, whether such and such Poison have been given by wicked persons, which is of great consequence to know, in order to exhibit suitable and timely remedies. For we often have to trace it by mere conjecture, after a very careful examination, and although something may be gathered from the signs accompanying, and from the effects, we can infer nothing certain concerning the nature of the Poison taken.

It is true that many things may be discovered from the relation of the sick and the bystanders, concerning the nature of Poison taken by accident, error, or carelessness, but it is otherwise when infidelity or malice, or the perpetration of some wicked deed are suspected, since in these difficulties we dare not express any thing but suspicions. Nevertheless Poisoning of any kind shews itself by very numerous signs, to wit, head-ach, vertigo, and dimness of sight, stern looks, delirium, tremor and convulsion, swelling and blackness of the lips and tongue, interrupted respiration, tightness of the chest, palpitations and faintings, anxiety, hiccough, burning pain of the stomach, tormina, vomiting, iliac passion, cholera morbus, bloody stools, inflation of the hypochondria, &c. Meanwhile the pulse is weak, obscure, intermitting, tremulous or convulsive; moreover, the strength fails, or is prostrated, the joints are torpid and cold, cold sweats break out, the whole body becomes swelled, the skin is marked with gangrenous spots, the nails grow black, &c. But these marks seem to agree with almost all Poisons of what nature soever; hence we are to search for others which more clearly point out the nature of the Poison, these are a burning sensation of the œsophagus and stomach, inflammation of the fauces, ardent thirst, violent pain of the bowels, bloody stools, ilius, cholera, fainting, &c. equally the effects of acrid, acid, or other infernal impregnations. Vertigo, lethargy, furious delirium, convulsions, nausea, vomiting, &c. are no unlikely marks of narcotic Poison.

It may be proper to add to these general observations, something concerning cicuta, and the noxious fungi, which by fatal

mistake are often mixed in our food. *CICUTA*, which sometimes is taken for parsnip root, sometimes for the leaves of parsley, on account of its resemblance, occasions innumerable and dangerous symptoms, among which more frequently occur a stupor, sometimes sudden, of the whole body, vertigo, dimness of sight, delirium, loss of strength, convulsions, vomiting, hiccough, heat and pain of the bowels, swelling of the epigastric region, discharge of blood from the ears, frothing at the mouth, &c. It is evident from the above that *our Cicuta* is vastly different from that of the *ancients*, which merely as a narcotic, brought on an easy death. The Poisonous *fungi* or *mushrooms*, which those ought to guard against who are fond of delicacies, exhibit their effects more slowly, or after an entire day, the most evident of which are nausea, dreadful vomiting, cholera, discharge of blood by stool and urine, cardialgia, tormina, intense thirst, perturbation of mind, tightness of the breast, puffing up of the hypocondria, unusual vibrations of the *aorta* or *cæliac* artery, anxiety, loss of strength, frequent, low, depressed pulse, &c.

But we must not omit to mention, that these *signs*, respecting *cicuta*, *fungi*, or other poisons, do not *shew themselves alike in all*, for it is evident, that they obtain different strength, in proportion to the dose, or to the matters taken into the stomach and mixed with them, and other innumerable circumstances. Besides by quicker or more tardy vomiting, by the belly being more or less loose, a greater or lesser part of the virus is carried off: hence it is no wonder if the symptoms with respect to the abdomen are sometimes mild and obscure. We may judge in the same way of that part of any Poison, which more sparingly or plentifully reaching the blood through the lacteals, is now subjected to the organs of the circulation, and strained out through the different glands of the body, now intimately mixed with the blood, and not to be loosed from its bonds, gradually injures the nerves; hence torpors, paralysis, contractions, and other symptoms of chronic diseases, which endanger the patient's life. These must be understood not only of *cicuta* and poisonous *fungi*, but also of all other Poisons, among which ought to be considered, litharge, which is wickedly used to ripen immature wine, occasioning the greatest injury; and *verdegris*, which taints victuals cooked in brazen vessels, giving rise to *colica pictonum*, of which in its place.

It remains that I briefly enumerate the *signs* which may be gathered from *dissection*. The bodies of those who die of Poisons are for the most part swelled, the abdomen especially inflated beyond measure, the skin and nails covered with blackish

livid spots, the hair easily falls off, &c. on opening the abdomen there are found amazing dilatations of the intestinal tube, and as many strangulations, if I may be allowed the term. Inflammations and gangrenes occur every where. The stomach and intestines in some are sphacelated, variously chopped, and not to be handled without being torn. The liver sometimes deformed, contracted, as if dried, or seized with mortification. Lastly, spots affecting all parts in great abundance, of a livid or blackish red appearance. From comparing these marks with the foregoing symptoms, and properly weighing and considering them, we may collect some things certain, concerning the latent cause of death, which for the purpose of evidence at Court, ought to be expressed with clearness, lest the Judges in capital cases should be deceived.

From the circumstance that there is a great number of Poisons of different sorts, it is easily inferred that the manner of treating them is different. To subjoin in this place all the *medicines* exhibited against poisons, would be silly and fastidious, wherefore I have thought it worth the trouble, to give only the more select. These may be comprehended in *three classes*, of which the first exhibits *emetics*, and other evacuants of the first passages, which if taken hastily, or in time, may carry off the genuine cause of the disease, and thus as it were snatch the sick from the jaws of death. Evacuants afford present help, against *Poisons* of the *narcotic* kind especially, nor are they less beneficial against the *corrosive*, if given speedily and without any delay, namely, before the Poison has done any injury to the stomach, by which a dreadful vomiting is brought on. Wherefore it is obvious that in this case emetics would be useless, which, as they say, might *add a spur to the racer*. Nor is venesection to be omitted if the strength permit: a cure is especially to be hoped for by venesection, if the very severe pains denote threatening inflammation, to prevent which no pains ought to be spared, nor ought this remedy to be forbidden as the disorder advances, if necessity urge; but throughout the disease blood is to be drawn with the greatest caution, lest a gangrene coming on should hasten death, which histories testify to have often happened.

The *second* class consists of *diluents*, refrigerants, and *demulcents*, in which class are simple water, warm, or impregnated with lemon-juice or other similar acid, which are of peculiar benefit against narcotic Poisons; emulsions, chicken or veal water, decoction of rice or barley, milk, butter, honey, oils and fat soups, by the help of which, the acrid particles are entangled and covered, or as if held and fixed in chains. Clysters of milk,

decoction of tripe, butter, oil, honey, &c. afford their share of benefit. Remedies of this kind, which are successfully given against all Poisons, are far more efficacious, as experience testifies, against poisoned waters, or acrid, stimulant and corrosive Poisons, the spiculæ of which may be covered by these viscid, fat, and oily substances. I may remark as I go along, that nothing in nature is more suitable than milk for blunting the violence of cantharides, taken inwardly by most abandoned whoremongers. To diluents and demulcents we may add anodynes, which are of no little use in excruciating pains which follow the taking of acrid or acid Poisons, provided the first passages are cleared by suitable evacuants. Lastly, no one is ignorant of how much efficacy salt of tartar, crabs eyes, and other absorbents are, when the virulence of acrid Poisons is to be subdued, in which case it is manifest that they act the part of demulcents.

The *third* class respects *cardiacs*, alexiterials and diaphoretics, among which are theriaca, orveitan, mithridate, and diascordium, garlic, powder of vipers, volatile salt, &c. Some add bezoardics, formerly very much celebrated, but their use is nowadays not improperly rejected. Nevertheless from the foregoing we may collect, that these alexiterial medicines, are given with little effect against acrid Poisons, although they are much cried up by quacks and mountebanks, and approved by the ignorant vulgar; for they rather encrease the deleterious effects of these Poisons, much less oppose them. Lastly, every one knows the benefit of vinegar and volatile spirits to the nostrils, as also stimulating clysters after the customary evacuations, against narcotic Poisons, or even opium itself, which taken in too great a dose claims no mean rank among Poisons.

In order to complete my design, it is proper to say something particularly concerning *cicuta* and poisoned mushrooms. Nothing ought to be esteemed more necessary by the physician, when one has eaten *cicuta* or other such plants, resembling pot-herbs, than immediate vomiting and purging. Venesection also frequently does good, if, as above hinted, nothing forbid. Wine, and other alexiterials have often had the happiest effect; but diluents, refrigerants, and demulcents, exceed perhaps all the most highly recommended medicines, for, as I have often inculcated, they seem suited to every species of Poison. As to fungi, although their nature is most intricate, yet, from the effects soon produced, and from the requisite remedies, it is easy to judge, that they possess an acrid and stimulating matter. Hence chicken water, althea tea, milk, butter, oil and other demulcents, generally used against corroding Poisons, are highly extolled.

The milder cathartics, laxative injections, emollient fomentations and warm bath are happily administered, which being premised, and the more severe symptoms having abated, nothing forbids the use of cardiacs and alexiterials, which given at other times usually do harm. I may add, over and above, that there are some poisons, to wit, mercury, corrosive sublimate, cicuta, belladonna, stramonium, aconitum, solanum, &c. which within a few years have been brought into medical use, by some physicians of the first rank, and not without good success: but whether these remedies, although beneficial, if given with a skilful hand, may be safely trusted to the generality of physicians, surgeons, and apothecaries, I leave to wise politicians to enquire.

SECTION THE SECOND.
OF INTERNAL DISEASES OF THE HEAD.

VERTIGO.

THIS affection, sometimes idiopathic, and attended with signs of determination to the head, is in many a symptom of another disorder. In some the objects of vision seem to fly round, or to be turned in a circle; in others the sight is obscured, but many who complain of both phænomena, reel as they are standing on their feet, or fall to the ground, if they are not very careful. Hence arises a *division of Vertigo*, very much approved in the schools, but rejected by wiser practitioners, to wit, into the *whirling*, the *dark or dim*, and the *reeling or falling*, which are nothing else than grades of one and the same disorder. I wonder forsooth, that to these imaginary species, authors have not added a *fourth*, namely, the *sleeping*, by which, not unfrequently, the sick are for a short time deprived of their senses.

No one is ignorant that hypocondriacs, persons subject to flatulencies and palpitations of the heart, and also hysterical and pregnant women, are *liable to Vertigo*. Studious persons and those who indulge in profound meditations have a tendency to it, as also those who indulge in ease, and who are of a costive habit, those who are exhausted with hunger, as also gluttons and wine-bibbers. It affects the unmarried, and free from every unchaste desire, and spares not the debauchee, or those who have prematurely and rashly given themselves to venery. Profuse hæmorrhages, or the suppression of customary ones, bring it on. Saburræ lodging in the stomach, flatulency, &c. It is moreover contracted by cockle or darnel bread, from tobacco snuff, or the smoke of it through a pipe; from air infected with the very injurious vapour of charcoal; to say nothing of a fall from a height, vehement percussion of the head, &c. Lastly, those who give way to violent anger suffer slight Vertigo, those employed in steep or slippery places, persons who fix their eyes on whirlpools of water, or a river swiftly gliding along.

Sometimes grievous pain of the head announces *threatening Vertigo*, accompanied by tinnitus aurium, nausea and vomiting, loss of strength, &c. It not unfrequently resembles an apoplectic or epileptic fit, of very short duration: besides there is so great an affinity between these diseases, that frequently in youth *Vertigo* is the forerunner of epilepsy, and in old age idiopathic *Vertigo* sometimes preceeds a sleepy affection, apoplexy, or palsy; especially if the paroxysms be rather long, and recur frequently. Yet it is proper to add, in order to compose the minds of the timid, that chronic and repeated *Vertigoes* often excite vain terror, as I have known many advanced in life, who from twenty or thirty years, and even from their childhood, have complained of vertigo, though otherwise in good health. As to symptomatic *Vertigo*, we must have regard to the primary disease, in order to form a right prognostic. But it is plain to any one that *that* which arises from a slight cause, and easily to be removed, does not portend the least danger.

From *anatomical observations* we learn, that the brain contains within its recesses and folds a serous effusion, and especially that part is filled with it, that is known by the title of the *third ventricle*. In many there are found hydatids growing to the vascular plexus, commonly turgid with blood, which sometimes are moist with a blackish humor. The carotids in some, contract a bony hardness. Every where occur marks of purulence and putridity, not only in the texture of the brain itself, but also in its coverings. I add nothing concerning worms, stones, and other extraneous bodies, because they refer to numberless other disorders. On opening the breast there are discovered dilatations of the heart, the valvulæ filled with bony or stony concretions, and what are called *polypous* coagulations within the ventricles, auricles, and larger vessels of the heart, as though they were formed in a mould. The abdomen exhibits the stomach and intestines, which often contain the source of the disease, distended with flatus, and marked with livid spots, &c. The viscera obstructed, receding from the natural colour, corrupted and diseased in various ways, the vesiculæ seminales uncommonly dilated, putrid, or tainted with some other injury, &c.

It is best to abstain from every *cure*, if *Vertigo* originate from an evident and slight cause, otherwise we may call in the aid of medicines, as well in the symptomatic as idiopathic; but their administration is very arduous and intricate, when the cause of the disorder, as frequently happens, is obscure; so that the cure for the most part is governed by *juvantia* and *ludentia*, unless it be effected altogether by a suitable manner of living. Venesection,

especially of the *saphena*, is thought serviceable in the young and plethoric, and much more if the catamenia or hæmorrhoids be suppressed; the same good effect follows the application of leeches to the anus: in other cases every kind of blood-letting is apt to exasperate the disease. Emetico-cathartics give present help, which, by rooting out the sordes retained in the stomach and intestines, often subdue the internal cause of the disease. Nevertheless vomits do not agree with every one, and ought with caution to be given to the flatulent. Stomachics, taken from the class of aromatics, bitters and absorbents, of which the most common are the sweet flag, elecampane, Peruvian Bark, gentian, fumitory, and wormwood, salt of tartar, coral, &c. are much recommended. Little different from these are cephalics and antispasmodics, which are of use even when the head is free from disease; these are sage, betony, balm, mint, valerian, flowers of the lime tree, marygold, lilly of the valley, cinnabar of antimony, mithridate, &c. all which usually give the finishing hand to the cure.

Diluents perhaps excel all others, to wit, the most simple water, or somewhat impregnated, whey, the various cold and hot mineral waters. Moreover, millepedes, gum ammoniac, preparations of iron, soap, and other aperients. Nor are sudorifics, antiscorbutics and depurants to be despised, which may be usefully given as occasion and circumstances require. Histories testify that guaiacum has been of peculiar benefit to many.

Lastly, all medicines indicated for apoplexy and epilepsy, seem to be suited for Vertigo, yet they must not be indiscriminately used; since the cure in many species of Vertigo is performed by strict regimen, or by one or two cathartics. The odor of very sharp vinegar, or of different offensive matters; the vapor of volatile salts or spirits, check the *paroxysm*, as also the smoke of feathers or old leather, stimulating clysters, &c. From observation it appears that a spontaneous discharge of mucus from the nostrils has been very salutary, from which it is evident why sternutatories are useful; salivants also do great good. Nor do frictions on the back, or lower limbs merit little praise; pediluvia, domestic baths, &c. do good: but vesicatories, setons, and caustics, are considered among the best medicines, but they are confined to *idiopathic* Vertigo. The *symptomatic* is to be attacked with other weapons, nor is the method of cure worth a *straw* unless it be directed to the primary disease; which being known (but this is the difficulty) we may find medicines effectual to this end among those just mentioned.

APOPLEXY.

IT is almost universally known that this terrible disease is *discovered* by the total loss of sense, and voluntary motion, while the respiration and action of the heart remain unimpaired. Some when suddenly seized with it, fall, as though struck with lightning; at times it comes on like a profound sleep, and has its forerunners. It is sometimes unfrequent, at other times it seems to prevail as an epidemic. Although *Apoplexy* has its peculiar marks, by which it may easily be distinguished from similar diseases; yet various affections, occasioning even sudden death, are designated by the ample name of *Apoplexy*, which mistake is daily proved by *dissections*, discovering various injuries of the heart, lungs, stomach, &c. that cause immediate and unexpected death, while the brain is unhurt. Besides, the last grades of vertigo approach near to *Apoplexy*, as also some hypochondriac and hysteric fits, comatose affections, the forerunners of malignant fevers, syncope, suffocative catarrh, &c. Moreover, the effects of commotion of the brain, insolation, gluttony, poisons, smoke of charcoal, &c. that are so many *causes of sudden death*, are frequently and rashly mistaken for *Apoplexy*. But the manner of accession of these is different, the antecession, progress and end of which being well observed, will preserve experienced practitioners from all error.

A paroxysm of sleepy vertigo seems allied to *Apoplexy*, but ought to be considered shorter and milder. Convulsions sufficiently conspicuous preceed or follow comatous, hypochondriac, or hysteric affections. *The sleepy fits* with which some fevers of a bad kind commence, are *with more* difficulty distinguished, unless the usual forerunners of fever have preceeded; but the disposition of the patient, a contracted pulse, and a certain difficulty of breathing, excite suspicion of fever coming on, which soon taking place, removes all doubt. But it is expedient to remark that this and comatous febrile attack does not rarely bring on hemiplegia, a genuine mark of *Apoplexy*: so difficult it is to discern the *true character of the disorder*. Fainting is more clearly known, to wit, by obscure pulse, or one altogether deficient, by respiration scarcely perceptible, by sickly paleness of the face, &c. From the antecedent signs (of which hereafter,) suffocative catarrh may be distinguished from *Apoplexy*, but very often, to confess the truth, this would be work for *Ædipus*. Lastly, from the relation of the bystanders it is known whether

the disease is caused by percussion of the head, by the heat of the sun, by a surfeit, poison, vapor of charcoal, &c. But it has been fashionable to consider this fatal termination of convulsions, this sinking of all parts of the system, verging to death, as Apoplexy, whether rightly or not, I leave for wiser heads to examine.

From observations to be mentioned, which are taken from a multitude of dissections, it is plain that *Apoplexy* is threefold, namely, *sanguineous*, *serous*, and *accidental*. The first arises from stagnation of blood in the brain, as well within as without the vessels. To this species, more common than the rest, the plethoric and sanguineous, the luxurious and fat, whose necks seem shortened, are thought to be liable. The cessation of customary discharges of blood occasions it, as also violent anger, and other aggravated passions of the mind. Lastly, let those beware of this species of Apoplexy, from the fortieth to the sixtieth year of their age, who have derived a kind of proneness there-to from their parents.

The *serous Apoplexy* takes its name from the stagnation of a serous fluid, in the various recesses of the brain: but this serous collection is found in many other diseases where there has been no Apoplexy. Hence we may conjecture that it is a mere morbid product, the cause of which consists in *atony* or *collapse* of the brain.

Persons of a phlegmatic temperament, the aged and insane, are thought to be prone to this species: as also the lazy and stupid, to which we may add the scorbutic and gouty. It may also be brought on by sleep unnaturally protracted, the immoderate use of snuff; chronic *renal ischury*, the drying of old ulcers, the suppression of customary expectoration, checked perspiration of the feet, &c.

The *third* or *accidental* species of Apoplexy, arises from a certain compression of the brain into another shape, which is occasioned by tumors, abscesses, the stagnation of any fluid, bones of the cranium depressed or moved from their proper situation, &c. Finally, falls from a height, violent contusions of the head, wounds, &c. Hence it is clear, that these species of Apoplexy differ much one from another, which although they appear more clearly in *dissection*, are often with difficulty, even by the most experienced practitioners, distinguished before death. Wherefore, not without closely attending to the antecedents, to the age, temperament, and other circumstances, can we accurately trace the *diagnosis* of these diseases which resemble each other only in their termination.

Among the forerunners of *Apoplexy* of either name, are enumerated violent pain of the head, vertigoes, loss of recollection, torpor of the membranes, involuntary weeping, tinnitus aurium, distortion of the mouth, tremor of the lips, impediment of speech, gritting of the teeth in sleep, coldness of the extremities, &c. We have already hinted that a cessation of all the animal functions, and voluntary motions, while the vital functions remain, exhibits the character of *Apoplexy* of whatever kind, but it is well to add, that as the disease advances, or becomes aggravated, the pulse is gradually obliterated, and the motion of the breast can scarcely be perceived, so that some as they lie motionless are thought to be dead, and are left for burial, not without a crime. These are the more visible marks, which discover *Apoplexy* in general, but it remains to treat of such as agree to each species.

Sanguineous Apoplexy, which in the vernacular French is called *coup de sang*, commonly invades suddenly; some that are seized with it, scream as they are falling. The face is suffused with redness, the eyes half open, are deprived of their usual splendor, the respiration by degrees impeded, is often carried on with snoring and hissing, the pulse is observed to be high and strong. Paralysis appears in some at the beginning of the disease, or comes on not till after many hours, or days: in sundry patients the loss of sense is not intire, so that many have been able to express their thoughts by nods, and can hear when spoken to, and look at those who talk to them. Lastly, it sometimes happens, that in the sanguineous *Apoplexy* hastening to death, the patients gnash the teeth, or tear themselves. Sleep mostly denotes serous *Apoplexy*, which encreasing, the face is affected with paleness, the veins being scarcely visible, the respiration becomes more difficult, with violent snorting. The pulse is depressed, unequal and intermitting; lastly, some near their end, froth at the mouth. But these marks are doubtful and inextricable, if *Apoplexy* be partaker of both causes, to wit, sanguineous stagnation, or serous effusion, which there is no doubt has been found in some *dissections*. From the preceeding can be distinguished the diagnosis of *accidental Apoplexy*, if it originate from an evident and known cause; but it is hid in obscurity if it have proceeded from a tumor or other injury of the brain.

All these, although rather intricate during life, become more distinct after death, wherefore, the *bodies of those who die of sanguineous Apoplexy*, before they are laid out, effuse much blood from the mouth and nose; when cut, they exhibit the vessels, brain, and its involucra, moist, distended beyond measure, and

stuffed with what they call *polypous* concretions, the plexus choroides swelled and varicose, extravasated blood, stagnations in the ventricles, under the meninges, and within the proper substance of the brain, which may be loosed, and moved in every direction. But these effusions of blood, as we shall prove hereafter, have often another cause than plethora. The vessels of the lungs also in many are choaked up, which therefore after death are ruptured, on which account, the blood in many bodies, issues from the mouth and nose, as above remarked: moreover, the head is often immoderately swelled. In those *who die of serous Apoplexy*, the brain is found moist and flaccid, or collapsed, and covered with water; the ventricles very much enlarged with *limpid*, or turgid with *bloody* serum. The collection is of the same nature between the meninges, this is especially effused in great abundance near the basis of the cranium, and in some it fluctuates about the *medulla spinalis*. This matter diffused through the above-mentioned parts, sometimes contracts a visciduity like glue. The plexus choroides, mostly discoloured, shews various hydatids attached to it. Lastly, there occurs in some who had lived well, and were of a sanguineous temperament, an effusion, as already hinted, partly watery and partly bloody. In persons dead from *accidental Apoplexy*, more visible injuries are observed, namely, soft or bony tumors, abscesses and hydatids, the follicles sometimes as large as a hen's egg, filled with a yellowish serum, or black and grumous blood; the pineal gland very much enlarged; various extraneous bodies; bones depressed, &c. to which we may add, serous, bloody and purulent stagnations, which arise from causes immediately to be adduced.

It has not escaped the notice of any practitioner that Apoplexy is often removed by the spontaneous motions of nature, either by a flow of saliva, or hæmorrhage, without any other perceptible evacuation. Hemiplegia, which in most patients follows close at the heels of Apoplexy, often shews itself *during the Apoplectic fit*, and indeed sometimes preceeds it; but it rarely appears before the fourth day from the first attack. This species of paralysis is not mortal, and mostly vanishes spontaneously, or by a little medical assistance. It is otherwise with universal paralysis, which baffling all cure, sooner or later drags its victims to the tomb. Lastly, some assert (among whom BAGLIVI takes the lead) that there is no Apoplexy, which does not bring on some species of palsy; but experience contradicts this. A full and equal pulse and free respiration, promises a happy termination, but, the more the offices of the heart and lungs recede from the natural state, the more dangerous is Apoplexy considered. The

case is also dangerous, when deglutition is impeded. Bloody or wine coloured urine indicate approaching death. Lastly, a fever coming on, as the paroxysm proceeds, is thought salutary. All medical writers assert, after HIPPOCRATES, *that slight Apoplexy is difficult of cure, but a strong fit is clearly incurable:* But medical observation rejects even this *aphoristic sentence.* Nevertheless, when in the strong Apoplexy, after one or two days, the customary and best remedies have not succeeded, we may send for the hearse. Apoplectics die on the first, second or third day from the attack; but they that survive the seventh day mostly recover.

To these general observations, it is well to add something concerning the *prognosis of either species.* Convulsions, therefore, during sanguineous Apoplexy, indicate instant death; the same termination may be expected when the face is discoloured, livid, or leaden. Serous Apoplexy, especially in old age, has some intermissions, though fallacious, which notwithstanding, if it be protracted beyond the eighth day, is thought out of danger: but, if after a few days the disorder returns, we may think of the funeral. In this species, suffocation, snoring, frothing at the mouth, cold sweats, incontinence of urine or stools, &c. are so many fatal symptoms. Moreover, the sick are commonly subject to hemiplegia, distortion of the mouth, impeded speech, &c. which mark this species of Apoplexy. Finally, when either species is occasioned by stagnation of blood or serum, which however is with difficulty known, there will need but short preparation for death.

The *cure* of any species of Apoplexy, must be prompt, for there is the greatest danger in delay; nothing is to be left undone in order speedily to subdue the disease, which otherwise usually baffles all cure. To begin with *sanguineous Apoplexy:* Let blood be immediately drawn from the arm, foot or neck. Arteriotomy also is of great service, which I know not why, has now almost become out of use. MORGAGNI recommends the section of the occipital veins, which also LUSITANUS practised with success in desperate cases. Nevertheless blood letting must be limited, and not used more than three or four times at most, even in the athletic lest the native heat, so essential to the solution of the disease, should be extinguished. One or two bleedings fulfil the principal indication, which is to prevent the rupture of the vessels of the brain. After depleting the vessels, it has been customary to give an emetic, which notwithstanding does not agree with all; but in this species of Apoplexy, mostly does harm, or brings on death: Yet, after premising a cathartic, which is of no small benefit, a vomit may be safely given,

if foulness of the stomach require it. After due evacuations of both sorts, spirituous cephalic waters, and the most usual cordials, are thought to be not amiss, provided they be administered moderately, and in very sparing doses : otherwise we must be very cautious how we use them. Nor can we with more safety apply these very fragrant waters to the nostrils, before the *sensorium commune* be relieved from oppression. For it is acknowledged that in the beginning of the cure, we must principally aim at restoring the flexibility of the vessels of the brain. But, that these spirituous substances have a contrary effect, whether given internally or externally, no learned physician will deny.

We judge otherwise of *stimulating clysters*, viz. of *emetic wine*, colocynth, euphorium, &c. some praise an infusion of coffee given in the same way ; all which may excite a healthy revulsion. But this last remedy is not much to be relied on. The same benefit is derived from leeches applied to the temples, anus, &c. Blisters, sinapisms, and cups, to the forehead, scapulæ, hips, &c. or the cauterly itself to the occiput or the soles of the feet. Nor must we omit frictions on the back and lower limbs, so celebrated with this view. For some time past the use of animals cut open alive and applied to the head, has been reviled, or given over to the vulgar, but it is certain from hundreds of histories, that this topical, when in common use, has saved many from the grave. After the Apoplexy has been removed by this method, no pains are to be spared to prevent a return ; to which end a suitable regimen, bodily exercise, timely venesections and cathartics are conducive ; the various mineral waters, setons, issues, &c. are beneficial.

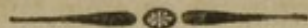
The mode of curing the serous Apoplexy is different, as the attention of physicians must be turned to restore the strength. It is best to abstain from much bleeding, which is as hurtful in this species of Apoplexy, as it is profitable in the other ; this nevertheless does not hinder its indiscriminate use by the common run of physicians ; on which account CELSUS has rightly taught, that in Apoplexy it induces *health* or *death*. Yet, some among the moderns hesitate not to bleed once if the strength permit, that other remedies may more easily act, or rather that they may accommodate themselves to the prejudices of the vulgar. Notwithstanding, all declare that venesection is fatal if the privation of sense be derived from gluttony, which happens very often. It is therefore thought more safe to trust to the common emetic, given in a large dose ; to which, if the stomach resist it, we may add the powder of algaroth ; for by this remedy, not only the sordes which oppress the stomach are carried off, but the

whole frame of the body is shaken, and the torpid spirits roused. The virtues of emetics sometimes resemble drastic purgatives, nor do the above mentioned acrid injections deserve less praise, all which being of no avail, a decoction of tobacco may be injected. Cephalics and cordials are also justly praised, to wit, Hungary water, compound water of balm, imperial and the-riacal spirit of amber and sal ammoniac, guttæ anglicæ, the cardiac confections of the shops, and numberless others indicated in comatose affections, and paralysis.

The most powerful remedies, in this species of Apoplexy, are taken from the *sternutatories*, of which the most common are florentine orris, leaves of rosebay, seeds of mustard and staves-acre, pepper, pellitory, white hellebore, euphorbium, &c. and even cantharides, arsenic, corrosive sublimate, in urgent cases may be blown up the nostrils. Nothing perhaps is of more benefit in these difficulties than to shake and pinch the patients as they lie, by every means, for some, when other methods fail, have, by being borne in a coach or carriage through stony and rough roads, been restored to health. I have seen many roused by great noises. The sound of drums, the clangor of trumpets, and the smell of gunpowder, I have thought to be beneficial in some cases. But these attempts do not suit physicians that are more solicitous for fame than they should be; which if they do not rightly succeed, afford a laughing stock to the censorious. Lastly, *irritants and external stimulants* of any kind are of wonderful use; namely, cephalic waters applied to the nostrils, volatile spirits and salts used in a similar way, the smell of burning sulphur, friction with a rough cloth, sinapisms, blisters, scari-fying, cups, the actual cautery, &c. When by these means or by the efforts of nature, the disease is subdued; every precaution must be used against its return. Practitioners usually keep it off by various exercises of the body, by the timely use of cephalics, cathartics, aperients, diaphoretics and salivants, among which are frequently used, sage, elixir proprietatis, millepedes, preparations of iron, Potter's antihectic, diaphoretic antimony, chewing tobacco, or the smoke of it through a suitable pipe, but the various natural mineral waters take the palm from all the rest, to which we may add setons and cauteries, which perhaps have not their equals among all antiapoplectics..

These are the remedies which from experience I have thought would be advantageous to select from that *immense farrago*, with which books abound; and although choice and approved, ought nevertheless to be used with the greatest caution. For it is more than sufficiently evident from thousands of histories, that numberless Apoplectics have recovered by the powers of nature

alone, or by common and trifling remedies, foreign from every medical preparation ; whether in these cases the efforts of nature, if undisturbed by useless and illtimed remedies, would be more salutary, let those judge who have investigated the hidden recesses of nature. But nothing distresses me more than an Apoplexy coming on after the most efficacious means for preventing it, used for another purpose. A few years ago, I remember to have seen a Nobleman of vigorous constitution, about fifty years of age, who had been bled thrice within four days, for catarrhal fever, if I mistake not, and after an interval of a day, had taken liberally of emetics and cathartics, which had produced surprising evacuations ; after all this had been done, seized on the following day with fatal Apoplexy. What is to be inferred from this, I leave for the examination of men conspicuous for probity and learning.



SLEEPY AFFECTIONS.

FROM all that has been written on this subject, nothing perhaps can be collected except an unmeaning nomenclature, which authors change at pleasure : according to which, *four* species of Sleepy Affections are established, namely, *carus*, *coma somnolentum*, *lethargus*, and *coma vigil*. The two first are mostly found with a pulse not feverish, but the last are attended with fever, or are taken for mere febrile symptoms. The *Carus*, which approaches near to apoplexy, consists in *profound sleep*, which noise and shoutings, shakings of the body, pinching and puncturing are scarce able to overcome. But when by diverse methods the sick are roused, they hear and perceive what is done with them, but soon relapse into the former state, sometimes attended with snoring, as in apoplexy. *Coma Somnolentum* is that profound idiopathic and chronic sleep which is easily dispelled by speaking to the sick ; but when left they shew the propensity to sleep. It is well known that the aged are liable to this, who even while speaking and eating, are oppressed with an almost unconquerable necessity of sleeping. To the same affection, hypochondriac, hysterical and cataleptic patients are subject. It is brought on by the retrocession of gout, suppression of hæmorrhoids, and other spontaneous evacuations, &c. *Lethargy* differs from the two former species, by the fever with which it is attended, or of which it is a symptom. Those seized with this, scarcely ever rouse up spontaneously, many are delirious when

awake, others are so unmindful, that while yawning they forget to shut their mouth. Lastly, they lie in a supine posture, or when turned by others on their side, they roll afterwards on their back. *Coma Vigil* is also numbered among febrile symptoms, in which the sick are borne down with great desire of sleeping; deprived of recollection, sleepless although they shut their eyes, and tormented with most troublesome restlessness of the whole body. I have purposely omitted these last species as pertaining to fever, lest I should serve up the same dish twice.

The *idiopathic Somnolency*, of which it is incumbent on me to treat particularly, including *Carus* and *coma somnolentum*, as well as apoplexy, from which it seems to differ only in degree; arises from a triple cause, manifesting itself by *anatomical examination*: namely, the sanguineous, serous and accidental; of which we have said more than enough in the preceeding chapter. Hence it is little to be wondered at if it should be the most familiar forerunner of apoplexy, or even subsisting within its own limits, should often bring on tremor of the head, and a certain debility bordering on paralysis. *Dissection* clearly demonstrates this affinity, by which are presented to view sanguineous stagnations, serous effusions, tumors, and other defædations of the brain, which those who die of apoplexy exhibit. Yet it is well to remark, that congestion of blood is more rare; hence it is that *somnolency* (concerning which at present) often denotes serous or accidental apoplexy. From the foregoing it is obvious that there is no other method of cure, but by having an accurate regard to the grade of the disease: this being settled, I have judged it superfluous to delay the reader any longer. We may also attack a febrile drowsiness with the same weapons, provided the judgment with respect to the cure be directed by a clear and perspicuous observation of all circumstances.

It now remains that we treat of other *accidental species of drowsiness*, which are known by the title of *Ebriety* and while the brain is uninjured are occasioned by wine, ale, and other fermented liquors of this kind; by darnel, opium, and other narcotics, by tobacco smoke, mineral waters, &c. Their modes are different, so that the more intense scarcely differ from genuine apoplexy; even the more skilful fall into this mistake, if they undertake the cure of the sick before they derive information from the bye standers, of the evident cause of the disease: for I have met with many quacks to whose care this species of *somnolency* was entrusted, who never had the least suspicion of the genuine character of the disease. This kind of drowsiness although accidental, and depending on no injury of the brain, is not without danger; it excites the greatest terror, when it near-

ly resembles apoplexy, especially if convulsions come on. It is thought less dangerous, when it shews itself like a placid sleep, although the patients when roused be delirious or raving. At times even in the milder grade, the sick complain of great pain of the head, stagger when they walk, perceive nothing distinctly, and speak incoherently, &c.

The cure of this disease of Drowsiness, is performed with simples, if it be not best to abstain from any cure. But since in severe cases the stomach is oppressed for the most part with foulness, pains are to be taken to excite vomiting by large draughts of warm water, or tickling the pharynx. If these attempts do not succeed well, it is proper to give an emetic, nor are purgative clysters to be omitted, for then it is of the greatest moment to empty the bowels. Having cleansed the first passages, nothing does more good than water with nitre, or impregnated with vegetable acids. It is said that many drunkards by fortunately falling into the water, have instantly recovered; from which it is plain of what efficacy the cold bath would be. With respect to venesection there is great dispute among physicians; but that it is chiefly to be dreaded in the very common *state of tremor*, I am warranted by experience to assert: in other cases, nothing perhaps forbids one bleeding if the strength permit.

To conclude: we may add that many histories are extant, of sleep *protracted to months and even years*, but with some intermissions, as may be seen in the memoirs of the Royal Academy of Sciences, and of the Royal Society of London, in *Actis Lipsiensibus*, and the collections and diaries of that nature, the authors of which think themselves bound to commit to writing, things that are strange and curious, or out of the common order, relative to medicine. From which it is proved that these preternatural drowsy affections, have been treated without effect by medicines most powerful against apoplexy, and that after the resources of medicine were exhausted, the whole business of cure, has been committed to nature, lest something worse might happen; so that from her spontaneous efforts, after the course of this astonishing disease had been terminated, the sleepers have been roused. We must not however omit to mention that, among the multitude of medicines which have been administered against this very rare disease, sudden immersion in cold water, has had the best effect on many, which seems to argue beyond controversy the excellence of this highly extolled remedy.

TREMOR.

IT is universally known that *Tremor* is sometimes general, affecting even all the parts of the body, sometimes confined to a peculiar part, namely, the head, arm, leg, &c. But the genius of this disease is not known to all, although it be very common: for in many it partakes of *palsy*, but in others it seems altogether *convulsive*, and, often it is the forerunner of both, namely *palsy* and convulsion. Every one knows that the aged, and convalescent from severe illness, are obnoxious to the *first species of tremor*. The votaries to Bacchus, and those who indulge too much in venery are also liable to it, nor do those escape who delight in frequent draughts of coffee. Lastly, narcotics and poisons, the handling of mercury, lead, and other minerals, &c. But *convulsive tremor* is caused by external cold, terror, anger, or other violent passions of the mind. *Shivering and chill*, the symptoms of fever or other disorders pertain to it. Internal suppurations also produce tremulous cold; worms lodging in the intestines, ischury of the kidneys or bladder, suppression of the menses or lochia, &c. The tremor caused by debility of parts is easily distinguished from convulsive tremor; for the *first* becomes more conspicuous, or increases when the hand sustains any weight, and evidently ceases if the arm be propped; but the *second* is overcome by carrying a weight, but never yields to rest of the part. From attending well to the antecedent and accompanying symptoms, as also to other circumstances derived from mode of living, age, sex, &c. we discover what may be determined concerning the event of either species. We have noticed above, that tremor arising from debility, has sometimes been the harbinger of palsy: if it be protracted for years, especially in those of advanced age, it admits of no cure, otherwise it is in great part free from danger: but the termination of *convulsive Tremor*, being mostly *symptomatic*, is different, nor can an accurate *prognosis* be found, unless we have strict regard to the primary disease; but if it follow delirium in acute diseases, or arise from suppressed lochia, it portends death.

A few things are gathered from *examining the dead bodies*, concerning the character of the first species; and observations on this subject, refer more to succedaneous or adventitious diseases, than to *Tremor* itself. But dissections of those who have

suffered convulsive tremor teach us more. For instance, there is found a serous, greenish humour fluctuating about the brain and medulla spinalis sanies, in the ventricles of the brain; suppurations and putridities, contaminating different parts of this viscus, present to view. Worms also are detected lodging in some recesses of this part: Moreover, the vessels are filled with feculent blood. The spleen is found of immense size, and not rarely like cartilage. Suppurations, putridity and gangrene occur every where, as well in the viscera of the breast, as of the abdomen. The uterus, especially, is very frequently found diseased.

The cure of the first species of Tremor scarcely differs from that of paralysis and convulsions, of which we shall speak in order; wherefore, it would be superfluous to delay longer here. Only, I thought that it might not be amiss, to say something as it were transiently, of the more customary and familiar remedies. Wherefore, in this species, have premised general means, cephalics and stomachics taken from the class of roborants, deserve the first place; of this kind are balm, lavender, savory, elecampane, fennel, Peruvian Bark, cloves, nutmegs, &c. Martials are also much esteemed, nor are diaphoretics useless; but let diluents, temperants and demulcents fill every vacancy, if the tremor be caused by venery, wine, &c. Cordials, diaphoretics and diuretics are serviceable, if tremor proceed from mercury. But the very common frictions are of excellent use, if the tremor partake of palsy; bathing and pouring from a height with the various warm mineral waters; roborant liniments; aromatic fomentations and fumigations, &c.

Convulsive Tremor requires other remedies. Venesection is useful in some cases, if the strength and age will bear it, especially, when any discharge of blood is suppressed. Cathartics also are useful, and other general remedies, commonly used in the beginning of the cure of either, that the way may be prepared for the more efficacious: these consist of antispasmodics and cephalics, which seem to possess a kind of specific virtue. Roborants, alexiterials, and stomachics are also beneficial, which differ little from the former. But when worms, scurvy, hypochondriasis, hysteric, &c. are the cause, there is no one but may see what ought to be done. Moreover, the abundant and diversified use of the warm mineral waters is much recommended; nor are cold baths to be objected to. Frictions often afford help; nor are setons and issues unserviceable, although they are undeservedly ranked among the obsolete.

Lastly, the *febrile rigor* is prevented by large draughts of warm water given before the paroxysm. We say nothing of tremor from anger, terror, and other temporary causes.

PALSY.

IT is obvious to every one that Palsy consists in a defect of sense and motion, or one of them, to which immediately succeeds a debility and stupor of the parts. It is called *universal*, if all the parts situated below the head are affected; but when it occupies the half, as the right or left part of the body, it is named *Hemiplegia*. Lastly, if it invade this or that part, to wit, the arm, leg, eyelids, tongue, pharynx, penis, bladder, anus, &c. separately, it takes the name of *particular Palsy*, of which we shall treat here and there under other titles. The origin of this disease is not obscure, if due attention be given to what takes place from pressing the nerves by external force. From the torpor also, which even the distant shock of that singular fish called *Torpedo* occasions, we may learn much of its nature.

Paralysis, although rarely a primary disease, yet mostly follows apoplexy. Epilepsy, and the spasmodic affections also bring it on, so do severe nephritis, very acute colic pains, tormenting dysentery, and lastly, gout and rheumatism. The aged, hypochondriac, scorbutic and syphilitic are *subject* to it. Loss of strength from immoderate hæmorrhages, or too lascivious venery occasions it, wine too freely drank, or adulterated with lytharge, the imprudent use of narcotics, cathartics impregnated with metallic exhalations, mercurial effluvia, cold of winter, &c. No one is ignorant that it takes its rise sometimes from wounds, luxations and fractures. Lastly, infants often contract this disease from the recession of cutaneous eruptions, from the preposterous treatment of small-pox and measles, &c. It is expedient to remark, that paralysis arising from scurvy, hypochondriasis, and spasmodic affections, usually attack the organs of *motion* alone, while the senses are unimpaired.

Hemiplegia, which often comes on without notice, and is more frequent than the other species, draws the eyes, mouth and tongue into consent, and mostly encreases as the sick grow older, while the *sensorium commune* is preserved from all harm. The *universal palsy*, takes many off suddenly; but if

protracted beyond a month, it becomes chronic. In any species it is a good omen if the paralytic members are seized with tremor, itching, tingling, or pains: we may also anticipate a happy event, if fever arises in paralysis succeeding serous apoplexy. Palsy which only impedes motion is thought to be of little danger, and the cure is easy. There is great hope of health if palsy of any kind come on without any previous affection of the brain. A paralysis attended with atrophy or coldness, is thought incurable. Convulsions in paralytics terminate the disease and life together. When the affected members are seized with œdema, there is danger of gangrene. The same unhappy consequences follow palsy contracted from cold. If the disorder having been once cured, recur anew, the case is dangerous, for we seldom count three accessions. *Stupor* in hypochondriasis and hystericis, portends no harm, but it is a fatal symptom in acute fevers. Lastly, if the anus and bladder are palsied, death is at the door.

Paralysis, as well as apoplexy, *frequently ceases spontaneously*, and this happy event is usually attributed to the remedies before used, although often inert. There are histories of various paralytics, who after a tedious and inefficacious treatment, were instantly restored to health, beyond all expectation, by violent anger, terror, or some vehement affection of the mind. VALERIOLA relates, that he saw a certain (*Arelatensem*) paralytic, having for many years been bed-ridden, thrown into such terror by the unexpected burning of his own houses, that forgetting as it were, his debility, he screamed, and leaped suddenly from his bed, and hastily called his neighbours to his assistance, so that he escaped the flames and the disorder at the same time. What BARTHOLIN relates is no less wonderful, concerning a dumb paralytic, who being enraged by the mockery of a certain old woman, whom he had formerly persecuted, collecting all his powers, recovered his speech, and was able to retort her revilings, much against her inclination.

I have already spoken of the various lesions of the brain attending apoplexy and palsy, to be met with in examining bodies; to what has been observed, I may add that serous stagnations are very common after paralysis, both in the recesses of the brain, and about the spinal marrow. Frequently also purulencies and putridity are found in different parts, but especially in the *corpora striata*. Sometimes the medulla spinalis is decayed, sometimes it is little different from a mass of matter. In some are discovered the vertebræ removed from their situation, the connections of heads of bones relaxed, &c. Moreover, in the abdomen are observed the biliferous

vessels turgid beyond measure, and viscera diseased in various ways.

My Work would become too voluminous, were I to mention all the remedies that are proposed against Palsy, wherefore my intention is to notice those only, which are used by the best practitioners, or confirmed by my own experience. To begin with venesection: from what has been said it is justly inferred, that this would be useless or hurtful if palsy take its rise from serous colluvies, but otherwise, if from a sanguineous cause, provided the disease has not become of long standing. Nor ought that remedy to be used, without first attending to the age, strength and preceeding circumstances. Emetics may be given to advantage, where there is no suspicion of bloody extravasation in the brain; in such case it must be avoided as a serpent. The use of cathartics in both cases is safer, but much more salutary if it resemble serous colluvies. Evacuants by stool are of special service for the most part in scorbutic paralysis, as also in the other species which proceed from colic, &c. Lastly, acrid, stimulant and aromatic enemata, highly useful, conclude the list of general remedies.

Among the more serviceable medicines, roborants and cephalics hold the first place; namely, sage, lavender, balm, camphorated medicines, juniper berries, amber, &c. Sudorifics merit no small praise, and among the best are guaiacum, and diaphoretic antimony; aperients, namely, martials, aloetics and mercurials: nor are antiscorbutics, to be neglected, if there be any suspicion of latent virus. The Chian or Venetian turpentine, given inwardly, or applied outwardly, are celebrated. Lastly, the warm mineral waters have really taken the palm from all others, either taken by the mouth, or by bathing, and by pouring on the spine from a height.

The skins of animals just killed applied to the part affected, are highly recommended, and not undeservedly; or *animals cut open alive*, before they lose their natural heat. Liniments of petroleum, laurel oil, and oil of ants, are used with advantage; and preparations of martial ointments, and other roborants of that nature. Dry frictions, or with camphorated spirit of wine or other spirituous liquor, are celebrated. Fumigations, fomentations and baths prepared of aromatics; sweatings; beating with nettles; sinapisms and blisters. To which may be added the seton and cautery. If the natural mineral waters cannot be had, artificial ones may be prepared, *with four pounds of quick lime and two pounds of sulphur, boiled in a sufficient quantity of spring water.* Lastly a bath of sand heated by the sun is of great service, dregs of wine are of equal benefit:

the leaves of dwarf elder heated in the fire, and wrapped about the sick, occasion a very salutary sweat. Nor must we omit to mention that the part affected, ought, during the use of these remedies to be well defended by the skins of foxes, hares, and such like. Finally, it appears consistent with repeated experience, that many have been cured by *electricity*; but we think it proved, that this experiment has had little effect on many.

DULNESS OF MIND AND MEMORY.

DULNESS and forgetfulness from old age, or a certain hereditary constitution of the brain cannot be cured by any art, nor are they classed among disorders, therefore they have little to claim in this place. But it is otherwise if *slowness of intellect* and forgetfulness arise *from another cause*, namely, from apoplexy, from concussion of the brain after a stroke, or fall from a height; from serous effusion, &c. Misfortunes, sudden terror, or severe grief may bring it on, as well as long continued feasting or venery. Sleep protracted beyond the natural bounds, or the abuse of narcotics sometimes darken the mind, previous severe disorders often produce the same effects. By which some convalescents have become altogether forgetful, or have not remembered even their own name. Moreover, immoderate evacuations of what kind soever may occasion similar injury to the sensorium commune. *Onanism* also, to which boys are prone, sometimes injures the imagination and memory. They incur similar danger, who cultivating premature genius more than is proper, indulge in ill-timed labor or intense study, and will not suffer themselves to be taken off from deep cogitations; so that it not unfrequently happens, that those who in their youth were esteemed second to none in wit and keenness of mind, having gradually exhausted the powers of judgment and imagination, become weak and sottish. On the other hand some children have appeared of tardy genius, or dull, who in process of time dispelled the torpor of their minds; so that by sparing no pains, they not only became ingenious and of good memory, but also arrived to the grade of the most learned and eloquent. Severe diseases sometimes promote this happy event; falls from a height, and other accidents, which in other circumstances have sometimes had a contrary effect.

We have above remarked, that these lesions of judgment and memory when hereditary, or attending on extreme old age, are altogether incurable. If the memory fail, without any previous known cause, we may suppose apoplexy to be near, or palsy to threaten: but the prophylactics are very well known, by which we may avert either consequence. If weak judgment and loss of memory originate from venery and wine, or from the use of narcotics, they are with little difficulty cured by a contrary mode of living, assisted by some remedies as occasion may require. It happens otherwise if they arise from apoplexy or concussion of the brain. But dulness of mind and forgetfulness coming on after enduring severe diseases, mostly end spontaneously, or by suitable regimen.

Dissections shew the brain somewhat moist, flaccid and depressed, sometimes dry; so much so as sometimes to be even brittle; sometimes dense and contracted on account of the quantity of serous effusion, which not only fills the various interstices, but even fluctuates on the surface of the viscus. Besides, different kinds of tumors are perceptible, hydatids, abscesses, stones or other foreign substances. It is said that the *pineal gland* has been deficient in some. The *dura mater* is found sometimes tending to a livid appearance, sometimes beset with tubercles, putrid and torn. Add to these an unusual thickness of the cranium, and other depraved states of the bones or their connections.

From the foregoing it is easily gathered, that either injury of the brain rarely admits of cure, hence it is little wonder if even the best medicines should mostly be inefficacious: if they sometimes appear to be of any use, it is less to be attributed to the aid of medicine, than to time, proper regimen, and short sleep. As it respects children, the care of their parents or masters is of principal benefit, who are not afraid of the more than Herculean task; and are qualified by precepts handsomely propounded, to evolve and settle the mind, hidden in obscurity. Yet nothing hinders, when there is any hope of cure, but that we should call in the aid of cephalics and antispasmodics, after premising general remedies; among which the best are flowers of lavender, limetree, primrose, and lilly of the valley, piony, valerian, zedoary and calamus aromaticus; cubebs, mace, cloves &c. There is some doubt of the cephalic virtues of ambergrise and musk, since experience proves that many who were in no way disposed to dulness and forgetfulness, have by the immoderate use of them, fallen into both diseases. The succinated spirit of sal ammoniac, given in the dose of ten drops evening and morning, is recommended by practitioners of the first rank. Moreover,

there is some benefit from sternutatories, masticatories, and other hydragogue evacuants. Lastly, these celebrated remedies seem to do very little good, without attending to the character of the disease, and the power of the animal economy ; in opposition to which, they are given without effect, or do harm.

PERVIGILIUM, OR WANT OF SLEEP.

A DEFECT of accustomed sleep, to which as above noticed, *coma vigil* approaches, is rarely a disease of itself, or essential ; but attends others for the most part, both acute and chronic. To be brief on this subject, great cares and troubles dispel sleep, the melancholic and incipient maniacs have *sleepless nights*, the meagre, bilious and intensely thoughtful complain of interrupted sleep, who even while sleeping are worried with most distressing dreams ; lastly, the idle and those who lie abed longer than is proper often spend restless nights. Moreover, it is very well known, that there is a *sympathy between the brain and stomach*, for which reason it is little wonder if some injury of the latter organ should prevent nocturnal quiet. Some young people incur this inconvenience from hunger, on which account they can not sleep well without a plentiful supper ; on the other hand it evidently takes place in many adults, and especially the aged, whose stomachs are oppressed during sleep with too much food. Hence it is no wonder if after a repast they should often be roused and compelled to throw themselves out of bed, on account of threatening night-mare, or difficulty of lying down. It is necessary therefore for health's sake, that they abstain altogether from supper. The drinking of coffee drives away sleep from some ; while others take it with safety, even when going to bed. I have purposely omitted numberless other different or contrary effects from one and the same cause, arising from various circumstances.

There is no one who does not see what is to be feared from long continued watchfulness, yet it is proper to remark, that melancholics and maniacs bear this inconvenience more easily than others, who have been able to pass many months, or even a whole year, altogether without sleep. Authors of credit make mention of wakefulness without injury, continuing ten, twenty, or even thirty years. It is otherwise with febrile wakefulness, which denotes delirium, and often endangers life. Little can be collected from anatomical observations ; Nevertheless, in the

greater part of the *bodies* are discovered serous stagnations, as well in the brain itself, as in the theca of the vertebræ. It is truly admirable what a sameness is observed in diseases altogether different, after these sleepy affections. Abscesses are also found in the substance of the brain, inflammation in its coats, caries of the bones of the cranium, &c. Also suppuration and putridity, and other defecations in the liver, pancreas, and other abdominal viscera, which, to confess the truth, seem to pertain less to wakefulness, than to various affections of which it is a symptom.

Some who complain of sleepless nights, experience relief if they do not continue more than six or seven hours in bed. In many cases benefit is derived from large draughts of simple water, or lemonade, at bed time; also at this time the syrup of violets, water lillies, &c. There is no doubt of the efficacy of baths. In fine, let diluents, refrigerants and demulcents fill every space, which repress the fervor of the spirits, and blunt the impetus of the blood. With this view bleeding is useful, while other general remedies afford their share. Walking, riding, and other exercises of the body in the open and pure air have done no little good. Nor are there wanting some who invite sleep by rocking the bed like a cradle. Moreover, moderation in the gratifications of body and mind, musical concerts, the noise of water falls, and even *the soothing voice of an acquaintance* have been of service. And what advantage is derived in promoting sleep, from PIOUS MEDITATIONS, must be obvious to all. When all these fail of success, we must try *anodynes*, in which number are nitre, camphor, pulvis temperans, and mineral anodyne liquor, which are usually prescribed in acute diseases. But *narcotics* excel these, by more promptly assuaging the violence of the humors and spirits, and possess the wakeful patients with the sweetest delight of mind; which nevertheless ought to be used with caution, and not continued too long. Lastly, pediluvium with warm water, either simple, or impregnated with decoction of anodynes, have been of use to many, even during fever. I may add, before taking my pen from paper, that these remedies do no good, if wakefulness be a symptom of another disease: it is obvious that another mode of cure must be resorted to.

INCUBUS, OR NIGHT MARE.

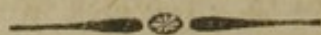
IT is reasonable to believe that this kind of disease coming on during sleep, is allied to *convulsive affections*. The sick complain of a sort of load lying on the breast, by which respiration is intercepted, with threatening suffocation, as it seems to them when asleep. Many speak of dreadful images with which they are beset, and which lying on the breast, preclude utterance when attempting to cry out; hence the sick are so terrified, that they suddenly awake, with inordinate motion of the heart; and are thus freed from this most troublesome sleep, and from the fit of the disorder; after which, they remain for some time languid as after convulsive affections. A stomach overloaded with food often excites night-mare, hence high livers are subject to it: the plethoric, hypochondriac, and hysteric are often prone to it; nor does it spare children, if their fits of fright, as some think, proceed from this cause; which we leave to the more experienced to determine.

Incubus when not frequent, and confined within certain limits, is thought to be *void of danger*; but if vehement, and frequently recurring, it denotes epilepsy in some young persons, or threatening apoplexy in advanced age: and indeed it is said to have sometimes been the forerunner of mania. Nevertheless, violent *Incubus* at any age, may become suddenly fatal. *Aurelianus* relates that it was at one time epidemic at Rome, and was as destructive as the plague.

Nothing worth speaking of is collected from *dissections*, except that sometimes you find a serous and purulent collection in the brain, which seems to have reference neither to the cause of the disease, nor its own production.

The principal point of cure is in a proper regimen, and very often nothing else is necessary to be done. Lying down on the back is of service in the greater part of these cases, yet I have seen some, who escaped the fit by lying on either side: But nothing is more beneficial than going to rest with the stomach empty, or after complete digestion. As to medical aids, venesection in proper time is celebrated, if nothing forbid; but we must have special regard to the first passages, where the cause of the disease is hid. Wherefore cathartics, and even emetics afford present help, and beyond doubt remove the threatening attack. Where the humors are bad, diluents, temperants, or mild aperients deserve praise, the best among which are the cold and hot mineral waters, martials, vitriolated tartar, &c.

When marks of depraved digestion occur, having cleansed the first passages, we may happily administer stomachics of absorbents, bitters and roborants, to wit, prepared coral and shells, fumitory, gentian, Peruvian Bark and aloes, sage, balm, &c. Cephalics and antispasmodics bring up the rear, if there be any suspicion that the brain is affected. Of this kind are, lavender, rosemary, betony, piony, amber, castor, &c. but these ought not indiscriminately to be given, and are rarely needful, as already hinted, and especially the unmeaning farrago of them.



MELANCHOLY.

THIS affection *allied to the temperament of the same name*, is very well known, and differs little from it, unless it attain a certain grade. Melancholics scarcely enjoy their sleep, and complain of very distressing dreams. Liable to vertigo, they complain of the functions of the brain being impeded. Some are tormented with tinnitus aurium, and grievous pain of the head; in some we may see tremors, convulsions, or sleepy affections. Among the most familiar symptoms are enumerated anxieties, palpitations of the heart, and stricture of the breast, with thickened expectoration. The pulse is small, unequal and intermittent, there are pulsations in the abdomen, arising from the aorta, cæliac or superior mesenteric. There are frequent acid eruptions, or of another kind; flatulence also predominates, by which the belly is often puffed up. Melancholics often make water, and that profusely, limpid and whitish, but are seldom stimulated to stool. Meanwhile they are overwhelmed with sadness and oppressed with fear of death; others weary of life, long to die. Many shun society, and hate sports and shows, and cannot see how others can be pleased with them. Lastly, their minds are beclouded: they are often seized with the greatest terror from the slightest cause, or tremble all over at an ambiguous message: they picture to themselves false images of things, sometimes shed tears, sometimes shake their sides with laughter, or are altogether delirious. It is proper however to remark, that these delusions of mind are about one or two objects only, and they are with difficulty removed from this pre-conceived opinion, unless it be shaken off by guile. For some conceit themselves to be earthen vessels, and are afraid that they will be broken by meeting others. Some think themselves dead; and so they are deceived in various ways.

Authors have made mention of another *Melancholic delirium*, in which the patients love to be in the dark, seek for hiding places, and desire to spend their lives among the wild beasts, and therefore sooner or later they escape from home, and go into deserts and craggy places, like *wolves* and wander about by night: hence this disease is called *Lycantropia*. Others affected with great solitudes, and as it were weary of their life, although they are not at all disposed for flight, yet love to change their place, and are constantly attempting what is forbidden. There are others, on the contrary, who indulge in sloth altogether, refuse to go out of the house or chamber, and they are beset with such dulness or dejection of mind, that caring nothing about human affairs, they lie spiritless, like logs. Lastly, among the various species of melancholy *Nostalgia* is usually enumerated, called *maladie du pays*, or *homesickness*, in which the patients burn with a desire of revisiting their country, which nevertheless I think to be often consistent with reason.

Melancholy is usually transmitted from parents to children, but sometimes it owes its rise to an *evident adventitious cause*; namely, to the ardor of love, to grief and sadness, and other disagreeable affections of the mind. Suppressed piles promote it, and numberless other diseases existing with or preceeding it. But they err from the mark who think that these diseases do not differ one from the other; because we meet with hypochondriacs altogether free from melancholy, and indeed disposed to merri-ment; and melancholics free from hypochondriasis: But to confess the truth, these affections in many, sooner or later unite. To these we may add, that melancholy symptoms terminate by the eruption of the piles, by scaly efflorescences, and other cutaneous diseases: nor are wounds to be defrauded of their virtues against this very obstinate disorder, if we may believe various accounts. Yet this favorable event is rare, except *when* there is scarce any hope of recovery; but rather the tedious disease when arrived to a certain grade, is followed by scurvy, hectic fever, marasmus, &c.

We gather little from *anatomical observations*, although very numerous, since it is scarce apparent whether they are to be referred to melancholy, or hypochondriasis, which most authors have considered as one and the same disease. That we may treat of this subject more certainly, it is necessary to know, that on removing the covering of the brain, the vessels creeping around the cerebrum are found filled with thickened blood; a serous collection in all the recesses of this viscus; the plexus choroides covered with a kind of mucus; the pineal gland grown to a great size, &c. In some the heart has been found quite empty,

in others full of polypous concretions, or of feculent and fluid blood. The injuries of the abdomen treated of above, when on the subject of hypochondriasis, we have purposely omitted, lest we should serve up the same sauce twice.

We have already observed, that this affection is mostly incurable, and indeed it frequently happens that the sick are destroyed by trusting too much to remedies, much less relieved by them; wherefore they ought to be cautiously prescribed, and the cure ought to be governed by the *juvantia* and *ludentia*. Venesection is of service if there be suppression of any flow of blood, otherwise it ought to be considered inert or even hurtful, let authors say what they will to the contrary. Emetics and cathartics are very salutary, when sordes lodge in the first passages, otherwise they are useless. But moisteners, diluents and temperants have not their equal, among which the simplest water has been greatly extolled, which being given very plentifully seems to excel all the rest: In this class are succory, fumitory, dock, &c. ass's or goats milk, whey, the cold mineral waters, &c. which being premised, we may safely exhibit aperients of nitrous and martial preparations, as also antiscorbutics when any suspicion arises concerning the affection of that name. Aromatics are beneficial to some, which belong to the class of cephalics, and stomachics, such as balm, Jerusalem oak, chervil, anise seed, chocolate, extract of juniper, electuary of bay berries, mithridate, &c. Antispasmodics afford relief, the most common of which are the flowers of the lime tree, orange and lavender, saffron, camphor, castor, &c. Narcotics seem to be of great service, but it is not to be denied that by their untimely use the disease becomes more obstinate, wherefore we must use them with caution. Refrigerant baths and injections are much esteemed; but to sum up all, nothing perhaps is found more effectual, than a proper mode of living; for instance, let melancholics shake off all sadness by agreeable conversation, walking about, riding, &c. let them dispose their minds to hilarity, and after a suitable repast, let them bid adieu to cares and business, until the first elaboration of the food in the stomach be completed. As to *Nostalgia*, if the sick altogether refuse to forget their country, and are deaf to all reasoning; let them hurry home without delay; nor is there any other method of cure.

MANIA.

NO one is ignorant that Maniacs are endued with great strength, can bear hunger and watching very easily, and are very prone to venery. We have already noticed that melancholy when arrived to a certain grade, is allied to Mania, so that it follows that both diseases are promoted oftentimes by one and the same cause. The more violent passions of the mind, to wit, excessive joy, the ardor of love, grief and sadness, adversity, intense study, profound meditations, with that *acumen* of wit, which they call *belle esprit*, and lastly, hereditary tendency, threaten insanity. Yet the dull and silly who are often verging on absence of mind, are not free from it. Besides, the suppression of piles and menses, the hysteric or hypochondriac affection, phrensy, comatous fits, and other grievous diseases may bring on idiotism.

This disease if recent and remitting, or contracted by an acute disease, or any other slight cause, *is often thought to be favourable*. But when inveterate and from a permanent cause, resisting all remedies *it becomes incurable*. Some Maniacs have been restored to health by the bursting of varices, by very profuse menses or piles after some suppression, or by any unaccustomed flow of blood, by diarrhæa extended beyond its natural limits, by very severe dysentery, or other immoderate evacuation. The same effect has followed quartan fever, and other intermittents, in which, notwithstanding under other circumstances, some however of sound mind have fallen into Mania. Lastly, if this disease, so humiliating to the pride of mortals, be dispelled by the spontaneous efforts of nature, or timely remedies, the convalescents, not unmindful of the disgrace, are overwhelmed with such sadness, that they are afraid to appear in public, and are tormented with perpetual fear of its return.

The *bodies* of Maniacs when subjected to the anatomical knife, exhibit the brain firm and dry, its substance elastic, scarcely to be confined by the skull, and the bloodvessels stuffed with a very black fluid; in some a serous effusion fills all the recesses of the brain, and hydatids, sometimes solitary, sometimes in heaps, are seen growing to the varicose plexus choroides: in others the dura mater, with its vessels scarcely visible, thick and callous.

The falciform process contracts a bony hardness, and the cerebellum defended with a similar enclosure, lies hid in its own cavity. The frontal sinuses not unfrequently contain worms,

nor do these nauseous animalcula spare the substance of the brain itself. Lastly, the bones of the cranium, the connections of which are obliterated, present an unusual hardness. Moreover, the gall-bladder is filled with glutinous and blackish green bile. But the other lesions of the viscera which authors relate, I have thought that it would be foreign from my purpose to enumerate.

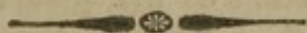
The *cure* is to be commenced with venesection, let blood, for instance, be drawn from the arm, foot, or neck. *Arteriotomy* has been much extolled by the ancients, which although rejected by our cotemporaries, has notwithstanding had a happy effect on many Maniacs, concerning which it occurs to remark, that it merits no less praise against phrensy, very violent head-ach, obstinate ophthalmia, &c. Every one knows that the temporal arteries, by reason of the subjacent bones are most fit for dividing. Blood is even drawn from the veins of the forehead, and anus, &c, by the help of leeches applied according to art. Lastly, every thing must be tried, to restore the suppressed piles or menses. Emetico-carthartics are much esteemed, if heated bile be lodging in its receptacles, or in the first passages, as frequently happens. Purgative and stimulating injections also afford their share of benefit. After the vessels are depleted, and the first passages cleansed, moisteners, diluents and temperants; refrigerants and nitrous medicines; to wit, water, even the very coldest liberally drank, cold mineral waters, succory, borage and fumitory, rice, barley and the cold seeds, milk, whey, &c. by which the fierce impetus of the spirits is gradually repressed.

Narcotics are rarely of service, to wit, opiates and other preparations of poppies, but rather frequently exasperate the disease. But sedatives and anodynes of another kind may supply their places, namely, the flowers of water lillies, violets, &c. Cinnabar has no small merit, which in urgent cases may be exhibited in the dose of half a drachm, once or twice a day. There are some who advise saccharum saturni, from two to eight grains, for allaying extreme fury: but by more judicious practitioners this remedy is disapproved. Yet the antispasmodics above recommended sometimes afford relief. As to the *hellebore*, formerly so much celebrated, it is proper to know that the root for sale under this title, when subjected to strict examination, seems to belong to a certain class which they call *Christopher*, or is taken from the black hellebore, an indigenous and very common plant, but not from the genuine hellebore of HIPPOCRATES; with a very broad leaf, exceeding high stem, and a purpleish flower; an exotic and oriental plant, which not many years since

has been cultivated in the gardens of the curious; hence it is easy to see, that the bastard hellebore of the shops ought to be expunged from the list of antimaniac remedies. Notwithstanding for various reasons, I could easily believe, that the true hellebore, although so very highly extolled by the ancients, would not be more efficacious.

Among the best remedies (to return to the subject) are *cold baths*, the whole body is not only immersed in water up to the neck, but even the head is sprinkled by turns, and this is the business of the servants attending the baths. Nor are semicupia, which are more easily prepared, of little service. By some, the sudden and unexpected immersion in sea water is recommended, as is customary in hydrophobia. It is said that *castration* has been serviceable to many. Some have been relieved by perforating the cranium. The actual cautery to the occiput is no mean remedy.

It sometimes happens that after all these have failed, Maniacs have been restored to health beyond all expectation, by very great terror, a fall from a height, or other misfortune. Nor are these phenomena that are out of the common order of things mere curiosities, since from inspecting and examining them well, wise physicians may direct the cure, I mean such as being experienced in practice, are not afraid to step out of the beaten track.



PHRENSY.

HITHERTO we have treated of madness without fever; we come now to *delirium attended with fever*. Practice teaches that this is of two kinds. Namely, one while the disease, as they say, is considered *per se*, and is attended with fever, again it is called a *symptom* of some fever. It must however be obvious, that this complicated disease, arising from melancholic or maniac delirium, and from any adventitious fever, pertains to neither species. Having premised these distinctions, superficially treated of by authors, it is necessary to come to *genuine Phrensy*, by which name ought to be designated that *idiopathic or essential delirium* which follows acute fever; but febrile delirium is called alienation of mind, if fever be the primary disease. The species of these diseases confined to different grades and complications, are often so closely connected, that the *diag-*

nosis is subject to the greatest difficulties, and the character of the disease is scarcely manifest.

The true and legitimate *Phrensy*, is commonly said to be rare, and is usually announced with heat and very severe pain of the head, which the sick not improperly refer to the more inward parts; redness of the face and eyes, wakefulness, &c. Meanwhile the fever rises, sometimes slight, sometimes intense, and not always proportioned to the violence of the disease, so that in *continuance* alone this kind of delirium seems to differ from mania, which every one knows to be more obstinate. But *febrile* or symptomatic *delirium* is an appendage of previous fever and affects the feverish alone. Wherefore, it is little wonder if when this is abated, the fever should *remain*, and complete the usual period. The case is otherwise in *Phrensy*, for if the sick recover their reason, they are instantly restored to health, if you except that debility of the system, with which convalescents from this very grievous disorder, are for some time confined.

It must not be omitted that there is another symptomatic delirium, to wit, *paraphrenitis*, rarely occurring to practitioners, which medical writers unadvisedly refer to diseases of the head, since this disease in relation to the affected part, differs nothing from pleurisy attended with similar delirium; and each affects the pleura, with this difference, that pleurisy invades the membrane of the same name lining the ribs, and paraphrenitis has its seat in that production of the pleura covering the arched diaphragm above. I do not remember to have observed that paraphrenitis, concerning which authors, treading in the footsteps one of the other, had made ample mention; and only twice, unless I am deceived, have I seen, in the *dissections* of the numerous bodies preserved for that purpose, a *true pleuritis*, which notwithstanding has been considered very frequent, among pretended or unskilful physicians. Lastly, it is my duty to remark that inflammation of the pleura lining both the sides of the breast, and the diaphragm, has not always delirium accompanying it, as is manifest from the history of *dissections*.

We have noticed above, that melancholic delirium originates from preceeding severe disorders; from hypochondriac and hysteric affection; from trouble, &c. But *febrile delirium* often attends continued and intermittent fevers of every kind. This is announced by wakefulness, very severe head-achs, inflamed and fierce eyes, weeping without any manifest cause, inquietudes or unusual fortitude of mind: it is promoted by suppressed evacuations; by erysipelas, or other efflorescence of the skin re-

ceeding; by internal inflammation, &c. *Legitimate Phrensy*, which is confined to a few days, and rarely reaches the eighth, usually attacks the young, vigorous and athletic, the bilious and passionate, high livers and sots. Food that is much salted or peppered, ardent liquors most grateful to drunkards, insolation, contusions of the head &c. produce it.

Delirious melancholy is rarely mortal; febrile delirium endangers life, especially if it attend bilious and inflammatory fevers, small-pox, measles, colic, or other dangerous disease. *Phrensy is a fatal disorder*, which about the third or fourth day from the attack, takes off the patient. Tremor and convulsions preceeding it, the vomiting of rusty bile, want of thirst, suppressed or whitish urine, &c. excite fear of death. On the contrary, pains of the body and limbs, hæmorrhages, piles, bursting of varices, diarrhæa, sweats, &c. promote a happy issue. Lastly, if when the fever ceases, there remain the essential or symptomatic fever, it runs into delirious melancholy, or mania, and sometimes into the sleepy affection.

I should go beyond the bounds were I to add all that is discovered *by dissection*, after acute and chronic diseases attended with delirium. Those hurts only that are found in the brain, which appear more dependent on Phrensy, I have thought would be in order; they are as follows. On opening the head there are seen vessels spread through the brain and its coverings, unusually turgid, and rough with varices in the plexus choroides. Fleishy excrescences and other tumors are met with, and worms lodged in various parts of the viscus. A serous collection fills all the recesses of the brain in many, or is effused into the membranes. The brain is thick, dry, and hard, inflamed, and often affected with purulence and putridity. The medulla spinalis sometimes exhibits the same injuries, and the coverings of both parts are contaminated with similar affections, besides which the dura mater is found full of tubercles, and lastly, the processes of this membrane, performing the offices of enclosures, not unfrequently possess a bony hardness. Add to these, that the receptacles of the bile are turgid, to say nothing of other affections of the abdomen, foreign from our purpose.

We have treated above of the cure of febrile or symptomatic delirium; but we may add that there is no little doubt about the efficacy of venesection, celebrated by almost all writers. It has happened that I have often observed death hastened by bloodletting during delirium, especially if it had been practised several times on the first days, and the disorder also of long standing. Besides it is also confirmed by the observations of

WILLIS, FLOYER, and other authors of no mean rank, that delirium has often been removed by cold bath, and even the disease cured. Whether this phenomenon proves the inefficacy of blood letting, I leave to wiser ones to determine. As to *Phrenitis*, venesection ought to be used as soon as possible, opening the saphena is especially recommended, but I have learnt from my own experience, that opening the jugular is preferable to any other method. Notwithstanding arteriotomy itself has been of greatest use to many. After the vessels are well emptied, emetics and cathartics are proper; purgative medicines succeeding these, are not without merit, by the use of which, the cure is not rarely finished. Moreover, through the whole course of the disease diluents are to be given, also demulcents and temperants, namely rice water, chicken water, whey, emulsions, decoction of succory and borage, &c. Among the anodynes, nitre, camphor, and sedative salts are justly praised, which wonderfully restrain the wanton spirits: but narcotics rarely do good, and rather exasperate the disease.

External remedies are not to be despised, among which are thought very useful, cold water, even the coldest, vinegar, nitre, camphor, &c. After premising necessary means, there is excellent effect from sinapisms, blisters, cups applied to the lower extremities. Leeches to the hæmorrhoidal vessels are much esteemed, if the discharge of that name be restrained, in other cases they are usually applied to the forehead and temples, and are justly numbered among the more efficacious remedies. Lastly, many have been benefited by warm pediluvium.

CONVULSIONS.

REAL convulsions ought to be distinguished from *convulsive motion*; in the one for instance, the parts remain rigid and immoveable, in the other the members are variously shaken, and agitated with motion more or less violent. Moreover, the operations of the mind are freely exercised in convulsion, and altogether deficient in convulsive motions, respiration in both affections is rarely injured; but the pulse is frequently obscure, and sometimes feverish. Every one knows that these disorders either general, or respecting a particular part, are sometimes slight, sometimes long continued, so that nothing certain can be said concerning their cause. Sometimes they are confined within

certain limits, or recur like intermittent fever, at stated times. Every practitioner is aware that hysteric convulsions often shew this type. Convulsion takes many names, according to the part which it attacks; if the muscles inserted into both commissures of the mouth are affected, there follows *spasmus cynicus*, or *risus sardonicus*, but when one of them is convulsed, it is called *distortion of the mouth*, which also all anatomists are aware, takes place in palsy. Convulsion seizing the back is called *tetanus*, in which species the muscles of the inferior maxilla are first affected, then the disorder is transmitted to the muscles of the neck, back and loins: hence the rigid body can be bent in no way. If the flexors only are convulsed, the disorder is named *emprosthotonos*, but it is called *opisthotonos*, if their antagonists are seized with spasm. But physicians who are desirous after a right method of treatment, care very little about this Greek nomenclature so garnished by the ancients, (who have laboured under I know not what *itch* of *word coining*,) and celebrated in the schools; provided the genuine character of the disease, in whatever part it may have its seat, be known to them.

Besides these *differences*, there occur other convulsive diseases, namely, epilepsy, night-mare, asthma, and cough of that class, palpitation of the heart, sneezing, squinting, hicough, priapism, &c. of which in their places.

To the same class also may be referred *yawning* and *stretching*, which have a place in the list of symptoms. There is another species of convulsion often mentioned by writers, which they call *catalepsy*, concerning which many fables are related; *this* is nothing else than a certain grade of convulsion, wherein the more flexible members retain the situation in which they are placed. This affection appears like a species of hypochondriasis or hysteria, and is cured by no other remedies; for it appears clear from the histories of catalepsy, that it originates from profound and religious meditations, from undue application to learning, or other more serious affections of the mind. This rare species of Convulsion commonly attacks suddenly, and as the tale goes, preserves the patient immoveable in the same posture, whether walking, speaking, standing, lying down, writing, &c. add to this that some, in this condition see and hear, but have not power to speak, nor to move the eye-lids. Resembling this is *St. Vitus's Dance*, in which the patients dance like fools, and are distorted with unusual motions. Not many years ago this disease was as it were epidemic, and appeared in *Paris*, and would not perhaps have ceased, had not the KING by a severe law terrified the deluded minds of the sick. It is rea-

sonable to believe that *pseudo-demoniacs*, who beguile the too credulous old people, are affected with a similar disorder.

The greatest number of those who are *seized with Convulsions*, can neither speak nor move, many fall into *coma somnolentum*, which sometimes lasts a month, and longer. Some although they lie immoveable, see, hear, and understand every thing, which they exactly remember when the disorder is removed. We have above declared, that the case is otherwise in *convulsive motions*, with which all who are affected are deprived of sense. Vertigoes, tingling of the ears, yawnings, stretchings, tremors, pain of a particular part, palpitation of the heart, and irregular pulse, anxieties, heartburn and nausea; all denote *convulsive affections*, mostly of the trunk and limbs. Some when the paroxysm is coming on, complain of a kind of pain like the biting of ants, others feel what they call a *cold air* in the hip, or extremities, which creeping along the back, as it appears to them, gets to the head. Lastly, inflation of the hypochondria, spasmodic constriction of the anus, and of the neck of the bladder, &c. are also among the number of the *forerunners of this disease*. Moreover, the sick when the fit is subdued, remain as if broken down with great labour: some faint away, others become torpid, or sleepy; lastly, the disorder is often ended with cries and wailings. To these it may be added, that some are subject to priapism during the paroxysm, which is even unsubdued by death.

Convulsive diseases spare none, but it is well known that the weaker sex and infants are *more liable* to these affections. Hysteria and hypochondriasis, the ardor of love, and inconstancy, terror and anger, and other distressing emotions of the mind occasion them. They not unfrequently rage at the appearance of the catamenia, and when they are suppressed; they also proceed from difficult parturition and abortion. Emetic and drastic purges may bring on Convulsions; poisons of different kinds, wine adulterated with litharge, &c. They arise from ischury, suppression of the semen, checked perspiration, receding of cutaneous eruptions, and repelled gout; they are excited by unaccustomed fasting, and by immoderate evacuations. Fevers of a bad kind, worms lodging in the first passages, the bite and puncture of poisonous animals, &c. bring them on; to which we may add wounds, luxations, and fractures; and in one word whatsoever wounds and tears the nerves, with their membranes. Whence it is little wonder if they should often occur from wounds of the testes, in the surgical cure of excrescences, or from castration, as I have often had opportunity to observe;

Every practitioner is aware that children bear convulsions more easily than adults; and women than men. They are sometimes terminated by hæmorrhages, profuse discharges of urine, evacuation of worms, spontaneous vomiting, &c. They are fatal if they proceed from hunger, and exhausted strength. All authors after HIPPOCRATES, assert, that those seized with *tetanus*, recover if they reach the fourth day. Yet I remember to have seen some who died on the twelfth or fifteenth day of the disease. It is also said, in condescension to this *divine old man*, as he is called, that fever coming on during convulsions, is very favourable, which assertion is also contradicted by experience. Convulsive diseases of either kind often end in epilepsy, apoplexy and palsy, which in advanced age, *portend death*. Convulsions when small-pox are breaking out, and at the commencement of other acute diseases, are thought by physicians to be less dangerous. They are fatal if they follow immoderate evacuations; nor may we predict a less unhappy event, from Convulsions of the same part of the body; for instance, it is considered fatal, especially in children, when it affects the eyes. The *cynic spasm*, much more rare than the rest, tends to death.

Distortion of the mouth impairs the health but little. What *subsultus tendinum* threatens during fever, has been treated of before. To crown all, I may add that convulsive disorders are less to be feared in acute fevers than in others, and that those chronic affections by which the mouth and eye-lids are often distorted, and the countenance rendered disagreeable, are altogether void of danger. The same may be pronounced of those customary tossings and shufflings of parts, &c. which are not classed among diseases.

From the foregoing evident causes of convulsions, we learn that *anatomical observations* must be very numerous; so that the work would swell to an immense size were I to adduce all that could be said on this subject, however briefly. I intend therefore to mention only the injuries of the brain and spinal marrow. On opening the head, then, the vessels are found obstructed and sometimes ruptured, with stagnant blood; there occurs a serous colluvies fluctuating about the brain and spinal marrow, and filling the various recesses. In some there are tumors on various parts of the brain; this viscus presents to view decayed with suppuration and putridity, but rarely dry and parched. The medulla spinalis is subject to the same affections, but here they are more frequent between its two coverings, and the vertebræ are sometimes affected with caries. It is necessary to remark that the vertebral medulla alone is the part injured, while the brain is safe, in convulsions which

spare the animal functions, and organs of speech. Among the injuries of other parts, we more commonly find suppuration of the diaphragm, calculi of the kidneys, acid crudities in the stomach and duodenum, lumbrici in the intestinal tube, which is puffed with flatus. It has been noticed that priapism has been often seen in the dead bodies; but what is more surprising, to wit, luxations and fractures of the bones, which truly exhibit the effects of most violent agitation.

Respecting the *cure*, I am authorised by experience to assert, that venesections and emetics, commonly used by the generality of physicians, are futile and even hurtful. But a very bad custom has prevailed, to exhibit these remedies in all severe diseases whatsoever, to escape censure, or accommodate to the prejudices of the silly vulgar. Notwithstanding there are not wanting medicines which may be successfully used; namely, stimulating clysters, very sharp vinegar applied to the nostrils, simple or succinated sal ammoniac, petroleum, turpentine and other fœtid substances; friction on the back and limbs is recommended; ligatures are put on painfully tight, emollient and aromatic liniments are made, for anointing along the spine; cups either dry or with scarifications are put on, blisters, &c. Baths, semicupia and pediluvia are praised, or the part affected is immersed in water. Nor while the fit rages, are all internal medicines to be forbidden, if deglutition be not hindered; for cold water plentifully drank has been of service in many cases. Antispasmodics do some good, to wit, guttæ Anglicæ, tincture of castor, or of amber, orange flower water, &c. Lastly the noise of trumpets, timbrels and drums, the fumes of gun-powder, and such like, which have never entered the minds of physicians.

After the paroxysm has been subdued, we must take care to prevent its return, by directing the judgment of cure by close attention to the causes already apparent. For it is certain that the common convulsions are merely symptomatic, hence it is obvious to even the most inexperienced, that we must have regard to the primary disease. But when convulsive fits arise from a slight cause, the whole business is to be left to nature, or we may have recourse to the remedies prescribed for melancholy. Otherwise a *prophylactic cure* by venesection, is serviceable in some cases, especially after the suppression of customary discharges of blood. Having opened a vein, we must see to the first passages, by clearing out the foulness lodged there, both by vomits and purges. Meanwhile we must call in the aid of diluents, temperants and demulcents, to wit, water either simple or impregnated with nitre, mineral waters either

cold or hot, whey or milk itself, chicken or veal broth, emulsions, &c.

Nor are antispasmodics less conducive, in the intermissions which exist even in the paroxysm; next to these are cephalics and carminatives; but far from being specific are remedies of this kind (as it is commonly reported) against convulsive diseases. The more common are balm, sage, and betony, lavender flowers, primroses and lilly of the valley, piony and valerian, amber, castor, pulv. de gutteta, &c. The musk has been praised by some moderns as a most excellent remedy, given from eight to twelve grains. Bitters often afford relief, among which the Peruvian bark is not undeservedly recommended; absorbents, also and vermifuges merit regard, to wit: corallines, wormseed, &c. Nor are aperients of little value, namely, martials, millepedes, &c. Among the sedatives, camphor and mineral anodyne liquor are much esteemed. Narcotics also associated with antispasmodics may be usefully exhibited, if the animal functions go on freely, otherwise I believe they cannot be given without danger. Baths of warm mineral water, or of another kind, are of great benefit; as also various topical remedies, indicated for preventing the paroxysm. Meanwhile it is of great moment for the sick to visit public places, or exercise on horseback, or in a carriage. I have learned by experience that this manner of living has been of the greatest advantage to many. It is said that some, after all remedies had been in vain, were restored to health by carrying magnetised iron; which phenomenon, although out of the common way, nevertheless appears not inconsistent with reason, provided the brain have contracted no injury.

EPILEPSY.

PERSONS attacked with this disease, fall suddenly or after several turns as if giddy. While prostrate on the ground, and deprived of all sense, they are distorted with strange and horrid motions, so that the bystanders are struck with pity, or become motionless. The eyes of the patients are convulsed, the mouth daubed with froth, especially at the decline of the paroxysm; the face is swelled and suffused with a blackish purple colour, the tongue is thick, and thrust out of the mouth, and sometimes wounded by the teeth or quite cut off; the breathing in many is difficult, and carried on with loud snoring; some scream, and as it were enraged, beat themselves with their fists: others speak

incoherently, or mutter some things not to be understood, which are reported by some ignorant ones to be the effect of *witchcraft*. Nor are there wanting some who have heavenly visions, that are celebrated by the simple vulgar, or by fanatics. "*Penis in juvenili ætate erigitur, imo et semen erumpit:*" in some there is a discharge of urine with great impetus, and the bowels are evacuated in the same manner. The paroxysm sometimes increasing or returning near its decline, is followed by stupidity or drowsiness, very much like apoplexy. Some, after the paroxysm ceases, are sometimes affected with torpor of the limbs; all complain of unusual lassitude, as if overdone with hard labour, to say nothing of the contusions of the head, which they suffer on stony pavements.

Epileptic fits are mostly subject to certain periods; to wit, they recur yearly, monthly, every two weeks, &c. nor are they seldom governed by the *moon*: hence it is no wonder if the ancients called persons seized with this disorder *lunatics*. The paroxysms commonly last from a quarter of an hour to one or two hours, yet there are not wanting some which continue many days. Some epileptics, having had experience of various forerunners of the fit, are able to guard against a fall: for many indicate a *threatening paroxysm*; namely, great pain of the head, vertigo, or the appearance of sparks in the eyes, sounding in the ears, palpitation of the heart, inflation of the epigastric region, rumbling of the bowels, coldness of the extremities, &c. To these we may add a kind of pain or tickling, affecting some one of the limbs, which threatens an accession; the sick take this as a warning, and for fear of a fall and bruises, prostrate themselves on the ground. The air, as they call it, moves from this part to the head, as if *there* were the cause of disease which drew the brain into sympathy. In most, however, there occurs no warning of the fit, so that a few for fear of its invasion do not venture from home. Authors do make mention of some epileptics who are not deprived of their senses during the paroxysm. Whether these have been deceived by the affinity, and taken one disease for another, I leave to be determined by wiser heads; since the *peculiar type of Epilepsy*, as almost all agree, consists in the entire deprivation of the internal senses; by attending well to which, we may detect the various frauds of beggars.

Nevertheless, Epilepsy does not shew itself by *evident marks*, nor can anatomical observations, although very numerous, afford the general character of the disease, much less can the various histories of Epileptics, given by authors, preserve us from the risk of mistake. BOERHAAVE has justly remarked: "*Plerosque nubem pro Junoni salutasse,*" which, nevertheless, has not taught

us how to escape the deception: so that it is perhaps not unsound to doubt whether Epilepsy does not coincide with other species of convulsion; and indeed, on serious reflection, it is reasonable to believe that all spasmodic diseases differ one from the other only in *degree*. Nor, as remarked, do the *dissections* of those who die of this disease, contradict the sentiment. Besides it is known that almost all the species of convulsions are produced by the same evident causes, are attended with symptoms scarcely differing, are treated with the same remedies, and terminate nearly in the same manner. But this doubt I leave undetermined.

It is proved by experience, that infants and young persons, as well as the cachectic and melancholic are liable to Epilepsy, but it rarely attacks old persons, unless they had contracted it in youth: it is well known that women, especially gravid and puerperal, are prone to it, unless the hysterics, so familiar to them, puts on the appearance of epilepsy. Terror and frights, and other excessive affections of the mind, may bring on Epilepsy. Restrained lust, or very frequent emission of semen excite it. When *idiopathic* it denotes the cause to be in the head itself, mostly hid in obscurity; which is often produced by retrocession of scabs or other cutaneous affections, by the drying of old ulcers, by the preposterous cure of intermittent fevers, &c. But the *sympathic* mostly arises from foulness in the first passages; from checking the propensity to venery in both sexes, from suppressed menses, or other disease of the uterus. Worms and teething promote it in infants. Lastly, it takes its rise from contusion, wound, fracture, and caries of bones, and other causes acting on the neighbourhood of the head, by which through consent of the nerves the sensorium commune is affected.

The epilepsy of boys, concerning which in its place, mostly ceases at puberty, and is commonly said to last not more than seven months or years. But in adults it rarely ceases spontaneously—rather lasts through life. The more frequent the fits, the more dangerous the disease: when hereditary it admits of no cure, even the *idiopathic* is thought incurable; but the *sympathic* is easily removed. Epilepsy running into that kind of comatous affection resembling apoplexy, soon hurries the sick to the grave, unless palsy coming on restore them to life, which histories testify to have sometimes happened.

The paroxysm is often immediately followed by syncope, in which the patient lies as if dead, which physicians ought carefully to remember, lest preparations should be made for interment, and the unhappy patient be buried alive, which horrid misfortune, it is not unlikely many have suffered. Lastly, those who

survive these terrible fits, become deranged in mind. To conclude, we may add, that Epilepsy which has resisted all remedies, has been radically cured by quartan fever, or other severe disorder. It is doubtful whether Epilepsy be contagious, although some examples of it have been adduced.

From *anatomical observations* we learn, that in many cases Epilepsy is idiopathic, for besides a morbid conformation of the bones of the cranium and its sutures, there occur exostoses pressing on the brain, or bony fragments, sometimes moveable, sometimes growing to the skull, and wounding the Dura Mater. The thick processes of this membrane have been found converted into a bony substance, some of the angular parts of which irritated the brain: the dura mater beset with tubercles, and the brain hard, callous, and glued to its coverings, &c. the vessels spread through the brain, and membrane filled with what they call polypous concretions, or a kind of tartareous mucus; the plexus choroides varicose with dilatations, filled with hydatids, &c. We meet with bloody stagnations, both in the substance of the brain itself, and in the various interstices of that viscus. But there is more frequently a collection of serum filling all the recesses, and fluctuating about the cerebrum and medulla spinalis. A fetid sanies is discovered in the ventricles of the brain, or a kind of viscid ichor, little differing from froth that bedaubs the mouth. A matter plainly resembling this is also discovered under the dura mater. Other things occur worthy of note, to wit, tumors of different kinds, purulencies, putridity, &c. Moreover we sometimes meet with quicksilver about the base of the brain, not only in those who had undergone salivation for syphilis, but also in such as had followed various trades in which that mineral is handled and used.

It would be superfluous to mention the various injuries of the breast, abdomen, trunk, and limbs—being altogether foreign from our design; but it will not be out of order to say something concerning the *limbs*. It has been noticed that many epileptics have been warned of a threatening paroxysm, by a certain pain in the toes or fingers, or in some part of the legs or arms; there is at this point, often designated by the patients while living, a certain kind of ganglion or other appearance, which is the genuine seat of the disease; yea, and it appears from some histories, that many, after the removal of this cause by surgery, or after division of the nerve supplying the local disease, have been restored to health: *which ought to be well noticed.*

Venesections and *emetics*, which are boldly prescribed by many unskilful physicians, during the fit, ought to be considered superfluous and fatal. It is safer to commit the whole business

to nature, while by a proper position of the body we guard against bruises. Although the paroxysm sometimes appears to yield to blood letting, yet it is a maxim among the masters of the art, that this untimely remedy makes the disorder more obstinate. Let the case of the *woman*, mentioned in the JOURNALS suffice as an example, who, in the course of one year, I know not by what physician's order, *was bled four thousand times*: so prevalent were *pre-conceived opinions*. Notwithstanding, we may sometimes let blood, if the case be urgent; to wit, where the vessels are in danger of being ruptured on account of plethora, or the suppression of any discharge of blood. Which it is certain from the histories of dissections, have not rarely happened from violent convulsions. With like reason an emetic may be prescribed, if the first passages be full of the depraved remains of digestion; but a vomit must be used with the greatest caution, as by it the blood rushing with greater force to the brain, may inflict on it a fatal injury. Frictions on the back and legs are more safe, and stimulant or cathartic injections, which have done no little good, under various circumstances. A fit has been restrained by chaining, in this species of sympathetic epilepsy, which depends on a peculiar affection of the limbs, and this binding down, has when timely performed, been attended with happy success. Sternutatories in the the greater part of epileptics, are very hurtful, but do good in some cases. However, since it is difficult to find out, in what case these stimulants suit, it appears best to abstain from them altogether. Heavy and disagreeable odours, so serviceable in other species of convulsions, are found quite inert in this; so that it is customary with almost all nations, to leave the solution of the paroxysm *to the efforts of nature alone*.

During the intermission, no pains must be spared to guard against another attack of this baneful disease; this *prophylactic method* differs little from that described in the last chapter. Bloodletting, especially from the foot, or neck, has been serviceable to almost all epileptics, nor are emetics and cathartics thought less beneficial in the commencement of the cure, and indeed it is well to open the bowels often during the course of the treatment, especially if acid saburræ or worms be lodged in the primæ viæ. At any season of the disorder diluents and temperants are of use. A milk regimen has had the best effect in many cases, by means of which the force of the spirits is surprisingly repressed; nor are the cold and hot mineral waters less recommended, whether acidulous or what are called martial. After premising these, *specifics* are requisite, but these possess much less efficacy than is commonly attributed to them,

and rather are inadequate in most cases to keep off the disorder; among the more eligible are piony, valerian misletoe, Peruvian bark, cinnabar of antimony, pulvis de gutteta, &c. by the help of which epileptic fits are sometimes checked. Cephalics are allied to these, and seem to possess the same virtues. Bitters and absorbents are sometimes profitably administered. Antiscorbutics and antivenereals are best, if there be any suspicion of latent virus; among these last, the more common are æthiops mineral and calomel. Quicksilver itself, according to many, has been happily given, not only in syphilitics, but also in cases free of lues venerea. There occur some others which may be given as occasion requires, namely, soaps, magnesia, flores sal: ammon, &c.

External remedies must not be omitted, for in some epileptics, wetting the head with warm mineral waters has been happily practised: leeches have done good when applied to the hæmorrhoidal vessels. Scarifying cups to the head, back or thighs. The virtues of these are equalled by blisters applied to those parts. Setons drawn through the skin of the occiput have done wonders. Wounds inflicted by caustic deserve no small praise, provided the disease be recent. The actual cautery on the forehead concludes the list of remedies, which, it appears from various observations, has been of greatest service in many cases.

We add nothing of the numerous amulets of quicksilver, piony root, elk's hoof, and other substances hung to the neck, or carried in the bosom, the virtues of which depend on the implicit faith of the patients. To what have been already treated of, it is proper to subjoin, by way of finish, that this most obstinate affection is often removed by some new manner of living, by a change of climate, by distant journeys, tedious voyages, &c. Lastly, it is proved by repeated experiment, that a *strict diet* has not its equal as a remedy, which moreover is of benefit in all other diseases: without which, it is best to abstain from every other cure.

SECTION THE THIRD.

OF INTERNAL DISEASES OF THE BREAST.

HOARSENESS.

THE affection of the glottis, causing a weak and rough voice, and called in French *enrouement*, is well known. But there is another disease designated by no French name, although very familiar, which attacks the larynx, and especially the trachea, and is called by writers, *bronchus*. Catarrhal fluxions even the most common are known to be attended with some hoarseness; which is also among the symptoms of various diseases, namely phthisis, vomica, atrophy, worms, suppression of the menses, &c. It is promoted by checked perspiration, breathing of cold air, cold drinks, singing, hallowing, &c. it is caused by fried victuals, by rancid oil and butter. It is beyond a doubt that both diseases are caused by a kind of mucus irritating the internal membrane of these parts, since it is moderated by expectoration alone, or by a kind of arbitrary hawking or snorting. The slender, scorbutic, syphilitic, &c, are prone to the *true Hoarseness*. The aged and cachectic are thought liable to *bronchus*, as also those who frequent large assemblies; lastly, they who speak with great apprehension and diffidence to a public audience. A hoarseness arising from any accident, or from a slight cause, is *void of danger*, although it continue many months: but if it proceed from an internal cause, or be a symptom of some other disease, it bespeaks no good. There is the same judgment of *bronchus*, which moreover occasions no little trouble in advanced age, nor is it free of danger, as it often ends in asthma or suffocation.

Bodies subjected to the anatomical knife, exhibit the internal surface of the glottis, larynx and trachea moist with a glutinous mucus, or obstructed, inflamed, eaten with ulcers, dry and marked with gangrenous spots. The cartilages of both parts are found affected with caries. In these places are also seen gypseous or stony congestions, and polypous excrescences, sometimes moveable, sometimes pendulous and fluctuating, &c. The lung is often brought into sympathy—for it is sometimes schir-

rous or filled with tubercles, sometimes it contains abscesses, or is disfigured by ulceration—nor is the thymus free, which when closely examined does not rarely manifest the same appearance: to add nothing of ulcers in the mouth, and other injuries perceptible before death.

The *method of cure* differs little from that which is suitable in cough, catarrh, phthisis, &c. On which account venesection is rarely beneficial, laxatives do some good; but diluents, demulcents and mild pectorals are of more service; of this kind are milk, whey, honey, naveu, jujubæ, rice, barley and the like: Gum tragacanth, sugar, spermaceti, tortoises or shell crabs, &c. The vulnerary and detergent medicines prescribed for the breast are recommended: namely, veronica, hyssop, ground ivy, gum-ammoniac, natural balsams, syrup of hedge-mustard, balsam of Lucatellus and of sulphur, &c. Spirit of sal ammoniac especially in advanced life, merits praise, but this remedy must be given with a skilful hand. But in symptomatic Hoarseness, every one must see that regard should be paid to the primary disease. It is no wonder therefore if antivenereal sudorifics, antiscorbutics, and a multitude of other incidentia, should often succeed well. Lastly, issues and setons do great service, when the disorder becomes deeply rooted, and other medicines have been ineffectual.

COUGH.

IT is obvious to even the most inexperienced, that peripneumony, dropsy, and other diseases of the breast are attended with *Cough*; but all are not aware that this arises from the irritation of the glottis alone, or of the larynx, from inflammation of the pleura, diaphragm and liver, from depraved humors in the stomach and duodenum, and from other diseases of the viscera: and a *dry* cough is mostly observed to arise from diverse injuries of the abdominal viscera. But if it be excited by a flow of mucus, stagnant blood, suppuration, tubercles or by stony or bony concretions vellicating the lungs, or be marked with the throwing out of spittle, it is called *moist*. That *more violent cough*, which is called convulsive, of a catarrhal or other nature, is subjected to certain periods; and with such ferocity do the paroxysms sometimes rage, more or less frequently, that the face is flushed with a blackish blue colour, and the sick are in danger of suffocation. From this source also proceed bleed-

ings at the nose, spitting of blood, vomiting, involuntary discharge of urine, and unexpected stools, abortions, herniæ of various kinds, &c. A cough of this sort often rages as an epidemic, and is called *coqueluche*, *folete*, &c. according to the mere whim of physicians.

○ Coryza, gravedo, hoarseness usually denote *Catarrhal Cough*, and this species of inflammation of the pharynx, or angina is called by the vulgar *mal du gorge*. Nothing scarcely is expectorated in the first stage of the disorder, but after some days the spit becomes gradually thicker, and is thrown up in great plenty. Fever commonly beginning with a chill, usually attends catarrh, and is exacerbated towards evening; this which they call catarrhal, is sometimes milder and comprehended within two or three days, sometimes of a bad kind, and attended with wandering pains, difficulty of breathing, anxiety, faintings, cutaneous eruptions, or miliary, very plentiful sweats &c. In some epidemic constitutions, when it wears the appearance of peripneumony or malignant fever, it threatens death. Under this form it is protracted to the seventh or fourteenth day, beyond which there is fear lest it run into hectic fever.

There are other species of *Cough*, to wit, *stomachal* and *guttural*, the first, the discerning of which is often hid in great obscurity, shews itself with nausea and vomiting, heartburn or grievous pain of the stomach, and inflation of the epigastrium. The *tussis stomachalis* to which infants, hypochondriacs and old persons are subject, excites almost no spitting, and is usually increased after eating, and is sometimes so severe that it brings on fever. The guttural Cough, mostly chronic, shews itself with a kind of troublesome sensation in the bottom of the fauces, or about the larynx without the signs above enumerated, but for the most part we can only guess at its character. The *symptomatic Cough* is indeed more frequent, for the hypochondriac and hysteric, scorbutic and scrophulous are vexed with it: the gout, rheumatism, introverted sweat, the recession of scabs and other cutaneous eruptions; the drying up of old ulcers &c. promote it. It is occasioned by small-pox and measles, by dentition and worms: lastly by smoke, mineral vapours and any other extraneous body slipping into the larynx; wounds, &c.

Simple catarrhal cough *portends* nothing bad, occasions slight inconvenience, and terminates by the spontaneous efforts of nature: but the chronic in advanced age can scarce be restrained without danger; and most old people require expectoration as long as they enjoy the vital air, because the pores of the skin being confined, cannot yield an outlet to the usual quantity of perspiration. Catarrhal fever when epidemic often

becomes destructive, on account of the internal inflammation which mostly accompanies it, or of the violent symptoms with which it is attended; by reason of which it is rashly taken for malignant fever: But it is of another character, and subject to another condition, when it does not last beyond the fourteenth day; during which fetid sweats and feculent urine denote a *favorable termination*. If it invade those of unhealthy constitution, or be treated with unsuitable remedies, it portends death, or ends in a chronic and unconquerable cough. When the cough is very violent or convulsive, it brings on various misfortunes; for the blood, by the very powerful shaking of the breast, rushing with increased impetus to the brain, may occasion Apoplexy, either fatal, or ending in palsy. From the same cause proceed hæmorrhages, abortions, herniæ, and other diseases, of which we have treated above. Lastly, dry and chronic cough excites suspicion of some latent injury of the lungs, or schirrous obstruction of other viscera, threatening phthisis or asthma.

From dissections, the lungs are found in such state as not to be separated from the neighbouring parts without laceration; affected with œdema, or emphysematous, covered with a gelatinous crust, emaciated, &c. The bronchia are stuffed with a gluey mucus, the vessels winding about them, uncommonly turgid and varicous. In the same viscus are schirri, tubercles, encysted tumors, abscesses, ulcers, and other suppurations, putridity and gangrene; and not unfrequently stony and bony concretions, &c. The pleura with its processes, affected with a livid colour, touched with inflammation, and marked with spots like gangrene. There appears a serous collection, or sanious or purulent, both surrounding the lungs, and hid in the mediastinum or pericardium. It must not be omitted, in mentioning things worthy of remark, that the heart, also the companion of this evil, is often found ulcerated or grown to its involucrum. Nor are the abdominal viscera unhurt, for inflammations and schirrus are detected in the liver, spleen and pancreas; gangrenous specks in the stomach and intestines, the cavity of which is filled with foulness of various kind; the biliary vessels filled beyond measure, &c.

The *cure* of the more common catarrhal fever is performed by simples, or left to nature, avoiding only access to the cold air, and attending to a suitable manner of living. If the spit be thick and freely thrown out, it indicates the solution to be near, unless the disease be prolonged by unsuitable or untimely medicines. But it is otherwise in catarrhal fever of a bad kind, which demands different remedies, among which venesection is recommended by many of no mean rank, even by SYDENHAM

himself. Yet experience proves that bloodletting is not beneficial in all epidemics, but rather may occasion the greatest harm or even death. But alas! there are no marks by which the method of cure in this case can be directed; so that under these difficulties, when there is an epidemic constitution, it is lawful to subject the sick to some experiments. But we may always with safety give diluents, demulcents and pectorals, to wit, liquorice, the herb capillaire, *hispidula*, jujubæ, navew, tower-mustard, honey, oil of sweet almonds, spermaceti, white looch, what they call *lac gallinaceum*, lozenges of althea, clarified sugar, milk, whey, barley water, rice water, &c.

At the decline of the disorder, *cathartics* are of service, otherwise they must be cautiously used; lest by an ill-timed evacuation by the bowels, expectoration should be checked, and the most alarming suffocations follow; which I remember to have often seen, whatever RIVERIUS and others of eminence say to the contrary, who have placed too much confidence in this remedy. But emetics, at the coming on of catarrhal fever, often do surprising service; as also in other species of fevers: these are principally useful in that species of cough, known by the name of *coqueluche*, which is usually exacerbated with more violent paroxysms called *quintes*. Without controversy, ipecacuanha excels all other emetics: also in this case the kermes mineral is highly extolled, either prescribed as a vomit, or alterative and incident. The milder diaphoretics very seldom fail, viz: the flowers of the red poppy and of mullein; or the kermes just mentioned, exhibited in divided doses: and indeed theriacs, mithridate, and other roborant and cordial electuaries, often moderate the catarrhal cough. In convulsive catarrhal cough, small doses of cascarilla have done good; in some cases sedatives promote a salutary perspiration, and bring on an intermission: namely, saffron, laudanum, anodyne drops, diacodium, syrup of karabe, pillulæ de cynoglosso, and other hypnotics, which, however, must be judiciously handled, lest an ill-timed suppression of expectoration should take place.

The stomachal Cough, familiar to infants, hypochondriacs, and old persons, requires evacuants by vomit and purge, as repeated experience proves: with this view the kermes mineral has often happily succeeded. Having cleansed the first passages, or carried out the foulnesses floating there, stomachics are of wonderful benefit, namely, anise, coriander, catechu, theriac, &c. In some cases the confection of hyacinth, and other absorbents which may break down the acid saburra fretting the stomach, have also done good. It is to be remarked that the demulcent pectorals which are commonly or incautiously given in large

quantities, ought to be considered inert or noxious, concerning the virtues of which, even as to other species of Cough, there is no small doubt; since the most simple water exceeds in efficacy the most exquisite perhaps of all pectorals: which I leave for the wise ones to ponder.

Chronic Cough requires another cure, namely, having premised what is customary, let pectoral demulcents be immediately given, to wit, preparations of milk, of flour, shell fish, &c. To these succeed pectorals, vulneraries, among which are ground-ivy, ladies' mantle, speedwell, St. John's wort, natural balsams, tar-water, syrup of hedge-mustard, balsam of Lucatellus, and many officinals which owe their virtue to sulphur, and are sold, under the form of lozenges, balsams, magisteries, and flowers. Nor do pectoral incidents yield less benefit, if the character of the disease do not forbid; namely, southernwood, puta, camphorates, fennel, juniper berries, myrrh, storax, flowers of benzoin, antimony, various preparations of squills, balsamic pills, &c. Diaphoretics come in here, to wit, guaiacum, China root and sarsaparilla, diaphoretic antimony, Potter's antihectic, the kermes mineral so often mentioned, and such like; which by relaxing the pores of the skin, have had a happy effect on many. As occasion may require, even diuretics, aperients and depurants may be used; such as wood-lice, florentine orris, oxymel of squills, æthiops mineral, &c. The various mineral waters close the list, which by searching the inward parts of the body, resolve obstinate obstructions, and finish the cure of chronic cases.

Vesicatories are of famous use in some cases, also setons and issues, especially if cutaneous eruptions of any kind have previously receded, and the lips of old ulcers have closed together. The same may be said of various other diseases of a different character, which may occasion symptomatic cough; from attending well to which the legitimate mode of cure is manifest. By way of over measure, I intend to add the history related in the Acts of the Royal Academy of Sciences; concerning a certain man, labouring under a very troublesome chronic Cough, who by the advice of his Physicians had lain for a long time in a warm bed-room, with the cracks of the doors and windows religiously closed, and was tormented with a troublesome and tedious cure: becoming impatient of this intolerable delay, he bade farewell to all remedies, and ran out into the street; it was wonderful that from breathing the very cold air, not only the cough was not encreased, but was beyond expectation removed; so that, temerity sometimes effects, what prudence could not do.

SUFFOCATING CATARRH.

SCARCE any thing certain can be gathered from books, as the treatises on this subject, savour more of sportive fancy, than the work of sedulous observation. Many have taken Suffocating Catarrh for a sudden choaking of the lungs, whence its name, which *anatomical examination* proves to be not wide of the truth, as it respects the aged and infants; but it is otherwise at a different age. Some have blamed the heart, hence they have not improperly referred the disease now treated of, to *cardiac syncope*, in which the heart and lungs are overwhelmed with blood. Others among the experienced, suppose that Suffocating Catarrh consists in violent irritation of the larynx, which brings on alarming and fatal suffocation: so that this disorder differs little from that species of angina, attended with no inflammatory swelling; except that the accession of Suffocating Catarrh is more prompt and dangerous. Nor are there wanting those who call a fit of convulsive asthma, or hysteric convulsion, by the name of Suffocating Catarrh, although there is a very great difference between the chronic disease and this very acute one. Lastly, many have falsely persuaded themselves that this catarrh differs none from apoplexy; since suffocation in this, shews itself before the loss of sense, as appears from the relation of the servants who keep watch; while apoplectics plainly lose the animal functions *first*, and their respiration is injured afterwards.

From the foregoing we learn that many, deceived by the affinity, have plainly been blinded as to the genuine diagnosis of this disease, and have treated the one for the other. On more accurate consideration of the subject, it is reasonable to believe that Suffocating Catarrh arises from a *two-fold cause*; to wit, from a spasmodic constriction of the glottis, and from obstruction of the bronchia. The first species usually invades those who after severe labour, expose themselves while warm, to the cold air, without delay. It frequently affects those who are already subject to catarrhal fluxions, as well as the corpulent; high livers, lovers of ease, drunkards, &c. We have above noticed that infants and old persons are liable to the other species. Each is subject to different grades, even the lighter of which is not without danger; but from the more severe there arises a sudden suffocation, attended with snorting and wheezing, while the senses are mostly deficient. At the commence-

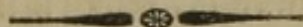
ment of the first species, the larynx is disagreeably irritated, and afterwards drawn together, threatening suffocation, just as if a bolus had slipped into it: the brain is afterwards drawn into consent. The case is different in the other species, in which, tho' the larynx is unhurt, yet the lungs are overcome with such a weight, that the sick instantly fall down deprived of all sense.

Both species of Suffocating Catarrh, last but a few hours, and very often occasion death, which ought principally to be understood of the last, the solution of which consists in expectoration alone; to promote which, weak infants and old persons are inadequate. This disorder of either kind, rarely occurs to Physicians, although it is said to be much more frequent, since it comes on mostly about midnight, and runs its course before medical aid is thought necessary; so that the miserable patients, destitute of all medical aid, are often taken off by sudden death.

Almost nothing is collected from *anatomical observations* under this title, as many have treated of hysteric fits, and various diseases of the heart and brain, only changing the name. I have had an opportunity of dissecting but one man, who was a conspicuous Nobleman, about sixty years of age, and died in the night of the first species of suffocative Catarrh, if credit may be given to the report of the servants who were present. I found the ventricles of the heart, and especially the first, beyond measure stuffed with compact blood; nothing appeared in the glottis and larynx, which seemed altogether free of any injury, although the patient when deprived of voice, clearly indicated by indubitable signs, that the disorder affected these parts. Wherefore, without the least vestige of previous strangulation, there appeared only a morbid product, namely, stagnation of blood in the ventricles, auricles, and other receptacles of the heart. It is proper to remark that the person who died of this disease, was fat, troubled with sadness and solitudes, and led an idle life, but otherwise enjoyed vigorous health. I have often observed the other species of Suffocating Catarrh, very familiar in infants and old persons, whose bodies exhibited the trachea and bronchia filled with a viscid mucus, and altogether impervious to the air: while the other viscera appeared sound, or affected with various injuries foreign from the present disease.

We cannot doubt that venesections, even often repeated, are proper in the Suffocating Catarrh affecting the glottis. An emetic may be of great service, if the blood vessels be first well depleted, otherwise it deprives the sick of life. Cathartics are indeed less to be feared; but the very limited and short stage of the disorder will never admit of these remedies, which operate

too slowly. One bleeding is proper in the second species ; but more is forbidden. The kermes mineral, and other emetico-cathartics, have succeeded happily in most cases. Yet they are not to be used without the greatest caution. Stimulant injections are serviceable in both disorders, which can at any rate do no harm. There is the same judgment concerning scarifying cups, blisters and sinapisms. Tight bandages upon the limbs merit no small praise, nor are pinchings, frictions, or other customary methods of exciting the humors and spirits, to be omitted, for they may relieve the part seized with spasm. When this Herculean disease is subdued, either by the successful efforts of nature, or by art, we must spare no pains to keep off another invasion. Among the general prophylactics to be used on occasion, the cautious use of cathartics is recommended ; other aid is commonly brought from the class of diaphoretics and diuretics : of this kind are the terra foliata tartari, rape juice, salt of amber, spirit of sal ammoniac and of hartshorn, &c. Nor do pectorals, demulcents and incidents, afford useless aid ; namely, sperma ceti, gum tragacanth and ammoniac, &c. Lastly, issues succeed these remedies, which perhaps even excel them. In the mean time a suitable regimen is to be observed ; sparing suppers for old people ; let the sick enjoy a more temperate air at a place of public resort ; let them avoid sadness and anxiety ; let them indulge in agreeable walks or journeys, &c. The want of accurate observations forbids to add more : nor will my plan admit of it.



INFLAMMATION OF THE BREAST.

PERIPNEUMONY and *Pleurisy* are taken for one and the same disease, among the inexperienced, which notwithstanding differ much one from the other, in respect to the parts affected, since *Peripneumony* has its seat in the lung itself, and *Pleurisy* affects the membrane lining the ribs. Moreover, *peripneumony* is a very frequent disease ; but *pleurisy*, as dissection proves, attacks very rarely. For amongst the great numbers of those who die with Inflammation of the Breast, the dissection of which I have often superintended, I have found only two, if I mistake not, affected with genuine *pleurisy*. It is true indeed that the lungs, when seized with inflammation, draw the pleura into consent, whence proceeds that implicated disease which they call *Pleuro-peripneumony* ; but differing very

much from mere pleurisy, which spares the lungs. They shamefully deceive themselves on this subject, who consider a very acute pain of the side, as a manifest mark of pleurisy; since it has often been my lot to observe the pleura in this case, to have suffered not the least injury. Another error has crept into practice, about the inflammation of that process of the pleura covering the convex surface of the diaphragm, which disease coincides with pleurisy, in respect of the causes from whence they arise, the effect produced by them, and the method of cure. It is that which, on account of delirium, Authors, even the most eminent, refer to diseases of the head, under the senseless title of *Paraphrenites*; but I will delay no longer with these, lest I should be guilty of needless repetition.

A shivering which is followed by fever, a pain in one of the sides, but mostly the right, in the sternum, back, &c. bloody spit, and difficulty of breathing, are the most remarkable *signs of Peripneumony*. It is carefully to be noted, that in some who are taken down with this disease, there appears no bloody expectoration, although the lungs are seized with true inflammation, on which account many physicians, with SYDENHAM at their head, have taken this affection for *peripneumonia notha*, whether properly will appear from what presently shall be shewn. This must also be remembered, that inflammation of the lungs is not always attended with cough, pain and difficulty of breathing; as during the prevalence of this epidemic constitution in the year 1744, I frequently observed in dissecting the bodies of those committed to my care. Sometimes peripneumony is preceeded by tormina of the belly, quinsy, or other inflammatory disease: nor are these forerunners thought to be uncertain in some epidemics, as they are altogether absent at other times. Concerning erysipelas of the lungs, LOMMIUS and BOERHAAVE have made mention, after HIPPOCRATES and GALEN; but this opinion is supported by mere conjectures, as erysipelas appears to respect the skin only, by the recession of which, a morbid matter falling by metastasis upon some viscus, causes another affection, differing on account of the structure of the part, from the character of erysipelas: which by permission of these great men, it is sufficient to note as I go along.

There is *no bloody expectoration in pleurisy and paraphrenitis*, unless the vessels of the bronchia, be ruptured by the violence of the cough, but in this case the red blood shews itself under a different aspect. Both affections are attended with delirium in most cases; a very acute pain occupying some part of the breast, and encreased from inspiration, torments the patients, who can scarcely get their breath. The pulse, during the fever, is found

hard, the mouth dry, and lastly, the chills recur irregularly. From the situation of the pain, *paraphrenitis* is known, which is moreover attended with belching, nausea, vomiting, heart burn, anxieties, hicough, *risus sardonicus*, &c. Hepatitis differs little with respect to signs, from pleurisy and paraphrenitis, especially if inflammation invade that part of the liver which is convex and adhering to the diaphragm, since the pains thence arising may pervade the whole surface of the breast, or extend to the clavicles and scapulæ. Nor does *inflammation of the heart* and pericardium, a disease *very rare*, appear more clearly, since it is followed by the same symptoms, and affords marks not unlike. It is to be remarked that the blood, in almost all these inflammatory diseases, when drawn by venesection, is seen with its red part compact, and covered with what is called an inflammatory crust, in the cups, after one or two bleedings. But I have learnt by repeated experience, that this concretion of the blood is not to be considered as a certain *indication of inflammation*.

Every inflammation of the breast, whether attended with bloody expectoration or not, may terminate by resolution within three or four days; but if the fever, pains, and other symptoms remain after that term, there is no doubt of suppuration or schirrous obstruction. The disease in the first case is protracted to the fourteenth or twentieth day, but in the second it is extended further, until by degrees it puts on the appearance of chronic fever. From every inflammation of the breast, there sometimes arise metastases, which from the weight of the purulent matter upon one or other part, are thought to be more or less *dangerous*. The peripneumony, with yellow expectoration, is the most troublesome of all, and frequently portends greater danger, because expectoration is more slowly carried on. But it is a good omen if what is spit up be streaked with blood and conglobated: when more glutinous, and with difficulty thrown off, serous, bilious, and greenish, there is no little danger; as also when chiefly consisting of red and frothy blood. Lastly, if expectoration be black, we may prepare for the funeral. Inasmuch as the principal solution of this disease depends on a proper expectoration, it is easily understood that death stands at the door, if this be altogether wanting, or be suppressed by ill-timed remedies. But when this discharge is promoted about the fourth day, and freely kept up till the last, the disorder is mostly *removed* about the seventh, ninth, or eleventh day, by spontaneous sweating. From the sudden cessation of pain, or other severe symptoms, it is obvious that gangrene is near, and that there will need little preparation for interment.

It is a maxim with all, that the pulse is the guide of practice,

wherefore no *prognosis* is to be formed without first attending to the strokes of the heart, and to the degree of heat; for if the pulse be hard and contracted, with great heat and dry skin, it denotes no good. The less it recedes from the natural state, the more hope is there of health. Many things also are learnt from the kind of pain, for an obscure one indicates inflammation, occupying the interior of the lungs: whence expectoration is more easy: but from an acute pain, it is conjectured that the surface of the lungs is inflamed, nor perhaps is the pleura safe; on which account the disease becomes more dangerous. Yet I would have physicians to be aware, (I speak from ocular experience) that there never is a very severe pain without some injury of the pleura, which especially happens, if the lungs be connected with this membrane; this adhesion I have very often observed even in perfect health, and must have escaped no anatomist. A plentiful sweat on the first days of the disease, excites no vain fear; but about the seventh day, it answers the purpose of a critical evacuation. That a timely vomiting of bile has often been of very salutary effect, is well known to experienced practitioners.

Whitish and feculent urine is not rarely evacuated with relief to the sick, otherwise nothing certain can be formed concerning the *event*, from the examination of urine. Nor can any thing *more certain* be gathered from looseness of the bowels; which notwithstanding, as the disease advances, is thought dangerous in most cases. There is some doubt respecting hæmorrhages; but abscesses behind the ears, on the back, thighs, &c. promise a happy termination. On the contrary, a hiccuping or anxious respiration, and snorting, lead to a fatal termination. Delirium, with tumid and flame colored countenance, is thought mortal; nor is there greater hope from a dry and blackish tongue, or from livid apthæ, occurring every where about the mouth. Lastly, death threatens, if the symptoms encrease on the sixth day of the disease, or new and aggravated ones make their appearance. Peripneumony, attacking the scorbutic and scrophulous, is dangerous. And the case is serious also, if it follow angina, or any other inflammatory disease. If pain, cough and fever extend beyond the usual term of the disease, and irregular chills, anxieties, night sweats, &c. come on; it is running into hectic fever, phthisis, vomica, empyema, and dropsy of the breast. Lastly, what is to be expected from the morbid matter, leaving the lungs, and fixing on the liver or other viscus, there is none who does not understand.

Pleurisy and *paraphrenitis* mostly impart a gangrenous disease to the affected part, yet pus sometimes is formed there,

and an abscess follows, of greater or less size, which in some cases points outward and fluctuates under the fingers: but in the greater part, the pus is effused into the cavity of the breast, whence arises empyema; at other times, but rarely, it makes its way to the lower part of the abdomen, through the diaphragm; hence arises purulent dropsy, by which the viscera are affected. Lastly, such as have already suffered internal Inflammation of the Breast, contract a certain proneness to this disorder, on which account a return, about a similar time, threatens these, which is thought more dangerous than the first accession.

From *anatomical dissections* we learn that the lungs are diseased in two ways, to wit, that they are *livid*, and *obstructed*; and of increased size. About their surface occur effusions of blood, suppurated pustules, gangrenous spots, which escape the view, if these viscera be adhering to the pleura, and the neighbouring parts. The surface of these is covered with a kind of *gelatinous crust*, whitish or yellowish, slightly adhering, or easily separated with the handle of the scalpel; the pleura also is sometimes covered with a similar matter: the liver is affected in the same manner, and, as above noticed, the intestines and other viscera are inflamed. It is reasonable to believe that this matter is generated by a kind of suppuration; since after a confirmed inflammation of the lungs, there often appear no other signs of suppuration. Moreover, I have had occasion frequently to observe a similar matter mixed with genuine pus. More frequently, to pursue my plan, entire abscesses are found within the substance of the lungs, which, at times, is so filled with pus, that from cutting any part, this fluid issues on all sides. Lastly, the lungs are found in some cases putrid and mortified; yet rarely altogether injured in the ways above enumerated: but oftener one or other part, the left or right, and one or the other lobe. To conclude: it is proper to remark, concerning the seat of the disorder, that sometimes, as dissection proves, the sick complain of pain about a sound part, while the part affected is easy.

The pleura shews *various affections*, as well that which lines the ribs, as that covering the diaphragm, and forming the mediastinum; for it is found livid, more than usually thick, affected with inflammation, ulcerated, and mortified. Abscesses have been discovered as well in the pleura as under the mediastinum, the size of which sometimes is immense, so that the whole lung on that side is almost obliterated. In like manner sometimes we see some space of the lung, and the pleura attached thereto diseased; but we may rightly distinguish, as well by examina-

tion as by the history of the disease, that some part has been primarily affected, from which the disease was propagated to another. From this view it is plain, as above hinted, that genuine pleurisy is a very rare disease, as well from my own observation, as the history of dissections. These morbid dispositions are followed by stagnations of a serous, sanious and feculent nature, which fluctuate about the lungs and pericardium. The heart also is found variously diseased, to wit, its surface whitish, eaten by small ulcers, or, as it were, flocculent; and it is often disfigured with whitish spots, which, as above noticed, are so many pellicles, to be taken off like exfoliations. Besides which, the pericardium is found inflamed, mortified, and growing on all sides to the heart. We have purposely omitted inflammations of the liver, and other viscera, worms lodged in the first passages, and numberless other diseases of the lower belly, which do not belong to this subject.

There is no doubt that in every Inflammation of the Breast, the *principal point of cure* turns on *bloodletting*; nor does the flow of catamenia forbid it, but then the *saphena* must be opened, lest it be checked by ill-timed revulsion: Notwithstanding venesections in whatever part, must be confined within certain limits, lest the strength necessary to promote expectoration, or any other effort of nature, should fail, from too great depletion of the vessels. Taught by experience, and supported by the opinions of the most celebrated practitioners, we hesitate not to assert, that a vein ought not to be opened beyond the third or fourth time, in the first days of the disease; and that few bleedings, at proper times, are more profitable than very numerous ones, through the remaining stages of it, which, after giving temporary relief, may excite more severe symptoms. The illustrious Arbiter of medical practice, SYDENHAM, advised about forty ounces of blood to be drawn at three or four bleedings. The very celebrated RIVERIUS, who consumed almost an age in experiments, did not let more: in the footsteps of these physicians, it is well known that the more celebrated and judicious practitioners have followed. I will candidly disclose what I think on this subject, lest I should seem to have paid no share of the reckoning. From a long, and perhaps successful practice, I have ascertained that three or four bloodlettings, of about twelve ounces, are suitable means of preventing all the bad consequences from too great a quantity of blood; so that except in a very urgent case, I have not extended it to the fifth or sixth. Moreover, every one knows that venesections, even the smallest, are fatal in some epidemic constitutions: under which circumstances, it is best to abstain altogether from letting

blood. To this we may add that, by common consent, venesections hinder suppuration, which nature usually points to, about the third or fourth day of the disease.

It is not to be denied, that many, not of inferior note, have followed a contrary method; who have, for instance, in every obvious Inflammation of the Breast, ordered bleeding ten or fifteen times, or even more. The young and athletic may bear this *astonishing loss of blood*, with success; but I have seen many afterwards relapse into phthisis or dropsy, after overcoming the inflammatory disease; to say nothing of many whose strength had been prostrated by this immoderate depletion of the vessels: whereby they became unequal to the promoting of expectoration, and were carried off by suffocation or gangrene. There are, lastly, some who are of opinion that venesection, near the part affected, is more useful; to this opinion RIVERIUS and SYDENHAM subscribed, which appears not inconsistent with reason and experience.

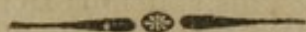
After one or two bleedings, it is often proper to give an emetic, lest the foulness of the first passages, reaching the blood, or irritating the intestinal canal, should at last prove troublesome to the physician: but this remedy seldom does good in the other stages. At the decline of the disorder, *cathartics* are successfully exhibited, otherwise they ought to be prescribed with caution, lest from their improper use, being very much in vogue among some cotemporaries, more misfortunes happen; among which the suppression of expectoration takes the lead, which endangers the life of the patient. Yet the bowels must be kept free, either by mild laxatives or emollient injections: but it is proper sometimes to deviate from this rule, namely, when a foul mouth, a tongue covered with mucus, nausea and vomiting, &c. argue a depraved colluvies lodging in the *primæ viæ*; in which case, we must spare no pains to eliminate it, and it cannot be effected by any other means. Having cleansed the first passages, it is of use to mitigate the heat of the blood; for this purpose *diluents* and *demulcents* are excellent, through the whole course of the disease, and perhaps excel all the rest. The most approved are liquorice, althea, succory, hispidula, and other capillary herbs, oil of linseed and sweet almonds, spermaceti, syrup of althæa and water lillies, mucilages of flaxseed and tragacanth, tinctures of various kinds, the more simple emulsions, chicken water, &c. To these may be safely added the *bland diaphoretics*, to wit, the wild poppy, borage, carduus benedictus, scorzonera and scabious. Nor is that kind of more powerful ones to be despised, namely, the prepared blood of a goat, very much celebrated in some countries; kermes

mineral, diaphoretic antimony, &c. Hypnotics are useful in some cases, to dull the pains, and restrain the fierceness of the spirits; yet it is necessary to proceed cautiously with these remedies, although they are familiarly used by many Physicians of eminence, even by SYDENHAM: since by procuring false ease, or suppressing expectoration, they sometimes disguise the disorder; those who are covered with this cloak, seem to succeed very well, while gangrene is lying in ambush for the patient's life.

Among various *topicals* in use, blisters to the parts affected, or some other part, are of the greatest benefit; it appears indeed, from observations, that diseases both acute and chronic, are often terminated either by cutaneous eruptions or by the afflux of humors, or of morbid matter to some part or other. Cathartics promote or imitate these salutary endeavours of nature, which may direct the devious humors to the skin, and save the viscera. Besides, it is known that bad humors are carried off through old ulcers, performing the offices of a sink; whence it happens that from the drying up of these, the infection usually falls on the viscera. Lastly, every one knows that the purulent humor collected in any part, is often re-absorbed, and makes itself an outlet through the various strainers. Hence it is plain that blisters are of service, if the strength of nature permit, when the morbid matter, mixed with the blood, threatens an internal metastasis, or has another tendency. Cups may have the same good effect, either applied to the pained part, or to some other; which have been even successfully applied to the legs, after a sudden suppression of spitting.

Emollient cataplasms are profitably applied, or bladders half filled with warm milk, the vapour of warm water inhaled has the same effect; with these also are recommended liniments, prepared of lard, marrow, ointment of althea, oil of earthworms, or of bays, to which some add camphor. Soothing balsam, and other external narcotics, are proper to be cautiously used, in the most fierce and urgent pains, otherwise they ought to be avoided. Half a loaf of bread, fresh from the oven, is rashly classed among old women's remedies, since the pains are often quieted by this solitary and innocent application. It is clear that this topical will be the more beneficial, the nearer it is applied to the seat of the disorder, since then there is greater hope of diverting the suppuration. With this view, ripening plasters are used by some, which being tightly fixed to the skin, may direct and move the pus thither. Lastly, cauteries and setons, in suitable places, have had a happy effect on some, who were even given up by physicians that only

accommodated themselves to the whim of the sick or the bystanders: hence it is little wonder, if the patients are often deprived of these salutary remedies. Concerning the cure of pleurisy, and other above mentioned Inflammations of the Breast, we will add nothing, since they are treated by the same method, so long as strict regard be had to circumstances: But of vomica and empyema, which usually follow Inflammation of the Breast, we shall treat in the proper place.



OF PERIPNEUMONIA NOTHA.

THIS affection has been known to few, even advanced in years, although not unfrequent, since there is perhaps no accurate history of this disease among authors. RIVERIUS treats superficially of it, under the name of *Pituitous Peripneumony*; SYDENHAM and BOERHAAVE have plainly sketched out different diseases under one and the same title, and have given perhaps nothing but hypothesis. They miss the mark who, following BOERHAAVE, take that obstruction of the lungs, immediately preceeding death, for Peripneumonia Notha; nor do they hit it more successfully, who are pleased to enumerate this among the symptoms of diseases. It appears from my own observations, that *spurious Peripneumony* is a disease *sui generis*, or existing of itself, which often resembles the type of legitimate peripneumony, so that in the *measure of the pulse* alone, there appears to consist the difference between the two. It is reasonable to believe that it is a *mere recent obstruction of the pulmonary vessels*, or arises from a stagnation of what is called a *pituitous* fluid, very different from inflammation. It is especially attended with cough, and difficulty of breathing, obscure and heavy pain. There is in most cases, whitish, viscid, and frothy expectoration, rarely tinged with blood; the pulse, although febrile, is found slow and contracted, irregular chills recur, or alternate chill and heat; the tongue is moistened with a clammy humour: the sick are oppressed with anxieties, or with morbid sleep, &c.

The *commencement* of this disease is often obscure, on which account we can learn scarce any thing certain concerning its duration. Nevertheless, like the legitimate peripneumony, it may terminate in three or four days; in other respects, its course is very nearly similar; whence it is little wonder if the inexperienced take the one for the other, unless they think they are

curing a paroxysm of asthma. Yet the *Peripneumonia Notha* is sometimes implicated with the legitimate, whence arises a disorder of a doubtful nature, which may even puzzle the more skilful.

A lethargic sleep, sallowness of the face and blueness of the nails, hoarseness, anxieties, and coldness of the limbs, excite *fear of threatening death*; but often these symptoms are absent, and the danger hid; so that while enjoying the hope of a happy termination, the sick are hurried "to that bourne, whence no traveller returns." This spurious Peripneumony often prevails in moist and marshy places, especially in a moist and cold season. It moreover affects old persons. The cachectic and phlegmatic are also subject to it, nor does it spare hard drinkers. In a word, this species of Peripneumony frequently occurs in practice, of the type of which the unskilful never have any suspicion: what must be the consequence, it is easy to understand.

I have learnt by experience that the *cure* must be hastened, since medicine very often comes too late. Venesection rarely does good, which nevertheless, when the difficulty of breathing is urgent, may afford temporary relief: But there is no doubt that by bloodletting, the strength is lessened, and expectoration more difficultly carried on, whence the disorder becomes aggravated and more dangerous. An *emetic* affords present help, especially when the sick are plagued with nausea: nor are evacuates by the bowels of less benefit, namely, cathartics and laxatives, or injections aiding them; watery diluents are not to be omitted, by the help of which the sluggish and sticky juices are mildly forwarded. Pectorals are also exhibited with advantage, demulcents and incidents, namely, ground ivy, hyssop, sweetened water, spermaceti, kermes mineral, &c. nor are diuretics and aperients mixed with these, to be deprived of their merits; to wit, elecampane, nitre, soaps, oxymel of squills, spiritus cornu cervi, and others; which, by penetrating the inmost parts of the body, may loosen the viscid humors. Among the pectorals, are recommended camphor, mineral anodyne, &c. but narcotics are forbidden. Lastly, we must not omit blistering or cupping, which, by diverting the noxious humors, may carry off some part of them.

ASTHMA.

BY this title are ignorantly designated *various difficulties of breathing* different altogether from genuine Asthma; and the truth is that out of ten patients who are treated for asthma, scarce one is met with who labours under the true disease. It is really wonderful that the illustrious FLOYER, who himself laboured under this disease, and has given a very accurate description of it, should perhaps not have been free from this error. Notwithstanding, from close attention to the signs, the character of Asthma is discovered, which consists in a durable or chronic difficulty of breathing existing of itself, sometimes continued, sometimes intermittent, and having different grades. Hence it is plain that the difficulty of breathing attending all diseases of the breast, or depending on another disease, is of a different class. Asthma, mostly free of fever, has a two-fold appearance: Under one form there is no expectoration, under the other it is copious, and of a different kind, resembling purulence. The first is called *dry*, the other *humid*. Both, in proportion to the grade, are named dyspnæa, Asthma, or orthopnæa; but physicians care very little about this very celebrated scholastic nomenclature.

Asthma of either kind has its paroxysms more or less conspicuous; in the more severe, the patients catch the air with open mouth, nor can they draw their breath unless when erect, the *accessions* usually come on at night or after dinner, for which reason many patients are forced, in order to get breath, to throw themselves violently out of bed. The fits are mostly attended with snoring, cough, and wheezing, which lasts from two hours to a whole day, and very often the urine is discharged in unusual quantity. *An Asthmatic fit* sometimes partakes of convulsions, occasioning the face to glow with tumid veins, and the sick incur danger of suffocation. The spastic paroxysm to be sure is shorter, and recurs oftener, proceeded by belchings, inflation of the stomach, and other marks of flatulency. Nothing certain can be fixed concerning the intervals of the paroxysms, being sometimes twelve or fifteen days, sometimes one or two months, a year &c. yet the lucid intervals seem greater, the longer the fits are. Moreover, sometimes Asthma, especially the dry, is continued, as above noticed, but is always subject to certain exacerbations; which seem to answer instead of paroxysms; and from what has been said, it is easily inferred, that in these pe-

riods, although not recurring at stated times, the genuine type of Asthma consists.

The corpulent, cachectic, hypochondriac, hysterical, &c. are thought *liable to Asthma*; the striking in of cutaneous and chronic eruptions promotes it; anomalous gout, drying of old ulcers, suppression of the menses and piles, &c. It is also numbered among the remains of the small-pox, inflammation of the breast, and intermitting fever. The continued Asthma is brought on by air having some kind of powder floating in it, by mineral exhalations, the fume of charcoal, &c. to which we may add, a bad conformation of the breast. Asthma is justly ranked among the more obstinate diseases, which lasts for thirty, forty, or fifty years, nor does it seem to hinder longevity; nevertheless, if it be attended with palpitation of the heart, faintings, and palsy of the limbs, the case is dangerous; for when arrived at a certain grade, a very severe fit coming on, sometimes carries off the patient; or it runs into cachexy, anasarca, dropsy of the breast, consumption, phthisis, &c.

Anatomical observations are not wanting, but we can with difficulty distinguish whether they respect genuine Asthma, or another disease allied to it. Yet from close attention to these it is found that the lungs are swelled and enlarged œdematous and schirrous, and growing to the pleura, mediastinum and diaphragm. They not unfrequently contain abscesses, hydatids, or other cystic tumors; sometimes they are full of tubercles, and stony concretions, or disfigured with suppuration, putridity and gangrene.

The bronchia are obstructed by different powders drawn in. Excrescences of various size and number sometimes stop up the trachea, which at times proceed from the surface of the lungs, or from the pleura, or its processes. It is not seldom that the viscera are altogether sound, except the heart, which is discovered of very great size, the surface of which is eaten by little ulcers, or grown to the pericardium. In some it is enveloped in an amazing quantity of fat, and as if buried therein, and from a similar cause the whole mediastinum is swelled: whence it is not strange if from this mass of fat there should be confinement of the lungs. Moreover, the valvulæ on both sides, present a bony or stony hardness: we may perceive the same affection in the aorta and its vicinity. The ventricles filled with compact or what is called polypous blood; the pleura affected with unusual thickness and surprizing hardness; so that hence might proceed another surface of the breast, scarce varying from the natural solidity, as I remember to have observed, and others have noticed. Lastly, a serous, bloody, or purulent col-

lection very often fills all the recesses both of the pericardium and breast.

The *abdomen* also exhibits many things remarkable; viz. the organs of digestion appear infected in divers ways, for the liver is discoloured and rises to a very unusual size, or is contaminated with schirrous obstruction, purulency, putridity, &c. The same injuries are visible in the spleen, pancreas, and other viscera of the abdomen. It is proper to add that there occur not rarely, bodies of athmatics, the viscera of which, both in the breast and abdomen, have contracted some evident disease. And indeed it is not wonderful, after examining the bodies of those who die of convulsive and periodical Asthma, (the cause of which is in the lungs) that they should have been tormented, while living.

From the foregoing, it is plain that the *cure* of Asthma is difficult, since it is mostly produced by a multiplicity of causes immersed in obscurity; or rather there are different disorders, which, on account of the same effect produced, are incautiously comprehended under the same title; so that in these different cases, it would perhaps be better, after instituting a suitable regimen, to abstain altogether from every cure, or to prepare the way for medicine with very great caution, by different experiments. Among the various remedies against this most obstinate disease, *venesection* takes the pre-eminence, the unfortunate effect of which, experienced physicians often lament, since, although it affords temporary relief, things are generally made worse by the loss of blood; yet when the blood vessels swell beyond measure, or the menses and hæmorrhoids, or any other accustomed discharge of blood, be suppressed, I have believed phlebotomy to be serviceable. It is not forbid even in a more urgent fit of convulsive Asthma, viz. when there is threatening suffocation; otherwise it ought to be proscribed. But those who follow the other method, are blown about by every wind, and from their pernicious advice, seem to care little about the termination of the disorder.

In the *humid Asthma*, *emetics* and *cathartics* are useful, nor are they forbidden at the first attack; but they are thought more beneficial and safer, if exhibited during the intermissions. Diluents and demulcents suit at all times, namely, whey or milk itself, broths of the lungs of veal, also ptisans, and apozems, of liquorice, borage, coltsfoot and ground-ivy. *Pectorals* merit almost the title of specifics, so do vulneraries and incidents; hence are much extolled camporates, hedge mustard, southernwood, hysop, horehound, summer savory, wake-robin, juniper berries, gum tragacanth, or ammoniac, soap, tar water, turpen-

tine, various officinals prepared from sulphur, flowers of benzoïn; balsam of Lucatellus, &c. which must not all be indiscriminately used, but a choice must be made as occasion requires. Nor are *aperients* and *diuretics* less useful, namely, manna, grass, broom, fennel, elecampane, bryony, florentine orris, nitre, martial preparations, oxymel of squills, &c. But it is proper to observe, respecting *aperients*, *incidents*, or other stimulants, that they ought not to be used without great caution; since the preposterous exhibition of them may do the greatest harm. Nor are the skilful ignorant that many asthmatics have been hurried to the grave, by the ill-timed use of these medicines, who otherwise might have spent a long life by the palliative cure, or by proper regimen alone.

Among the more salutary articles, *those which promote perspiration* are mentioned by writers of the first note: which are especially serviceable, if Asthma arise from the recession of cutaneous eruptions, or of the matter of gout mixed with the blood: among these the more common are scabious, carduus benedictus, guaiacum, and sassafras, China and sarsaparilla roots, diaphoretic antimony, Potters antihectic, &c. *Antispasmodics* also deserve praise, to wit, saffron, amber, and castor, where there is any suspicion of an injury of the nerves, from the too great violence of the fits. *Bitters* agree in some cases, among which the best is Peruvian Bark. Lastly, draughts of coffee are esteemed by some, which in certain circumstances may afford some little help. *Hypnotics*, while the paroxysm rages, are thought useless and hurtful, and even at other times are forbidden by experienced practitioners: The various *mineral waters* complete the cure, which by reaching to the recesses of the body, or unlocking the obstructed vessels, may effect the cure of almost all chronic diseases; hence it is no wonder that physicians, when despairing of other means, should have these as their last refuge.

Emollient clysters, cathartics and stimulants, have a wonderful effect, during a paroxysm; or preparations of colocynth, emetic wine, &c. Frictions on the legs, and warm pediluvium, are celebrated. Sinapisms and blisters are inadequate to overcome the disease, unless the accession be continued beyond some hours; but they may do much good, if used in the intermediate times, especially after the striking in of cutaneous eruptions; concerning which, it is proper to remark, that Asthma arising from repelled itch, can be cured in no other way than by bringing back this very loathsome disease. Cauteries put on after the paroxysm, exceed the powers of blisters, as I have proved by multiplied experience; for these, by inviting

the hurtful humors in process of time, are able to eradicate the disease, when all other remedies fail. And practitioners are aware that ulcers have the same effect oftentimes, when occasioned by a previous abscess, or perhaps by any other cause. Some keep off the fit by the smoke of tobacco, drawn through the well known pipe. Vinegar applied to the nostrils, with the same view, is serviceable to others, &c. To fill up the measure, I may add, that cold and moist air occasions no little harm to Asthmatics, especially if they do not carefully cover the breast.

SUFFOCATION.

THIS disease shews itself openly, but its character often lies hid. It is known indeed that Suffocation is *promoted* by running, by anger, or other violent perturbation of mind, by a lighter atmosphere on very high mountains, by denser air in deep mines, &c. Nor are we ignorant that it follows nightmare, quinsy, eruption of blood or matter from the bronchia. Suffocation, from any substance confined in the chink of the œsophagus, is very well known, by a tumor on pressing some part of the trachea, &c. nor is obstruction of the glottis less obvious, both from polypous excrescences on the part, or on the trachea; and from tubercles and stony concretions proceeding from the lungs, or from some extraneous substance accidentally introduced by the mouth. Lastly, it is easily understood, that Suffocation is excited, if the trachea and bronchia be overwhelmed with blood, after hæmorrhage of the nose or mouth; which I remember once to have happened in a man, otherwise athletic, who had indulged in sleep immediately after a hæmorrhage from the nose. But it is not clear to all, whether the Suffocation proceed from hypochondriasis or hysterical affection; from suffocating catarrh, from dropsy of the breast and empyema: nor does it appear whether it be excited by a ruptured aneurism, or a peculiar disease of the heart.

From the foregoing, it is evident that Suffocation is mostly symptomatic, or has reference to numerous diseases, mentioned elsewhere. Wherefore it is incumbent on us to treat at present, of *that accidental species of Suffocation* alone, which proceeds from *submersion in water*; from breathing air impregnated with the *effervescence of must, the fumes of charcoal, mineral exhalations, or mephitic*; which last, in a short time puts on the appearance of very dangerous syncope; so that

the miserable patients seem altogether lifeless. But from the relation of those who have been restored to former health, it remains certain, that the first invasion was mere Suffocation, which attaining a certain grade, so impeded the animal and vital functions, or obscured them, that they lay scarce differing from dead persons.

It is little to the purpose to mention polypous excrescences, and foreign substances mixed in the glottis, nor the various collections, with which the lungs are covered within and without, or the other causes of Suffocation already enumerated: wherefore we have exhibited those only worthy of notice, which were collected from the *dissection* of such as have died suddenly from water, or some virulent air; which are as follows: The vessels of the brain are found swelled beyond measure; the receptacles of the heart, of an unusual size, filled with blood; stagnations of the same fluid within the tumid vessels of the lungs: lastly, effusions and spots of various kinds in the surface of the lungs, and other viscera. But this is to be remarked, that the stomach of those who suffocate in water, does not receive the least quantity of water, as commonly reported: which phenomenon physicians ought carefully to remember, who being blinded by the prejudices of the vulgar, turn their attention to freeing the stomach from this imaginary burden; what evil may arise from this preposterous method, is easily understood. Lastly, the limbs of those who die from these misfortunes, are mostly rigid, with the teeth firmly closed; or they are endued with an unusual flexibility: the face is sometimes red, sometimes pale. Other circumstances are purposely omitted.

In this most urgent case, laying aside all delay, no pains must be spared to restore the powers, call back the sense, and give the wonted circulation to the loitering blood. We must not despair of those who lie like dead, unless there be signs of putridity; since there is little doubt that many who were given up as dead, have, by timely aid, escaped the jaws of the terrific grave: for it is proved by various histories, that not a few, who after a submersion of many hours were bewailed as irrecoverable, have been recalled to the number of the living, beyond all expectation; in which condition, however, they had been unjustifiably delivered for interment. On which account, without delay, let them be brought near the fire, and let the cold acquired be gradually dispelled; let them be agitated by different motions, and rolled, that the smothered spirits may be aroused. There are some practitioners who advise a bath of hot ashes, or the skin of a sheep just killed, in which the bodies are to be

rolled up: But these remedies are mostly wanting, and therefore we must hasten to others, among which the first is immediate bloodletting. In the mean time, vomiting is to be promoted by irritating the pharynx, or by some other means. The hottest spirits are to be applied to the nostrils and temples, or distilled by drops into the mouth. The strongest errhines are useful. Air blown through the mouth is of no small service. Acrid suppositories and glysters prepared of tobacco. The purpose of these is served and perhaps exceeded by the smoke of tobacco, injected by the anus, through a certain instrument described by BARTHOLIN, MUSCHENBROEK, and other modern writers. But that remedy must be considered of little account, in a very urgent case; which is no where immediately to be met with. Some speak highly of *laryngotomy*: This might be necessary if the glottis were by any means obstructed; but we think it useless where there remains a free passage for the air, which no one is ignorant to have been observed in drowned persons. Nor are a few experiments sufficient in this extreme case; but rather they are to be long persisted in; since many that were drawn out of the water, or *hung*, who had been given over, and are now restored, afforded not the least indications of remaining life, till after two hours and more: which, although wonderful indeed, and out of the common order of things, remains proved beyond all doubt.

Almost in the same manner are those to be treated who have been suffocated by air impregnated with poisonous vapours, namely, first of all we must have them brought to an open place; let the face be sprinkled with cold water; let air be blown through the mouth, while the nostrils are compressed, that it may rush to the lungs. Let substances for smelling be applied, namely, the sharpest vinegar, English volatile salt, spirit of sal ammoniac, and others of the like nature. Moreover, let *a vein be opened* immediately. Some propose an emetic, whether properly, I leave for others to judge. Lastly, *acrid substances to excite sneezing*, are useful, and the above recommended *stimulant injections*, frictions kept up with rough cloths, cups, and numberless others, usually given against fainting and comatous affections. It is well to add, by way of over measure, about persons suffocated from any cause, who seem to have yielded to fate, deprived of sense, pulse and respiration, that we ought never to think of burying them, till after making various experiments, by which some signs of latent life may be discovered, since no certain signs of death occur, except putrefaction. Wherefore, the eyes ought to be accurately examined, which are of a peculiar dusky appearance in dead per-

sons, or are altogether deprived of their splendor. The more acrid vesicatories ought to be applied, which, if they cause blisters, afford no uncertain sign of life, since they are altogether inert in dead bodies: besides, hot iron is to be applied to the soles of the feet, &c. all which ought indeed to be carefully retained in mind.

HÆMOPTYSIS, OR SPITTING OF BLOOD.

THE *diagnosis* of this disease is doubtful, since the blood sometimes gushes out with so much force, that it is taken, even by the sick themselves, for vomiting of blood, or it is only excreted in the form of bloody spittle, also not rarely in considerable quantity rushing through the nostrils, throat, mouth and glottis while the lungs are sound. Nor are the more experienced preserved from this error, if in these cases a cough be excited by any other cause. Nevertheless when the matter is more accurately considered, it is not hard to find out, whether the blood proceed from the bronchia, for then this fluid is coughed up red and frothy: besides, the sick complain under this species of hæmorrhage of a burning heat, itching or pain somewhat severe, in the affected part. Moreover, hæmoptysis sometimes connects with itself a difficulty of breathing and vomiting, which by these marks, is easily *distinguished* from discharges of blood that resemble or are allied to it. But blood breaking from the superior parts distils through the nostrils, before bloody spit makes its appearance: If it proceed from the gums or neighbouring parts, the seat of the disease is discovered by inspecting the mouth, and the most simple blood is thrown out by spitting: if it come from the fauces, it excites there a sensible tickling, and is spit out. Lastly, if the vessels passing over the glottis or larynx be ruptured, there arises a troublesome sensation about the parts, and blood is thrown out by a kind of hawking, in small quantity. But it is to be observed that this last excretion of blood is attended with cough; on which account it is with difficulty distinguished from genuine Hæmoptysis, to which it nearly approaches.

Blood coming from the substance of the lung itself, is sometimes pressed out by transudation alone, and scarce tinges the spittle, sometimes from the ruptured vessels unloading themselves into the bronchia, it comes in such quantity to the mouth that it excites some suspicion of bloody vomiting, especially if

the blood be so bland as not to cause the least irritation, nor any, even the slightest cough: which physicians know to have sometimes happened. Whether blood abundantly discharged from the lungs be caused by rupture of the arteries, or not, there is room for doubt, but this we leave undecided. Among the signs of Hæmoptysis, fever ought not to be reckoned, which, notwithstanding, sometimes arises from the heated blood: for which cause the unskilful or incautious, rashly imagining it to be peripneumony, have no suspicion of the genuine character of the disease. Nor do those filaments of the bronchia, which are sometimes spit up together with the blood flowing from the lungs, belong more to Hæmoptysis; since that phænomenon respects the phthisical alone, who, as every one knows, are liable to this hæmorrhage.

Hæmoptysis is *contracted* by singing, hallowing, vehement cough, excessive anger, falling from a height, a stroke on the breast, &c. The suppression of the menses or hæmorrhoids, or other accustomed discharge of blood, whether spontaneous or artificial, promote it. Those are thought obnoxious to it, who live at their ease, as well as those who indulge in excessive labour of the body; gluttons and debauchees. Let the slender and lean beware of it; as also youth at the age of fifteen years to thirty, the hypochondriac, studious, &c. Finally, the weaker sex are thought more prone to the disease. This affection, is thought to be void of danger, if it proceed from an accidental cause, while the health is otherwise unimpaired, and if it be confined to certain limits; nothing bad is even to be apprehended, if it serve the purpose of the catamenia. But it is dangerous, if of long continuance, or depending on a tedious disease. Nor is there greater hope from it, when hereditary. It is well known that Hæmoptysis tends to ulceration of the lungs, especially in the young. Blood gushing out with a plentiful stream, threatens suffocation, or brings on very troublesome consequences.

The dissected bodies exhibit the trachea and bronchia filled with blood, or sanies; the membrane covering these pipes eroded: buttons and other foreign bodies introduced. Sometimes the lungs adhere to all the surrounding parts, sometimes are marked with gangrenous spots or eruptions. At other times they are disfigured with inflammation, suppuration, exulceration, or schirri: they contain also tubercles and stony concretions, and their vessels swell with blood. Aneurisms of the aorta shew themselves, ruptured and making their way through the bronchia. The heart is found greatly encreased in size, with its auricles beyond measure dilated, and its surface eroded

with little ulcers. There occurs an effusion of serum, both in the pericardium and in the cavity of the breast. Lastly, stagnant blood is sometimes seen in the contexture of the mediastinum. Nor are there less remarkable appearances in the abdomen; for the liver is presented to view inflamed or schirrous; the spleen of more than triple size, and the branches of the vena portæ unnaturally tumid, &c.

The cure of Hæmoptysis, whether accidental or recent, coincides with that which is proper in hæmorrhages: but the chronic ought to be treated like phthisis. At the commencement of the disease, venesections in the first case are of great benefit; which perhaps more effectually prevent it: but no more blood than is necessary ought to be taken, lest the patients, already liable, should slide into phthisis. After the vessels are depleted, refrigerants and demulcents are of service, namely, barley emulsions, decoction of rice, althea and water lilly, linseed oil, &c. which may effect the cure of a light disease: But if in the use of them the blood should flow plentifully, we must have recourse to more efficacious remedies, namely, to astringents and vulneraries, in the number of which are reckoned pimpinella, nettle, greater comfrey, plantain, ground-ivy and heal-all; red roses and pomegranate, mucilages, catechu, dragon's blood, amber, coral, blood stone, and globulus martialis; natural balsams, balsam of Lucatellus, &c. Lastly, in case of urgent necessity, or when blood flows in a full stream, it is necessary to have recourse to allum, oil of vitriol, and rabel essence: but these last medicines are not to be prescribed without the greatest caution, lest there should arise more dangerous symptoms, from its ill-timed or sudden stoppage. Nor are narcotics forbidden, if the cough occasion violent hæmorrhage; of this kind are diacodium, pillulæ de cynoglosso, trochisci de karabe, &c. with which however we must proceed with caution. Lastly, tight bandages on the limbs must not be omitted; cloths dipped in cold water, or vinegar and water applied to the scrotum, and others usually exhibited against recent hæmorrhages.

Among the more judicious physicians, it is acknowledged that nothing can be more happily used against chronic Hæmoptysis than preparations of *milk*, rice, barley, and oat meal gruels, soups of shell fish, calves' lungs, &c. Cathartics do little good in either case; yet if foulness in the first passages require them, the milder ones, as cassia, manna, tamarinds, &c. are to be prescribed. A proper regimen as to diet, far excels all remedies, and indeed there is need of the strictest diet, and of a demulcent nature, when the hæmorrhage is present. Endeavours also must be used by the sick to abstain from luxu-

ries, wine, and the like: to enjoy a more temperate air, and keep moderately warm; moreover let them recline at ease, and especially keep silent, lest by the action of the lungs, the vessels recently agglutinated, should again be ruptured.

PHTHISIS, OR CONSUMPTION.

SPITTING of blood, dry cough, a slight fever scarcely perceptible, redness of the cheeks, heat of the whole body, and especially of the palms of the hands, &c. are so many forerunners of Consumption. It is known by foul, glutinous, and purulent expectoration, and slow fever more or less evident, which is exacerbated after a meal, and towards evening; the voice is hoarse and low, the breath very offensive, respiration impeded, pain about the breast, or extending to the back, marasmus, curved nails, &c. Yet these signs of the disease are not visible in all cases, but rather from their deficiency or doubtful nature, the case is not unfrequently difficult to be ascertained. For it is expedient to remark that there is sometimes a dry cough, and that there appears no spitting of matter, although the breast be filled with pus: and indeed, in some the cough is altogether wanting. There are some consumptive patients not far removed from decay, who enjoy good spirits and are quite free from pain: besides the humid asthma, with chronic cough, not rarely puts on the appearance of Phthisis, by which the inexperienced are deceived. *Purulent spitting* therefore alone, shews the character of the disease, but whether it partake of this nature, it is sometimes hard to discover, since in the most simple catarrh, there is daily excreted whitish, very fetid spit, sinking to the bottom of water, and bearing other marks of genuine pus: which, notwithstanding differ widely in respect of its nature from the spit of consumptive persons. Nor are there more certain signs from the odour which they yield, and the distinguishable taste as related by the sick. Yet pus thrown upon coals, exhales something fetid, to be distinguished from other smells. Nevertheless the *diagnosis* of this disease is often so involved in darkness, that we can obtain nothing but conjectures.

Consumptive persons mostly spend sleepless nights, and lie with difficulty on either side. Vomiting is excited by the cough coming on after a meal; there break out, especially in the night, very copious sweats, and itching pustules sometimes infest the

whole surface of the body. A diarrhæa called *colliquative* by some, comes on, apthæ break out in the mouth now affected with saltness, the urine is oily, the eyes become hollow, the nose pointed, the shoulder blades project, the hair falls off, the legs swell, &c. Lastly, some consumptive persons excrete tubercles with their spit, as also very hard calculi of the size of barley or peas; polypous substances, filaments of the lungs, or of the membrane lining the bronchia, &c. Nor is Phthisis always attended with these symptoms, since there are some patients, one of whose lungs has been altogether obliterated by putridity, and the whole space filled with pus; who notwithstanding, as above hinted, may lie down on either side while respiration remains easy, and are oppressed with no pain, nor troubled with cough: which astonishing appearance I remember to have frequently met with in *dissecting the bodies*, after accurately noticing the previous disorder.

Let those beware of Consumption, in whom there is an hereditary taint, or malformation of the breast; and who are endued with slender, tall stature. Excessive venery, the too free use of wine, ardent spirits, and luxurious dishes, the suppression of customary discharges of blood, repelled cutaneous eruptions, anomalous gout, exhausted ulcers, &c. all promote it. It arises from asthma, small-pox, and measles, peripneumony, chronic catarrhal cough, wounds, &c. Lastly, it is universally known that this disease is enumerated among the symptoms of lues venerea, scrophula, scurvy, &c.

Consumption when hereditary, confirmed, or arrived at a certain grade, is thought *incurable*, but the accidental, namely, arising from peripneumony, small-pox, suppressed evacuations, &c. is more easily cured. as to the symptomatic, it cannot be eradicated without removing the primary disease. Acute fever coming on during the disorder, excites fear of death, for it mostly proceeds from inflammation of tubercles, and purulency; and not seldom appears like intermittents, although plainly of another nature. Very copious and offensive spitting, suffocation, diarrhæa, sweats very profuse or sandy, the countenance of a leaden hue, hairs falling off, atrophy and loss of strength, are esteemed signs of death. Tubercles create little trouble unless inflamed or suppurated. Yet it appears that some consumptive patients, whose expectoration has partaken, doubtless of pus, by adopting a suitable regimen, have lived for twenty, thirty, and more years: which happens when an ulcer of the lungs, not extensive, serves the purpose of an issue, by which the humors are purged from noxious and virulent matters; so that these ulcers of the lungs are not without danger dried up. No one is

ignorant that Phthisis is propagated by consanguinity; but whether it is to be feared in the married state, is not yet clear.

Anatomical dissections exhibit the horrid and amazing destruction arising from purulency and putridity, so that it is truly wonderful that the sick, thus situated, had not died sooner. The lungs are found very closely adhering to all the neighbouring parts, and cannot be loosed without being torn; the coats present themselves very thick, and of a callous hardness. The trachea and bronchia are found eaten with ulcers: abscesses entire or open, anomalous tumors, tubercles, and stony concretions are found in the lungs, which are also very often affected with suppuration winding about through the whole substance, or with putrefaction. Sometimes one of the lungs is altogether consumed by phagedenic ulcer, or a very small part remains. There occur sanious or purulent stagnations, both in the cavity of the breast, and in the pericardium itself, on account of exulceration of the heart. Nor does suppuration, often of a bad kind, spare the thymus, which is so injured in some, that it may be considered as the principal seat of the disease. The abdominal viscera are sometimes brought into consent, namely the liver, omentum, pancreas, &c. in which we may perceive the same defecations.

Venesection at the commencement, is beneficial in some cases, otherwise it is useless or hurtful. The inexperienced are in the habit of directing this, in that species of acute fever which proceeds from inflammation and suppuration of tubercles; but from this inconsiderate repetition of bloodletting, I remember to have seen many hurried off to their æthereal habitations. Some who have just entered the threshold of practice, or perhaps ignorant of anatomical observations, injudiciously take consumptive cough for stomachal, and thinking of nothing else than *saburra* lodging in the first passages, persist in the preposterous use of cathartics, even against experience; by which stimulants it must be obvious, that a *wasp's nest* is raised: hence it is no wonder if the sick are tortured, notwithstanding the doating of the physicians. Yet these remedies are not amiss in depraved digestion, but the milder ones are to be chosen, and prescribed with caution; lest by the increased heat of the lungs the cough should be exasperated. Among the remedies for Consumption, *milk* has the preference, for experience proves that nothing can be found more efficacious, as well to heal as to prevent this disease, the more commonly used are ass's, mare's, goat's, and cow's milk, the two last of which ought to be used for aliment altogether: so that they afford what may be called a *medicinal aliment*. This is the *milk diet*, on which, if nothing hinder, the

whole point of the cure of Phthisis ought to turn. Pectoral demulcents assist this, namely, borage, lungwort, the capillary herbs, colts-foot, and maiden hair. Their place may be supplied by broths made of calf's lung or shell fish, gruels of barley, rice, &c. The vulnerary and detergent *pectorals* also answer the same purpose, namely speedwell, St. John's wort, and ground-ivy, benzoin and gum ammoniac, natural balsam, balsam of Lucatellus, the various officinal preparations of sulphur, tar-water, MORTON's balsamic pills, &c. But these last must be used with caution, lest from their preposterous use, the blood already heated should become more inflamed. Absorbents seem to conduce little to the cure of the disease, but may relieve many of the symptoms, to wit, acescencies of the *primæ viæ*, diarrhæa, hæmorrhages, &c. Diacodium, pillulæ de cynoglosso, and other hypnotics occasion some intermission, provided they are confined to certain limits. The balsamic mineral waters, as also lime water, are often given opportunely mixed with milk, as above hinted. Concerning mercurials, sudorifics, aperients and incidents, antiscorbutics, &c. which suit only in symptomatic Consumption, we will add nothing. Lastly, let the sick indulge in riding on horseback, or amuse themselves in walking in the open air, or near rivers, let them enjoy the more temperate air, and avoid that which is impure. Let them abstain from wine and fermented liquors, from food that is salted or peppered, &c. The smoking of vulnerary herbs or of pectorals mixed with balsamics, drawn through a suitable pipe, has been of use in some cases. Lastly, the cautery on the occiput or scapulæ has had a happy effect, which by inviting somewhat of the morbid matter may gradually carry it off.

VOMICA, OR ABSCESS OF THE LUNGS.

THIS affection is hid in most cases, until from the rupture of the latent abscess within the lungs, the pus either sparingly or in great quantity, rushes, with great danger of suffocation, to the mouth. Notwithstanding, this collection of matter is not without its signs, to wit, a slight cough, sometimes dry, sometimes humid, and an obscure pain of the breast, the respiration, on account of the straitened situation of the lungs, somewhat impeded, the breath fetid: many labour under anxieties, night sweats, or diarrhæa; some are tormented with a kind of canine hunger: all are afflicted with slow fever.

Abscess from inflammation of the lungs may be suspected about the fourteenth day of the disease, if the expectoration be difficult, or altogether deficient. If there should be fever at night with sweats, if pain, cough, difficulty of breathing, and other symptoms of purulency, should not cease. But when this disease takes its rise from chronic catarrhal fluxion, or other injury of the breast, from suppressed evacuations, or repelled eruptions, or exhausted external ulcers; from contusion or wound, from metastasis of malignant or putrid fevers, &c. pus is often secretly formed, and does not shew itself unless it burst. After the evacuation of the matter from the ruptured cyst, the spitting in most cases is purulent, yellowish, sanious, or appearing like dregs of wine; the fingers become livid, the legs swell, or other *symptoms* of Phthisis appear. Nor are cases wanting, if we may credit writers, where the patients throw up the entire Vomica, of the size of a pigeon's, or hen's egg.

BURSTING OF AN ABSCESS, is occasioned by coughing, hallowing, sneezing, or other commotion of the breast, but the opening of the cyst does not always respect the bronchia, through which the pus finds an exit by the mouth, but is rather sometimes poured out into the cavity of the breast, and lurks there; until infecting the surrounding parts, it excites grievous symptoms, commonly observed in purulent empyema. We may add that it often happens, that the collection of pus makes itself way through the pleura, intercostal muscles and diaphragm, to a happy termination, which then must be opened by the well known surgical method.

Vomica is justly numbered among *fatal* diseases, for many, suffocated by the discharge of pus, amounting to one or two pints, are instantly taken off. An ulcer emerging from the ruptured abscess, in some cases winds extensively about, and produces incurable Phthisis. The misfortune threatens, if with the other symptoms of the disease, purulent and fetid spit be thrown up after the fortieth day. It happens not rarely, that an open ulcer is confined to certain limits, so that from hence arises a drain, through which the blood and humors, as above noticed, are freed from noxious matter by *expectoration*. The cyst, after the evacuation is mostly agglutinated, and pus is again collected therein, until a new rupture takes place; and so on, so that histories testify that patients have vomited up the contents of the Abscess, twenty, thirty times and more, during the course of their life. Lastly, there are not wanting young persons, otherwise sound as to the mass of humors, who after the follicle had been exhausted, have been restored to pristine health, with their flesh replenished by nutritious juices. But this termina-

tion of the disorder brings on some consequences, especially if respiration be not freely exercised, in which case let convalescents from this affection beware. It sometimes happens, as already noticed, that pus is diffused into the cavity of the breast; hence *empyema*, (of which below) or by eating through the neighbouring parts, it reaches the surface of the body, and producing a tumor, fluctuates under the fingers. Otherwise the matter mixed again with the blood, is by the powers of nature alone, (a most happy event) determined to the kidneys for exit, or to the intestinal tube.

Venesections are of no service, whatever authors adduce to the contrary; but the belly must be kept free, by the help of laxatives and injections; nor while the abscess remains entire, are diuretics altogether useless, under the hope of future metastasis. But after the rupture of the abscess, this affection ought to be treated like phthisis. Wherefore, let *demulcents* fill every interval, the best of which are preparations of milk, barley and rice gruels, broths of calves' lungs, and shell fish. Detergents also are esteemed, by many, to wit, speedwell, honey, turpentine, balsam of sulphur, MORTON'S Pills, &c. With the same intent the various mineral waters are serviceable, which in concert with the rest, have recalled many from the grave. Cauterics and setons merit their own praise, by which the purulent saburra may be gradually carried off. If a contracted ulcer be left in the lungs, we must beware, after a certain time, lest from violent passions of the mind, from breathing cold air, or any other cause, the expectoration should be suppressed. For it is universally known, that this suppression causes very great trouble; wherefore all means must be used to promote it, by inhaling the vapor of warm water, or by some other means, in order to prevent the misfortune.

EMPYEMA.

THAT stagnation of matter in the cavity of the breast, which often follows vomica and peripneumony, is thus denominated; or other suppurations affecting the lungs, mediastinum, diaphragm, liver, &c. A collection of blood or chyle within the breast, after contusions, wounds, or rupture of an aneurism in the thoracic duct, receives the same name, from which at times *Empyema* is scarcely distinguishable. It is not unfrequent after

peripneumony : nevertheless, there is suspicion that pus is lodged there, if in the course of the disease there have been a sparing discharge of spit ; or the fever continue after the fourteenth or twentieth day of the disease, with evening exacerbations. But there are *some marks* by which this affection is known, to wit, impeded respiration and dry cough ; a certain weight about the breast, of which the sick complain, and a difficulty in lying down on either side : to this may be added, a foul mouth, depraved appetite, œdematous swelling of the legs, night sweats, chills recurring irregularly, anxieties, &c. Lastly, this kind of disease never comes to view, unless the collection of matter be perceived by the touch or hearing ; which practitioners know to happen but seldom.

Nor does a plentiful expectoration, even of the best kind, after peripneumony, remove all fear of Empyema ; for I remember to have often seen this most offensive collection in the breast of those, who had enjoyed hopes of a happy termination, on account of the abundant expectoration : various examiners of nature testify the same. The other signs mentioned *are not less ambiguous*, especially if Empyema have its origin from vomica, or other tardy suppuration : for we have undertaken the cure of many patients who had free respiration, no troublesome cough, and could lie with ease on either side, in whom after death, one of the lungs was found altogether consumed by putrefaction, and its place filled with purulent matter, very much to the surprize of the bystanders, and of some authors who have treated on the subject. To the above may be added, that pus is sometimes found in great quantity, fluctuating about the lungs before the fourteenth day of peripneumony ; which indeed ought carefully to be remembered by physicians who do not at such times suspect it. I have noticed another astonishing termination in a man, who before peripneumony, had enjoyed complete health, and on the thirty-second day of the disease, *was removed to his fathers*, whose *body when examined* exhibited the right lung almost altogether consumed, and a genuine pus, without smell, and like milk, occupying its place, while but a very small part of this viscus remained.

We have noticed above, that pus fluctuating about the viscera is sometimes re-sorbed, and together with the blood, carried by the law of circulation to the kidneys and intestinal canal ; it is acknowledged by all, that these wonderful effects are produced by the powers of the animal œconomy alone, which nevertheless, nothing forbids to assist cautiously with *laxative diuretics*, and indeed *sudorifics*. But we must never dally with these futile remedies when the disease becomes manifest ; for then we

must use every endeavour to prevent the stagnation of pus, or to evacuate it by the *trocar and cannula*, or some topical escharotic. This *paracentesis* has succeeded happily in many if done in time, before the stagnant pus has made any ravages; otherwise it hurries the patient's end, by protracting his strength. There is no less danger of sudden death from drawing off a large quantity at a time, of pus collected in the breast, which is more safely let out at intervals. If by this means the matter discharged be genuine, white and of a good kind, there is some hope of health; but when it occurs fetid and muddy, we may send for the mourners. After completing this evacuation, we must continue with vulnerary and detergent injections; nor are other remedies to be omitted, of which we have more than sufficiently treated when on the subject of *Phthisis*.

DROPSY OF THE BREAST.

DISSECTIONS prove this disease to be more frequent than the generality of physicians suppose, and like empyema, *Dropsy of the Breast is with difficulty known*: nor are the said diseases more easily distinguished one from the other, which by the incautious are mistaken for asthma—what may follow from hence is obvious to all. Serum stagnating in the cavity of the breast, rarely spares the pericardium; nor from this collection are exempt the mediastinum, pleura and the lungs themselves, which contain follicles, turgid with water. *Hydrops pectoris* often produces ascites, and both diseases for the most part proceed from *anasarca*.

From a concurrence of signs, we may conjecture that water is stagnant in the breast; but this *diagnosis* is often very obscure. Nevertheless, from proper attention to the signs given by experienced writers, the character of this disease may be *fished out*; namely, œdematous swelling of the legs or scrotum usually denote it; frequent and difficult respiration, with manifest motion of the *alæ nasi*, especially indicate it, which difficulty is encreased in a horizontal position, in which the sick lie with great anxiety, and often as sleep comes on, they are obliged to start up in haste. Many are tormented with fear of threatening suffocation, on lying down; and not without reluctance, they betake themselves with their cloathes on, to their bed, from which they are often compelled to spring out with

haste. Others cannot sleep but in a chair, nor are there wanting some who spend altogether sleepless nights, although borne down with the unconquerable necessity of sleeping. Almost all suffer thirst, cough either dry or humid, and complain of a kind of obscure and heavy pain about the diaphragm, and ensiform cartilage, which sometimes reaches to the scapulae and arms. Meanwhile the pulse is contracted, unequal and intermitting; at other times a slow fever rises, attended with nocturnal exacerbations; and chills returning irregularly, and after the disease has gone on for some time, there appears bloody spittle, not unlike that in peripneumony: yet it sometimes happens that cough and expectoration are altogether deficient.

Besides œdema of the legs and scrotum, the external breast and arms are affected in like manner, the face swells, and the abdomen is peaked out. To these succeed palpitations of the heart, faintings, night sweats, &c. But these are *all uncertain marks*, unless from a certain motion of the body, water is perceived by the sick fluctuating in the breast, or is heard by the bystanders: by which mark alone, rarely occurring in empyema, the disease now treated of is discovered. We have already noticed that persons affected with empyema, with difficulty lie on the sound side; but from clinical observation, and *dissection* itself, I hesitate not to assert, that it oftener happens otherwise.

It is plain from the foregoing, that the *diagnosis* of hydro-pectoris is very intricate, and that a serous collection in the pericardium is not more evident; but rather much more difficult to be distinguished, for *Dropsy of the pericardium* is so involved in darkness, that on this subject even the most skilful are in an error, which from *dissections* appears to be not rare. Nevertheless we ought not to designate by this name the small quantity of water which is collected in almost all dead bodies within the said covering of the heart, since from parts coinciding with them, it oozes out after death, or presents a mere morbid product. But this swelling of the pericardium alone, from a serous collection, which presents itself at first view in *dissection* of the bodies, ought not to have that name. Besides the marks just mentioned, if we except fluctuation, which even coincides here, perhaps another more certain one may be mentioned, namely, a very slow pulse, which DIEMERBROECK says he has observed in a similar case: for I saw one out of many, who had had good appetite and unimpaired strength, whose artery beat but twenty times in a minute, carried off in the greatest hope of health, and when examined after death, he exhibited the pericardium of immense size from serous effusion; but to confess the truth, I have noticed this phenomenon

not in all, but only in some. Concerning Dropsy of the mediastinum and pleura, resembling the foregoing, and not more easily distinguished, I will add nothing, lest I should only repeat what has already been said.

Asthma, phthisis, palpitations of the heart, and other affections of the thoracic viscera, often bring on Dropsy of the Breast, which is also occasioned by scrophula, scurvy, lues venerea, &c. Studious persons, who indulge more than proper in a sedentary life, are obnoxious to it, also the weak, valetudinary, and cachectic. Dropsy of the Breast is well known to be highly dangerous, and almost incurable; yet many who are seized with it, live for many years; nor are there wanting some, if we may be allowed to conjecture, or if we may credit various histories, who have recovered from Dropsy of the Breast: Yet nothing certain can be adduced on this subject, since by *dissection* alone this affection is clearly made known. Wherefore there is some hope of health, where it is attended with mild symptoms, but if there be acute fever, panting and anxious difficulty of breathing, spitting of blood, frequent fainting, &c. death is at hand.

There are very numerous *anatomical observations* on this subject, from which it is inferred that the lungs are more or less contracted by the quantity of water, and are rarely sound; for they are found schirrous, callous, beset with tubercles, various in size, or infected with putridity and gangrene, especially after peripneumony, phthisis, and other affections of the lungs, which, as already hinted, bring on Dropsy of the Breast. Moreover, the pleura is sometimes very thick, and approaching to cartilage. The thymus is schirrous, callous, and of very great size, sometimes putrid. The fluid in one or both sides of the breast, limpid, frothy and inodorous; or sanious, purulent, muddy, fœtid. Cystic Dropsy is observed more rarely, namely, of the mediastinum, pleura, &c. To this species ought to be referred *Milk Dropsy*, arising from a rupture of the thoracic duct, which some have noticed: but this affection of the pericardium is not unfrequent, sometimes merely watery, sometimes sanious and purulent. The heart is found floating in water, and confined by its own covering; of very great size; eaten by ulcers, or growing to the pericardium; and its valvulæ, especially the semilunar, often of a bony or stony hardness. We may see almost the same injuries in the abdominal viscera, namely, the liver, spleen, pancreas, stomach, &c. around which a similar deluge fluctuates, to which we may add stony concretions often hidden in the gall bladder. From all

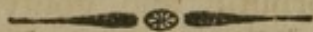
which, if well attended to, may more clearly appear, why so few recover from this disease.

We have already hinted that Dropsy of the Breast is often taken by the incautious for asthma; hence it is no wonder if they attack it inconsiderately with venesection, by which indeed death is hastened. The *method of curing* the disease differs nothing from that already treated of in the general view of serous effusion; which consists in *cathartics*, roborants and aperients, and especially diuretics. There is no room for doubt that purging has been of great use to some; but it is certain also that many, from the improper use of these medicines, have fallen into fatal marasmus; hence their virtues must be cautiously tried, lest they do harm. Among the most usual are rhubarb, jalap, diacrydium, elaterium, pulvis e tribus, calomel, syrup of purging rhamnus, &c. From multiplied experience it is plain that gamboge has been of no use in this species of Dropsy.

The superfluous serum is most safely carried off by *aperients* and *diuretics*, which by following all the course of the circulation, carry the morbid matter, together with the urine, to the strainers of the kidneys. Of all others of the kind, squills, the wine and oxymel prepared from them, are the best. Brioony, millepedes, saffron and sal martis; chalybeate tartar, salt of tamarisk, &c. To which may be added, juniper berries, cassia lignea, and other tonics, which often surprizingly emulate the virtues of aperients and diuretics. Kermes mineral has perhaps no equal, which by assisting the efforts of nature, sometimes acts as a cathartic, sometimes as a diuretic or diaphoretic; from much experience, I know its wonderful effect in this case, exhibited in refracted doses. As to depurants, sudorifics, antiscorbutics, &c. which are often happily used, they seem to agree but with symptomatic Dropsy of the Breast, or that which follows a primary disease. We have purposely omitted pectorals and expectorants, profitable on occasion, and to be considered among the mere palliatives.

These *remedies*, to say the truth, are inert in most cases; unless the matter of the disease be first evacuated by a surgical operation, as in empyema: for after the water overwhelming the lungs is taken away, these medicines may exert their action the more successfully; nor are physicians ignorant that many patients reduced to the last point, have been snatched from the jaws of death by both remedies. From experience it is proved, that ten or twelve pints of water, without very great loss of strength, may be drawn off by paracentesis: but in truth, it is best to perform this evacuation by degrees.

It is not to be concealed that the sick are often defrauded of this method, when this disease is obscure, because it is more than sufficiently evident that attempts of this kind have frequently been very unsuccessful. Yet when all other ways of cure are precluded, and the sick have no objection, it is justifiable to trust somewhat to fortune. After the operation with the armed canula, the serum usually collects again, on which account it is repeated, not without injury to the sick: a wound inflicted with a lancet is therefore sufficient to keep it open in order to prevent stagnation, and that the sick may not be tormented with the apprehension of a new puncture. Lastly, cauteries have been useful in some cases; others like scarification of the tumid legs: but we have noticed that this last remedy cannot be used without risque of gangrene.



PALPITATION OF THE HEART.

WE advance from *obscure* to more *abstruse*, while we undertake to sketch out the affections of the heart: for very few facts on this subject can be gathered from the comments of the learned, if we except the very elaborate work of the celebrated SENAC, adorned with the most polished style: for this most judicious author, sparing no labour in searching out the hidden recesses of human nature, has clearly treated of many things truly worthy of notice, taken from the dissections of bodies; and numberless others respecting the clinical art, in a book very lately printed, which neither the narrow limits of my work, nor my plan will permit me even to epitomise. On which account it is expedient to say only a few words concerning the two more common affections of the heart, with other things coinciding perhaps with all the injuries of this organ, lest I should be accused of exceeding my proposed limits.

PALPITATION OF THE HEART, is sufficiently manifest, since it may be perceived by the touch, sight, and hearing; but the *essential* is hard to distinguish from the *symptomatic*; nor does the genuine *cause* of palpitation appear. Nevertheless it is reasonable to believe that it consists in the spasmodic contraction of this viscus, by which the sides of the ventricles struggle in the vain effort to expel the blood. That palpitation is allied to convulsion appears from this, that by its vehemence not only the voice and respiration are injured, but even the ribs are removed from their situation, or broken. The pulse, as the disease ad-

vances, is contracted, unequal and intermittent, vertigo comes on, with dimness of vision. The sick complain of flatulency, and of a certain *twitching* in the affected part, &c. Sometimes Palpitation of the Heart or convulsive asthma is associated with dropsy of the breast, leucophlegmasiæ, &c. *Tremor of the Heart* is of another kind, which the unskilful rashly take for Palpitation; although it is principally distinguished from it by weak pulse, loss of strength, faintings, cold sweats, and other forerunners of death.

Palpitation of the Heart takes its rise from plethora, or from a suppression of accustomed discharges of blood, from repulsion of customary eruptions, and closing of long continued ulcers, great joy, anger, fear, terror, solicitude, and other violent emotions of the mind, to say nothing of some odours, of immoderate exercise, &c. which may also occasion it. The cachectic, hypochondriac, scorbutic, and gouty are subject to it, as also hysterical and chlorotic persons. Lastly, it often invades valetudinaries, gluttons, and idlers, &c.

Palpitation of the Heart proceeding from an accidental and slight cause, is void of *danger*, nor is the symptomatic thought always dangerous, so long as it is not the consequence of an incurable disease; lastly, there is some hope of health if it be caused by a general injury of the nerves. But it turns out otherwise if it be produced by an organic defect of the heart, which may be suspected when it recurs frequently, or continually afflicts the sick. By what kind of fault this prime organ of the circulation of the blood is affected, we can only conjecture, nor are physicians worth a straw, even when the nature of the disease is best known, since this organic defect admits of no cure, as will more clearly appear from what follows.

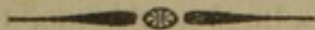
Dissections exhibit the heart in many ways infected; namely, with inflammation and purulency, tubercles in every part, its surface deformed with ulceration. Moreover, it sometimes attains to a stupendous size, its ventricles, auricles and vessels beyond measure distended. The two greater arteries with the coronaries, often of a bony hardness, nor are the *valvulæ* free from this disease. Stony substances concrete, both near the valves, and in the ventricles themselves and pericardium, in which it is said, even worms sometimes lodge. The coronary veins are beyond measure full and varicose. The pericardium contains flatus, serum, sanious or purulent stagnation, which at other times is seen covered with fat, fleshy, cartilaginous, bony, and growing to the heart. Aneurisms of the aorta and its branches are visible, nor does this injury spare the pulmonary artery. Lastly, the ribs present to view removed from

their proper situation, and fractured, to be silent about dropsy of the breast, and various faults of the lungs and abdominal viscera, which do not belong to our subject.

Venesections give relief in violent *Palpitations of the Heart*, arising from any cause; and are useful even in diaphoretic cases, although they are inadequate to overcome the disease: but they cannot be practised without danger where the strength fails; and they bring on death in *tremor* of the heart. *Cathartics* are prescribed with safety, if the first passages be foul, and the head ach, but they must be cautiously used, or the milder ones selected, lest by this stimulus we should *irritate the wasps*. *Diluent*s and *refrigerant*s do wonders, to wit, large draughts of the most pure water, the acidulous and martial mineral waters, and some of the warm minerals; whey, or milk itself, &c. To these are often joined with advantage, *aperients*, the more commonly used are *crocus martis*, *tartarus martialis*, and salt of tartar, *millepedes*, soaps, &c.

Against *Tremor of the Heart*, *stomachics* and *bitters* deserve great praise, namely, *fumitory*, round-rooted *birthwort*, *rhubarb*, *Peruvian Bark*, *cloves*, *cinnamon*, *elixir proprietatis*, &c. *Absorbents* are also much esteemed when there occur no marks of acrid colluvies. But *narcotics* are very hurtful, although *sedatives* of another sort are not forbidden, namely, *nitre*, *pulvis temperans*, *mineral anodyne liquor*, *sedative salt*, &c. *Antispasmodics* usually assuage the disease, to wit, *camphor*, *castor*, *amber*, *flowers of benzoin*, *water of orange flowers*, and *lavender*, *bastard balm*, &c. but rarely put it to flight. Lastly, in many cases *purgative* and *carminative clysters* are of service, *emollient fomentations*, *semicupia*, *pediluvia*, *leeches* to the *hæmorrhoidal vessels*, *camphor* in bags applied over the heart, &c.

It may be added, over and above, that all these aids are vain, unless regard be had to the primary disease, in which, it is obvious to any one, the principal point of cure consists.



SYNCOPE. FAINTING.

NO one is ignorant that *heartburn*, *debility*, *paleness of the face*, *dimness of sight*, *ringing in the ears*, *loss of sense and motion*, *coldness of the limbs*, &c. are the most common *marks of Syncope*. But there are others wherein it differs from *apoplexy* and the like, in which *sense and motion* are also lost; nor are

other signs wanting: these respect the observable measure of the pulse and respiration. For in Syncope, the motion of the heart and thorax seems altogether wanting, so that the sick seem to have expired, and differ from dead persons only in the flexibility of their limbs. But this is the ultimate grade of Syncope, the lighter of which is designated by the name of *Lipothymia*, and in French is called *defaillance*, or *evanouissement*. By the signs just mentioned, as so many forerunners, Syncope is often announced, at other times it comes on suddenly. This affection is dispelled in a short time, or ceases spontaneously, yet it sometimes lasts many hours, and even a whole day; from which very long fits the sick recover, not without sensations of weariness, and as if broken down by excessive labour, and in process of time are restored to their former health.

Immoderate discharges of blood or other fluid, as also the evacuation of a great quantity of any liquid collected in the cavity of the breast and abdomen, may occasion Syncope. Loss of strength also from penury of aliment *promotes* it, and the same follows debility from gluttony. It is contracted by some violent affection of the mind, as also by seeing dead bodies, serpents, mice, or other disagreeable objects: some odours have the same effect, to wit, musk, amber, roses, jasmine, &c. It is excited by simple venesection, by any very acute pains, by narcotics, poison, worms, &c. The weak and valetudinaries are subject to it; cachectics, hypochondriacs, and hysterical persons, the gouty, &c. Lastly, Syncope does not rarely precede fevers, and is numbered among the fatal symptoms of various disorders.

Those who faint without any manifest cause, says HIPPOCRATES, die suddenly. Experience more than sufficiently testifies this saying to be very true. This misfortune especially threatens, if the disease recur frequently, and its fits be continued long: but where it is owing to a slight cause, it is void of danger.

On examining the bodies of those who die of this disease, the pericardium is seen glued to the surface of the heart, covered with fat, turgid with water, blood or pus collected there, infected in various ways, or altogether consumed. The heart is seen of very great size, tainted with inflammation and suppuration; eaten by numberless little external ulcers, not unfrequently reaching to the ventricles, dilated beyond measure, with its appendices. Tumors and pustules of divers sorts are every where found in the same viscus. The valvulae and arteries, both the greater and coronary, sometimes contract a stony hardness. In many cases, the veins of the brain are seen turgid with flatus, especially after

very numerous bleedings, or immoderate discharges of blood. It would be superfluous to make mention here of inflammation and suppuration of the lungs, pleura, mediastinum and diaphragm, of dropsy of the breast, of the reliques of depraved digestion, and the various faults of the stomach, liver, spleen, pancreas, mesentery, uterus, ovaries, &c. But it will not be amiss to bring to view some things, as we go along, related by a crowd of authors, concerning *those imaginary polypi*, which are nothing else than sanguineo-lymphatic concretions, which filling the interstices of the *columnæ*, seem implanted by so many roots, into the substance of the heart.

If by the name of *Polypus* be understood a fleshy excrescence from the substance of the heart, like to the polypus of the nose arising from the pituitary membrane, I do not hesitate to assert, that this has never been discovered in the heart. It would indeed be wonderful, if among so many thousands of bodies, which for thirty years I have preserved in the hospitals for dissection, not one polypus should have been met with, which so many physicians, who, *like the dog out of the Nile*, imagined that they had frequently discovered, having been present at a few dissections in the course of their life. But from this very gross error the more experienced are preserved, who have thought fit to designate by the name of polypous concretion, the blood of a compact or fibrous texture, as at first view it appears. But far be it from me to suppose these concretions to be the cause of Syncope or sudden death, which appear rather to be formed in or after death. Hence we understand why they should occur so very often, both after acute and chronic diseases: as when blood drawn by venesection, by reason of its peculiar nature, runs into a dense and whitish coagulum; *so after death, or from deficiency of motion* and heat, this fluid concretes in its receptacles.

All are acquainted with the *extemporaneous remedies* against Syncope, to wit, the sick are brought into the open air, and placed in a horizontal situation, and by various means agitated and pinched, the face is sprinkled with cold water, or fragrant liquor, to wit, vinegar, Hungary water, or compound water of balm, the spirit of sal ammoniac either simple or succinated, is applied to the nose, *sternutatories* also do great good, although their use has become obsolete. Toasted bread, soaked in wine and sprinkled with aromatics, is laid on the stomach, or to the palms of the hands and soles of the feet. The cold extremities are wrapped in warm cloths, frictions with rough towels are repeated, &c. Internally are freely exhibited cordials and cephalics, namely, generous wine, cinnamon water, imperial and theriac

waters, and numerous others of that kind, by which the powers of the heart may be rekindled, and its motion continued. They must however be cautiously dropped into the mouth, lest they get into the glottis, to the great danger of the sick. Nevertheless these internal stimulants do not agree with all, for they are forbidden if hæmorrhage be the cause, which may be promoted by their administration. Very stimulating injections also have a good effect, scarifying cups, blisters, &c. but it is easily understood, that these tardy remedies, can seldom be used against so sudden and short a disease.

Respecting *venesection*, which, on account of the delay of the blood, is often unsuccessful, it not only seldom does good in the paroxysm, but often proves hurtful, especially when the stomach is oppressed with abundance of food: But it is often beneficial after the paroxysm, and is justly numbered among the *auxiliary preventatives*. But perhaps this disease is best kept off by the cautious use of emetics and cathartics; besides which, we must direct our view to preserving the bowels free, lest the first passages, often bringing the heart into consent, should be irritated by the reliques of digestion. With the same view absorbents are frequently exhibited with advantage, stomachics also and bitters, which are opposed to this formation of saburra; nor are roborants and martials to be despised, which by encreasing the strength of the heart and vessels, may prevent the stagnation of blood. But perhaps all these are excelled by a suitable regimen, hilarity, grateful excursions, &c.

SINGULTUS. HICCOUGH.

THE very common and transient hiccough is expunged from the list of diseases. It is however not so with the long continued and chronic, which endangers the life of some patients. This affection appears under various grades, and sometimes comes on with such ferocity, that the sick are in danger of suffocation. It not unfrequently invades periodically, although nothing certain is established respecting its return; nor is there more certainty concerning its stage, which sometimes lasts for days, or months, sometimes is extended to many years, even to thirty. Gluttons and drunkards, it is well known, are subject to this temporary or long continued disease, which is also familiar to children, hypochondriacs and hysterical persons. The suppression of usual evacuations promotes one kind, anomalous gout

also, and the repulsion of cutaneous eruptions. It is caused by foulness in the first passages, by the stimulus of emetico-cathartics, by poisons, &c. Lastly, acute fevers are attended with hiccough, also internal inflammations, ileus, colic, dysentery, hæmorrhage, &c. in which it is obvious that it is considered a dangerous symptom.

From *dissections* it appears, that among the numberless affections of the breast, the lungs are often found spotted with supuration. The stomach filled with bile, or foul matter: the liver of very great size, or seized with inflammation, as also the intestines, kidneys, bladder, and other abdominal viscera. The omentum very thick, and the stomach drawn downwards. Lastly, there are observed every where putrefaction, gangrene and other ravages; to say nothing of the ensiform cartilage removed from its genuine seat; of wounds, &c.

From an attentive view of the foregoing, every one may form his own *method of cure*, which respects chronic Hiccough alone. There is no doubt that venesection very frequently is beneficial, but emetico-cathartics, and injections which are allied to these, may be given with more advantage. Having cleansed the first passages, diluents and demulcents have an excellent effect, viz. large draughts of simple water, infusion of tea, whey, rice water, oil of sweet almonds, the most usual emulsions, &c. which being premised, we must have recourse to absorbents and stomachics, to wit, coral, and crab's eyes; to mint, anise, dill, Peruvian Bark, catechu, diascordium, theriac, &c. Aperients are serviceable in many cases, to wit, the well known root of rhubarb, millepedes, martials, vinegar of squills, &c. Antispasmodics often have a surprising effect, namely, saffron, castor, amber, orange flower water, &c. Nor are hypnotics and paretics to be omitted, viz. Laudanum and diacodium, mineral anodyne liquor, &c. Lastly, the cure is often finished by milk, sudorifics, the various mineral waters, &c. *External remedies* deserve praise, among which baths are auxiliary, but fomentations are more esteemed, or applications of mint, sage, rue, wormwood, cloves, camphor, theriac, and such like, hot bread rolled in a cloth, &c. nor are liniments of animal fat to be despised. Lastly, cupping on the epigastric region, or back, have been profitable in some cases.

This apparatus of remedies is futile *against accidental hiccough*, which either ceases spontaneously, or yields to a draught of simple water; it is even checked by holding the breath a little time, by attentive thinking, or by some unthought of event, &c. *Symptomatic hiccough*, is commonly more obstinate, and is to be treated with the above-mentioned remedies, among which the

most common and efficacious is chicken water, whey, or emulsions; oil of sweet almonds, coral, and other earthy absorbents, **Peruvian Bark**, castor and diascordium, mineral anodyne liquor, syrup of white poppies, or other hypnotic. Emollient fomentations are also useful, or roborants, cupping, and other topicals, of which above,

OF THE
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OF THE
HUMAN BODY

THE HUMAN BODY is composed of several parts, which are united together by a common principle, and which are all subject to the same laws. The body is divided into three parts, the head, the trunk, and the limbs. The head is the seat of the mind, and the trunk is the seat of the passions. The limbs are the instruments of action. The body is also divided into two parts, the solid and the fluid. The solid parts are the bones, the muscles, and the skin. The fluid parts are the blood, the lymph, and the secretions. The body is also divided into three parts, the head, the trunk, and the limbs. The head is the seat of the mind, and the trunk is the seat of the passions. The limbs are the instruments of action. The body is also divided into two parts, the solid and the fluid. The solid parts are the bones, the muscles, and the skin. The fluid parts are the blood, the lymph, and the secretions.

SECTION THE FOURTH.
OF INTERNAL DISEASES OF THE
ABDOMEN.

BAD DIGESTION.

IT is highly incumbent on those who set about the practice of medicine, that they pay particular attention to the powers and functions of the stomach: otherwise they never can trace the genuine character of its diseases, or of those affecting the head or other parts. As the countenances of men, although composed of the same parts, differ *ad infinitum* one from another: so in each individual there occurs a difference in the organs of digestion, each one enjoying a peculiarity of stomach, altogether different from others; the temper of which when accurately studied, would give the pathology more clearly. But authors seem to have cared little about this most salutary science, and have not blushed fantastically to adhere to the ostentation of letters, or to wear out a life in contriving useless hypotheses. No wonder then, if among the more abstruse phænomena of human nature are as yet to be numbered, the *genuine laws of Digestion*, and that the type of the innumerable diseases referable to them should mostly remain enveloped in obscurity, and the method of cure be consequently unsuccessful.

From daily experience, even superficial, it is beyond all doubt that a certain quantity of aliment agrees with every stomach, beyond which its offices are perverted. For in some spare diet is best, while others enjoy victuals more liberally. In most cases, walking or other exercises of the body after a meal, are beneficial, but some cannot properly digest their food, unless in quiet, or while sleeping. Water, which dissolves the principal substances of nourishment, pleases the greater part of mankind, yet there want not some, who find advantage in wine and ardent liquors. Coffee, chocolate, &c. are preferred by some; but agree not with others. Milk supplies the most nutritious and unwholesome aliment. The same may be said of *fruits* and *pulse*, of oil and butter, of the flesh of beasts, birds, and fishes,

&c. which in different persons has contrary effects. To say nothing of the surprising phenomena of *idiosyncrasy*, by which it is evident that many cannot bear milk, cheese, wine, &c. others have an aversion from eels, shellfish, peculiar fruits, certain kinds of pulse, &c. With this also coincides the depraved appetite of virgins and married women, but the limits of my work will not permit me even to sketch all the *phenomena of Digestion*; nor do I think it would be in point, therefore leave it to the more experienced.

When the functions of the stomach are exercised in any other way than is constituted by nature, it is evident that digestion is perverted; hence arises a *foulness irritating the stomach*, which affords occasion for various diseases. The remains of depraved Digestion shew themselves in loathing of food, foulness of the mouth, impure belchings, heart-burn, nausea, vomiting, vertigo, dyspnæa, &c. But these indications exhibit nothing else than the product of some organic disease, hard to be discovered, and veiled in darkness. This *foulness of the stomach* is of different kinds, namely, *acid, bitter, mucous, or putrid*; wherefore we have judged it most adviseable to subject it under so many species of sickness, to examination. First, Acid belchings, the stomach affected with griping pain, burning and inflation of it, severe pain of the head, cough, hiccough, costiveness and tenesmus; exhibit marks of *acescency* of the contents of the stomach: and from this kind of putridity arises *crudities*, as they are called, of an *acid* nature, from which, especially in women who suckle, proceed severe affections. Second, *Bitterness of the mouth*, dry tongue, heart-burn, heat of the bowels, vomiting of a muddy greenish matter, diarrhæa, &c. *Regurgitation of bile*, or of matters lurking in the stomach, produce bitterness, which matters sometimes so *rust* the silver basons into which they are rejected, as that the spots can scarcely be got out; no wonder therefore, if by fretting the stomach they should bring on most troublesome heart-burns. Third, The mouth affected with a glutinous humor, viscid saliva, loss of appetite, flatulence, eructations, which after many hours, have the odour and taste of what was swallowed at meals, vomiting and stools of mucous matters, lientery, or the discharge by stool of undigested food, &c. argue that the first passages are lined with a *plentiful mucus*, which blunts the sensation of these organs, and hinders the elaboration of the aliments. Fourth, A foul mouth, as from a rotten egg, and belchings of the like kind, weight of the stomach, flatulent anxieties, vomiting of a fetid smell, stools of an unusual fætor, afford marks of *mere alkaline putridity*, and discover stinking crudities as they are called. *Want of appetite accom-*

panies all these affections of the stomach, which also frequently brings on sadness, torpor of the head, faintings, inflation of the hypochondria, &c. in short, this is **PANDORA'S BOX**, out of which issues a host of diseases.

Gluttony, or an unusual abundance of food, in a stomach otherwise well, occasions *depraved Digestion*, not much to be feared; but the powers of the stomach are oppressed with *crapula*, if the forementioned faults of Digestion have preceeded. Excess in living is followed by pains in the bowels often inclining to tormina, anxiety, inflation of the stomach, belching, hiccough, vomiting, diarrhæa, &c. and sometimes this state of the stomach, from more than usual plenty of food, is attended with more grievous symptoms, namely, sleep, comatous affections and delirium. From the same cause not unfrequently arises a fever, by which the incautious are deceived, to the very great injury of the sick.

It is universally allowed, that intense studies, and attentive thoughts of any kind, hinder the first elaboration of aliments: for from an accurate *anatomical observation* of the stomach, it is not falsely inferred that a certain matter is carried from the brain to that organ, that its functions may be rightly performed: hence it is not strange, if from the suppression of this fluid, prepared also for other uses, the stomach deprived of its strength, should become altogether unable *properly to digest the food*. The functions of this viscus languish from general debility, and from advanced age; they are not rightly performed if the saliva be changed from its natural state, and if the food be not duly triturated in the mouth. Lastly, they are prevented by a kind of organic fault both of the stomach, and of the other viscera concerned in the digestion of aliments. Hypochondriacs and hysterical persons are thought equally obnoxious to this acid putridity: but the Digestions of the melancholic, phlegmatic, scorbutic, and those subject to catarrh, have a tendency to mucus. The bilious and passionate are tormented by a heat of the bile, or a greater flow of it: Nidorous crudities are familiar to valetudinaries and weakly persons, and those who indulge too much in luxuries.

Depraved Digestions are never without danger, from what cause soever they arise; for from this source, as from **Pandora's box**, proceed numberless and severe diseases both acute and chronic, among which are more frequently enumerated, intermitting fever, gout, inflammation of the kidneys, obstructions, looseness of the bowels, &c. It is a settled point among the skilful, that from acescency of the first passages, arise the greater part of chronic affections. It is known that from bitter and

putrid juices, arise acute fevers of the worst kind. Yet *the fever of a putrid type*, as it is called, depends not on this putridity; but it is reasonable to believe that this species of fever is produced by the access of these depraved juices to the mass of blood.

Bad Digestion from too much food, or gluttony, appears under different grades, some of which *excite no vain fear*, since they often bring on death, especially if they cause coma, which differs little from apoplexy. It portends greater danger, if associated with *drunkenness*, unless the first passages free themselves by vomiting and looseness. *Want of appetite* is dangerous, in infancy and old age, after severe diseases, after chronic looseness of the bowels, &c. BAGLIVI has remarked that a great appetite after long continued loathing of food, is fatal, in chronic diseases; but experience sometimes refutes this opinion.

It is known *from examination of the viscera*, that the stomach though sound, is often drawn into sympathy by a fault of the neighbouring parts, nor perhaps do the various sordes, treated of above, proceed from any other source. Yet it is not rarely found unusually dilated or contracted; in some cases it is overwhelmed as it were with fat; in others it is swelled with the matter taken in drink, or with flatus. Its tunics are seen thin and without wrinkles, or covered with a thick and glutinous mucus. Besides divers sorts of stones found in its cavity, there occur prominent callosities and schirrosities, tubercles of various size, &c. The stomach is sometimes infected with putridity and gangrene, is perforated by the same causes, and defiles the neighbouring viscera. Lastly, sometimes this organ is removed from its proper seat, and drawn by the omentum adhering to it in *herniæ*, towards the lower parts, even below the umbilicus. But lesions of the surrounding viscera, are more frequent, as above hinted; for the *liver* is found schirrous, presenting a whitish or leaden colour, grown to the stomach, of amazing size, by which it sometimes extends even to the pelvis; emaciated and deformed; beset with tubercles, containing abscesses, eaten by ulcers, putrid, gangrenous, &c. The *spleen* is seen very small, wrinkled and callous; sometimes corrupted, like pap, or altogether consumed. The *intestines* appear beyond measure distended with *flatus*, connected one with another, mortified, torn, &c. Lastly, schirrous obstruction, suppuration, putridity, or other faults, may be seen in the pancreas, omentum, mesentery, kidneys, uterus, &c.

It is justly inferred from the foregoing, that the stomach is

rarely affected *idiopathically*, from inability to bear aliments ; but is often drawn into *sympathy*, by a fault of the other abdominal viscera, or by their destruction : hence it is evident how difficult it is to obtain a *right method of cure*, to which nothing forbids us to prepare the way by various experiments. The modes in which the different foulnesses of the *primæ viæ* occur, are indeed manifest to all ; but since their *origin* is frequently involved in great obscurity, it is no wonder that so many remedies should be exhibited to no purpose. It cannot be doubted that in these difficulties some remedy must occur as more necessary, namely, foulness of any kind lodging in the stomach, must be speedily carried out by the suitable exhibition of an emetico-cathartic ; nor is it less evident that the most exact regimen will be of great service. As to other medicines, those are to be chosen which may overcome the colluvies clearly discovered in the first passages, which from experience, it is proper to treat of separately. First, *against acid crudities*, having premised what were necessary, the more simple diluents are of surprizing benefit ; absorbents act specifically, to wit, crabs' eyes, coral, chalk, &c. Bitters are of service, among which the best are Peruvian Bark, gentian, aloes, *Stoughton's* elixir, &c. Roborants are of use, namely, rhubarb, and extract of juniper, elixir proprietatis, martials, &c. The antiscorbutic plants are also very useful, which not only by their peculiar virtue, overcome the acescency of the stomach, but also may heal the injury contracted by the blood affected therewith. In these cases unripe fruits, wine and sweet things are forbidden. Whether it was from experience or hypothesis, that the celebrated BOERHAAVE gave wine and spirits to his patients, I leave for more skilful physicians to determine.

Bitter colluvies requires other remedies, if we except evacuants and diluents, which in this case afford no little benefit. Having premised these, the cold mineral waters seldom fail. But acid medicines remove this bitter foulness more expeditiously, these are either vegetable or mineral, among which are syrup of lemons or of pomegranate, spirit of sulphur and of vitriol, and others of the like kind.

As to *mucous matter*, evacuants are not to be prescribed before diluents be duly drank, which promote its fluidity ; otherwise the stomach, being lined with mucus, is unsusceptible of the stimulus of remedies. Having premised these, it is proper to have recourse to the warm mineral waters, with which cathartics are profitably joined. In the mean time, stomachics of various kinds usually succeed happily, these are *aromatics*,

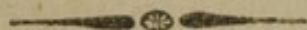
such as, mint and sage, bark of citrons and oranges, cypress, calamus aromaticus, zedoary, cinnamon, nutmeg, pepper, cloves, &c. *roborants*, as quinces, plumbs, rhubarb, catechu, candied nuts, cypress, Spanish or other generous wine: *bitters*, to wit, wormwood, and lesser centaury, gentian, Peruvian Bark, aloes, &c. and the officinals made of these mixtures; *opiates*, namely, mithredate, theriac, &c. Lastly, persons afflicted with this species of colluvies are to be advised to keep the region of the stomach well covered.

Nidorous crudities are also to be evacuated by emetics and cathartics, but the cure is promoted by a constant diet of the fruits of the earth. Which having been done, we must call into use refrigerant acids; the best of which is the very agreeable drink called lemonade. Tamarinds also are of service; quinces, and others of that kind. Sometimes also, contrary remedies are proper, namely, Peruvian Bark, gentian, wormwood and other bitters; as also aromatics, namely, mint, southernwood, &c. Lastly, rhubarb is deserving of praise, and is very much used in this case. Nor are the warm and cold mineral waters to be esteemed inert, which are especially of benefit to the viscera concerned in the digestion of aliments.

From the foregoing we understand why *loathing of food*, the familiar attendant of almost all these morbid dispositions of the stomach, should require a *method of cure*, different according to its multiplied causes. For no one is ignorant that certain aliments or remedies promote appetite in one, and prostrate it in another. Experienced physicians therefore, in no wise addicted to pre-conceived opinions of their own, often indulge the wishes of the sick; and indeed from this source they discover what may lead to the character of the disease, which was before hid from their view. I remember to have seen many times, after remedies of the first note had been exhausted to no purpose, the appetite restored by an onion, garlic and nuts, by pickles, by the sea-urchin, by salted flesh and fish, and others of that kind that were asked for, but entirely overlooked in the cure of the disease.

It remains, before I lay down my pen, briefly to treat of the method of curing the *depraved effects of crapula*, from which indeed, when any morbid disposition of the stomach occurs, may arise grievous and fatal symptoms; the cure is mostly performed by large draughts of water, for the chief aliment, or by spontaneous looseness of the bowels, or opening them by the help of clysters. It is well known that bleeding in this case is dangerous; on which account, unless necessity urge, it ought never to be practised, until twenty-four hours after a meal.

Nevertheless, we may deviate from this rule, when in a plethoric habit there arises violent fever, with drowsiness, delirium, or other alarming symptoms: But we must beware, lest the impeded functions of the brain, from this cause, should be taken for genuine apoplexy, which error many patients have had cause to lament. Cathartics and emetics afford present relief, and more safely carry off the cause of the disease. Yet they must be prescribed with care, lest by reducing the strength, they do harm. After these, bitters or acids sometimes are of service, and also roborants. Yet far be it from us, after the example of the unskilful or knavish, to protract the cure longer than is necessary. Lastly, if *drunkenness* be associated with gluttony, large draughts of tea, or lemon-juice diluted with plenty of sweetened water, are given with advantage; but in a very urgent case, we may fly to venesection and emetics, with the above cautions.



VOMITING.

IT will not be amiss transiently to remark, that Vomiting is promoted by a contractile and spasmodic effort of the stomach, but not from a simultaneous action of the diaphragm and abdominal muscles, as the very celebrated CHIRAC has incorrectly taught: and if I mistake not, the medical schools have all inconsiderately given assent to him: Concerning which phenomenon, see the ACTS OF THE ROYAL ACADEMY OF SCIENCES AT PARIS, for the year 1752. It is abundantly proved from the very thick plexus of nerves which enter its substance, that the stomach is endued with a most exquisite sense: Therefore, it is not strange if it be irritated by the slightest cause; or that the spontaneous effort of nature should throw off the offending matters, by means of the double series of sinewy fibres with which it is provided. *Vomiting*, (to return to our subject,) is *excited* by bad food, or victuals in too great quantity, by wine taken too freely, by stimulant medicines, and by poisons: also by various foulnesses lodging in the stomach. It arises from inflammation of the stomach, exulceration, schirrus or organic fault of some kind; to which may be added, *omental hernia*, which by drawing the stomach down, usually promotes this extraordinary motion. But *sympathetic Vomiting* is more familiar, namely, from diseases of the head, liver, kidneys,

spleen, &c. for there is no doubt that hemicrania, contusion of the head, drunkenness from wine, tobacco, fumes of charcoal, or other cause; inflammation of the liver, kidneys, &c. bring on Vomiting; but numberless other causes remain hid, unless discovered by *anatomical examination*. Practitioners know very well the *symptomatic* or *critical Vomiting*, in acute diseases, in various species of colic, &c. nor does it escape the notice of the experienced, that it is often excited by the matter of gout, ischiatic, or rheumatism, by suppressed perspiration, menses, urine or other discharge. Lastly, no one is ignorant that the sight of disagreeable objects, unusual tossing of a ship, &c. have the same effect.

Children, gluttons and drunkards are subject to Vomiting; hypochondriacs and scorbutics, cachectics and valetudinaries: chlorotic virgins and pregnant women are liable to it. Vomiting, like intermitting fever, and especially the quartan, sometimes recurs periodically. Many indeed, who otherwise enjoy vigorous health, vomit daily in the morning, a matter mostly mucous. Others are subject to this evacuation every two weeks, monthly, &c. Lastly, some unload the stomach after meals.

It is evident that whatsoever is contained in the stomach and intestines, may be thrown up by Vomiting, namely, bile, pancreatic juice, gastric and intestinal mucus, worms, stones, blood, pus, &c. to say nothing of certain Vomitings, foreign from the common order of things, the histories of which seem like fables: for that toads, lizards, serpents, moles, pups, mice, &c. have been concealed alive in the stomach, "*credat Judæus Apella*." Vomiting is beneficial when excited by too great a quantity of food, and the evacuation of bile, or mucus matter is very serviceable. Chronic Vomiting, without any manifest cause, depends on an organic fault of the stomach or neighbouring parts, on which account it is not falsely conjectured to threaten death. Vomiting at the commencement of acute diseases, is not only void of *danger*, but is thought of service. It is otherwise at other stages of the disease, since it is mostly symptomatic; if, lastly, Vomiting, in the crisis of severe disorders, be attended with hiccough, it causes sudden death.

It is known from *the dissection of bodies*, that a bad conformation of the stomach rarely occurs; but this viscus is often driven from its place, both by omental hernia, and other causes. Schirrus is found in many, but the lower orifice is more liable to this injury, which in some cases is cartilaginous or bony; nor is the duodenum attached thereto free from this affection. Sometimes also the pylorus is to be seen, seized

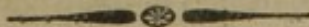
with inflammation, obstructed with stones, money or some other foreign substance. Moreover, the stomach is observed more than usually contracted, and hardened; beset with pustules of different kinds, deformed with anomalous tumors; affected with inflammation, purulency, exulceration, and gangrene; torn, stabbed with wounds, &c. The liver among the other viscera is the most frequently infected; viz. inflamed, suppurated, schirrous, gangrenous, putrid; grown to the diaphragm, stomach, and other neighbouring parts, &c. The gall-bladder often contains bilious concretions, which at other times, together with the *vasa choledocha*, is swelled with a great quantity of bile. Sometimes there is found an unusual insertion of the *ductus communis*, which is implanted near the pylorus, or into the stomach itself. The intestines are perceived beyond measure distended; as if tightly drawn together by a surrounding thread; pushed out of the abdomen together with the omentum, &c. The spleen, pancreas, mesentery, omentum and kidneys inflamed, suppurated, schirrous, putrid, &c. Lastly, a prolapsus of the ensiform cartilage, is manifest, not to mention various diseases of the head, breast, &c. which may influence the stomach.

The cure respects Vomiting that is excessive, or long continued. Venesections, by universal consent, ought to be banished. Emetics sometimes do good; and especially ipecacuanha. But that maxim is to be received (*cum grano salis*) with some allowance, which teaches that *Vomiting is to be cured by Vomiting*, since this mode of treatment does not suit in all cases; by which, as experience proves, *the wasps are roused*, and the disease exasperated. Laxatives are profitable, but rarely have the effect of overcoming the morbid cause: Stimulant clysters afford wonderful relief. Diluents and refrigerants are serviceable, namely, whey, milk itself, thin chicken broth, simple water or lemonade, or water impregnated with the sulphuric acid, &c. Purgatives are commended, namely, nitre, sal de duobus, and mineral anodyne liquor; nor are narcotics forbidden, to wit, laudanum, diacodium, pillulæ de cynoglossa, &c. After premising what is necessary, stomachic roborants and bitters, such as mint and sage, are justly praised; wormwood and the lesser centaury; elecampane and rhubarb; red roses and wild pomegranate, quinces and granate bark, mastich, balsam of Peru, extract of juniper, theriac, confection of hyacinth, &c. nor are absorbents to be omitted, namely, chalk and crabs' eyes, prepared hartshorn, crocus martis, &c. When the symptomatic Vomiting in fevers becomes alarming, we must not omit lemon-juice with salt of wormwood, or any

other of that nature, while fermenting, which in most cases like a charm, allays the most troublesome Vomiting. Lastly, the various mineral waters complete the cure, which, by penetrating all parts, are qualified to heal the organic disorders of the stomach and surrounding viscera.

It is sometimes judged necessary that the sick keep their beds: at other times let them exercise in agreeable walks in the open air. But there is always advantage in *spare diet* of jellies, creams, soft eggs, &c. Large draughts of simple water, or impregnated with various roots have been helpful to some, and offensive to others. Lastly, *if violent Vomiting arise from the exhibition of an emetic in a large dose*, or given at a wrong time, it is quieted by drinking freely of water impregnated with sulphuric acid. But vegetable acids are said to have a contrary effect, notwithstanding experience refutes the opinion. The common demulcents have the same beneficial virtues, also the sedative stomachics and absorbents; yet these medicines are rarely used against a disease, which is often dispelled by the odour of orange or vinegar alone.

Topical roborants of various kind may be of excellent use; when applied to the region of the stomach, namely, the pulp of quinces, mint, balm, wormwood, cloves, saffron: Hungary water, vinegar, theriac, and others of the same kind, from which are made cataplasms, or epithems, which do good in many cases. But perhaps toasted bread soaked in generous wine, sprinkled with aromatics, and applied to the stomach, excels all the rest. Very sharp vinegar is also successfully applied to the nostrils. Hungary water, or other such like, oranges, lemons, &c. Lastly, the prolapsus of the ensiform process is cured by surgery. As to *sympathetic Vomiting*, respect must be had to the primary disease, on which account there is often advantage from aperients, sudorifics, leeches applied to the arms, the actual cautery, &c.



VOMITING OF BLOOD.

WE have noticed above, that some, deceived by the relation of the sick, or by the affinity of the disease, have taken hæmoptysis for Vomiting of Blood: yet from accurate examination, there appears the greatest difference between the two diseases; for blood from the lungs is pure, florid, and frothy, which on the contrary comes from the stomach blackish, and mixed with

different matters : besides hæmoptysis is attended with cough, and by this mark is easily distinguished from Bloody Vomiting. The disease now under consideration is usually denoted by heat, oppressive pain of the stomach, inflation of the hypochondria, anxiety, a kind of restlessness at night invading the lower limbs; loathing of food, and nausea, with which are sometimes associated convulsive motions, or cold sweats, disappearing on the issuing of the blood. It is rarely attended with fever, but the pulse is rather small and contracted in many cases. Meanwhile the countenance puts on a pallid or leaden colour; the strength fails, anxieties, faintings, and other oppressive symptoms, usually observed in other hæmorrhages take place. The flow of blood is more or less, sometimes florid, sometimes black and fœtid, which is also discharged by stool like ink, especially when the mesenteric vessels, as also the gastric, pour it forth. The *pain* occupies different situations, from attending well to which, we may conjecture what is the *part affected*, whether the stomach and intestinal canal, spleen or pancreas, &c.

Plethora from suppressed sanguineous discharges, especially in the weaker sex, often excites Vomiting of Blood. Dissipation, eating food that is hot, or much salted and peppered; emetics, drastic purges, and poisons promote it. This affection rarely becomes epidemic; to which melancholics, hypochondriacs, and scorbutic persons are thought to be *liable*. We have noticed that the stools, in this disease are mostly mixed with very *black* blood, for which reason it was designated by the ancients under the title of the *Black Disease*; but we were loath to admit this unsuitable term, now become obsolete, with which some moderns are too much in love, lest from this source might proceed errors fatal to the miserable patients. It is true that *Bloody Vomiting* is not always attended with stools of the same kind; and very black alvine fæces are seen often when there has been no previous vomiting. Whence it appears that these two affections, for the most part complicated, sometimes exist separately, since their seat is different. To which may be added, that it also happens that blood issuing from the nose, while sleeping on the back, gets into the stomach; and thereby causes it to unload itself partly by vomiting, partly by the evacuation downwards of the stagnant blood, whence the stools contract this very black colour. It must be obvious that those are shamefully deceived, who dream that in this case they have met with the *black disease*.

Bloody Vomiting from suppressed menses and piles is not *dangerous*, so long as the blood does not break forth in a very full stream, since it ceases with the return of the former evacu-

ations. On the contrary it portends death, if attended with fever, or symptomatic of an acute disease, if black and fetid blood be poured out; lastly, if from an accurate examination of the seat of pain, it should appear to depend on some organic fault of the spleen, pancreas, &c. But in some cases very little blood is discharged by the mouth, while the stomach remains turgid, or beyond measure distended; whence arise faintings, and other oppressive symptoms, if the blood, corrupted in consequence of stagnation, do not find an outlet by stool. To this we may add that persons once seized with this disease, ought to guard against its recurrence.

From *anatomical* enquiry, the stomach is found bloody, infested with gangrenous spots, scarce to be handled without dilaceration; the lower orifice in some cases obstructed. The veins of this viscus, especially connected with the spleen, are more than usually turgid and varicose; and the vessels of the intestines affected in like manner, and distended with flatus; the omentum and mesentery emaciated; the spleen swelled, schirrous, cartilaginous or putrid: the pancreas obstructed, indurated or putrid. The liver, although rarely affected altogether in a similar manner, has the gall-bladder turgid with bile. To be silent respecting other faults which are met with every where, both in the breast and in the abdomen, which seem foreign from our purpose.

By rest and very low diet, this disease is often smothered as it were in the cradle; which notwithstanding does not hinder the timely use of the *lancet*; for instance, when the blood presents to view impetuous and of a crimson colour, or after the suppression of an accustomed discharge of blood; otherwise it is useless, or altogether improper. Among the remedies in common use and most serviceable ought to be mentioned refrigerants and temperants, namely, water impregnated with lemon-juice or nitre, syrup of vinegar, or of berberries; whey, chicken-water, rice, and barley-water, to which may be added infusion or decoction of succory, agrimony, pimpinella, sorrel, parsley, &c. Vulneraries and the bland astringents are of use, namely, nettles, greater comfrey, ground-ivy, plantain, millefoil, and the vulnerary herbs; quince, rhubarb, catechu, coral, Peruvian balsam, copaiba, &c. And even the coldest water has been of service in many cases. As to the stronger astringents, say, blood-stone, dragon's blood, allum, essence of rabel, spirit of vitriol, and such like, they *ought not to be used* except in a very urgent case, since they often do harm, and even occasion death.

Hypnotics also ought to be cautiously prescribed, namely, diacodium, trochisci de karabe, &c. lest by the too hasty suppression of the blood, symptoms more dangerous should be excited. Nor are cathartics less to be feared, unless we except the milder ones, such as cassia, tamarinds, rhubarb, &c. which may sometimes be used after the blood is stopped. But it is of the greatest moment to keep the bowels loose. Emetics must be banished. Nothing forbids the exhibition of Brazil root in refracted doses. Lastly, during the paroxysm, *external helps* must not be omitted, such as are used in almost all hæmorrhage, namely, tight bandages on the limbs, frictions on the legs, immersion of the hands and feet in cold or warm water. Hot cloths applied to the lower belly, fomentations of vinegar alone, or mixed with water, &c. As to *prophylactic* remedies, a cooling diet, namely, of milk chiefly, barley and rice gruel, &c. are much esteemed. *Venesections* are especially of service: laxatives do good. Sometimes martial preparations are indicated, aperients, and many others with a view to the primary disease, which was wont to occasion Bloody Vomiting.



CANINE HUNGER, OR A DOG'S APPETITE.

THUS is denominated that *insatiable voracity of food*, which brings on vomiting and *lientery*, or discharge of undigested aliment by stool, and lastly, *atrophy*. There is another unconquerable species of Hunger, which has none of these evacuations attending it, and is accompanied with oppressive pain of the stomach, and difficulty of breathing, this is called *Fames Bovina*, or an *ox's hunger*. From either of them, the strength is gradually protracted, drowsiness comes on, &c. Genuine Canine Hunger, in which the sick are never satisfied, is very rare; although that great appetite so common with young persons, gravid women, melancholics and valetudinarians, which scarcely affects the health, is designated by this name among the inexperienced.

The *dissected bodies* exhibit the stomach swelled beyond measure, stagnant blood found in its cavity, and a matter black as ink, like rusty or vitriolic bile, together with a very great number of *lice*. The pylorus unusually relaxed, the biliary duct opening into the stomach itself, &c. There is found an amazing collection of lumbrici in the intestinal tube, which sometimes contains even the *tape worm*. In one case there was found but

one intestine running in a strait course from the stomach to the anus, to say nothing of other malformations. The liver is sometimes noticed tainted with schirrous obstruction, and of very great size. The spleen also, of stupendous magnitude, or *pultaceous* and putrid. Nearly the same injuries are discovered in the pancreas, mesentery, &c.

In both species of Hunger, evacuants by the bowels are thought serviceable if nothing forbid. Refrigerants and demulcents are of great benefit, namely, chicken-water, or rice water, whey, &c. Fat meats also, or cooked with oil, often supply the place of the very best medicines. Nor, after premising what is necessary, are *hypnotics* less useful, namely, diacodium, laudanum, pillulæ de cynoglosso, and others of this kind. After a clear view of the cause of the disease, mercurials and other vermifuges have had a most happy effect. By some the amber-grise is highly praised. Others advise theriac and other aromatic stomachics, which seem to vie with the virtues of sedatives. Nor must we omit absorbents, namely, coral, chalk, blood-stones, filings of iron, &c. which by subduing the stimulating acids, may impart relief.

PAIN OF THE STOMACH.

CONCERNING the multiplied *character of this disease*, so carefully investigated by the ancients, modern writers have babbled nothing but notions; so that whatsoever appears in books on this subject, gives little satisfaction to a mind eager for the truth. For it is with difficulty *known* whether this very terrible disease be essential, or symptomatic; nor is it sometimes more easily distinguished from hepatic, intestinal, or nephritic colic, &c. This pain seems to have its seat in the scrobiculus cordis, which anatomists know to correspond with the superior orifice of the stomach. Yet it is not confined to these limits, but rather sometimes diffuses itself through the whole præcordia, sometimes is propagated to the more extensive epigastric region: at times also it reaches the well known connections of the diaphragm, viz. the hypochondria, both right and left. This troublesome sensation of the stomach appears under various grades, which on account of the diversity of type they seem to possess, may be referred to *four species*, which it is proper to exhibit separately. First, Obscure and languid pain, is called *anxiety*, which although it appear more mild, yet worries the sick in a kind of indescribable

manner, whence proceed inquietudes, occasioning *sighs* and *groans*. Second: The superior orifice of the stomach, which the ancients called *Cardia*, is affected with a kind of biting, hence named *Cardialgia*, this usually accompanies depraved digestion, and sometimes has its paroxysms. Third: There occurs another pain as if *burning*, known by the name of *soda*, and called among us, *le fer chaud*, this disagreeable sensation is often propagated near the œsophagus, and is caused by an acid matter, like vitrolic, lodging in the stomach, to which melancholics are obnoxious, who continually complain of eructations of this nature. Fourth: Lastly, there is another *lancinating or shooting* pain, which exerts its tyranny in the same organ, called *colic of the stomach*: This takes its rise from spasm and flatulency, and is mostly attended with belchings and inflation of the epigastrium, anxieties and faintings. It is proper to remark that if this last pain, when arrived at a certain grade, has fever accompanying it, it threatens inflammation of the stomach; which brings on fatal symptoms, and indeed occurs more frequently than is commonly supposed. By these very severe pains of the stomach, the neighbouring and distant parts are drawn into consent, and almost all the functions of the animal œconomy are perverted. Namely there follow enormous vomitings, difficulty of breathing, palpitation of the heart, and inordinate pulse, chills, tremors, suppression of urine, cold sweats, coldness of the extremities, &c. so that some patients, unable to endure them, are reduced to the last extremity with loss of the powers of mind and body: it is indeed not to be wondered at, if these most violent pains of the stomach bring on this dreadful croud of symptoms; since there is no part in the living body, according to its size, which has such a supply of nerves, and hence is endued with very exquisite feeling.

PAINS OF THE STOMACH arise from stimulant matters lodging in its cavity, namely, the remains of depraved digestion, emetics, cathartics, poisons, worms, &c. They are produced by anger, grief, or other excessive emotions of the mind; by suppressed sanguineous discharges, repelled cutaneous eruptions, checked dysentery, intestinal, mesenteric, and duodenal colic: by hepatic and nephritic colic; fevers of a bad kind, &c. The melancholic, gouty, and gravelly are obnoxious to these pains; the chlorotic and hysteric are thought to be prone to them. Pains of the stomach recurring frequently are not without danger: the chronic are incurable. When violent during fever, they threaten inflammation of the stomach: lastly, there is danger of the greatest harm, if while they rage, there come on hiccough, cold sweats, faintings, &c.

Dissections discover the bile very acrid and rusty, stagnant in the stomach, and blood extravasated. This viscus rises to an immense size from flatulency, its coats are found thickened and callous, inflamed and suppurated, eaten by little ulcers within and without, putrid, gangrenous, and torn. There also occur every where anomalous or cystic tumors, fungous excrescences, warts, and other tubercles of various kinds. Sometimes the biliary duct is found implanted into this organ, in which are also discovered worms, follicles filled with *lice*, stones of multiplied and various size, pills, kernels, coals, gypsum, and numberless other extraneous substances which had been swallowed. Lastly, the pylorus is seen tumid and schirrous; nor does this morbid disposition spare the duodenum, which is also distended by flatus to an unusual size, as also the other intestines: the liver is found schirrous, inflamed, purulent and putrid. The spleen, pancreas, mesentery, omentum, &c. affected in like manner. The gall-bladder filled to bursting, or containing a prodigious number of biliary concretions. Omental herniæ, aneurisms of the aorta or cæliac, &c. are visible; not to mention inflammation of the mediastinum and pericardium, the immense size of the heart, and other defects of this organ.

When very great Pain of the Stomach is attended with acute fever, it is proper to open a vein, to prevent threatening inflammation. Nothing indeed more speedily benefits the stomach, than *emetics* and *cathartics*, yet they ought to be prescribed cautiously, and mixed with hypnotics, lest by their stimulus the disease should be exasperated. Which being done, demulcents are serviceable, namely, chicken water, whey, emulsions, oil of sweet almonds, and such like, which are qualified in a particular manner to cover the irritating spiculæ of emetics and poisons: otherwise the most simple water plentifully drank succeeds to our wishes; for many have been relieved from this chronic disease, by this method alone, during which, they abstained from wine. Decoctions of borage, succory, pimpinella, fumitory, chervil, dock, river crabs and other common temperants, have done no little good.

With the above medicines the *paregoric sedatives* may be joined, namely, nitre and camphor, mineral anodyne liquor, &c. Sometimes antispasmodics are of use, such as, balm and the flowers of lavender, castor, orange flower water, pulvis de gutteta, &c. nor are narcotics forbid in more urgent cases, to wit, diacordium, SYDENHAM'S anodyne drops, and others of this kind. *Stomachics* and *carminatives* also suit this disease, namely, flowers of chamomile, so justly celebrated by many; mint and sage, anise and fennel, elecampane and rhubarb, Peruvian Bark

and cascarilla, extract of juniper and of wormwood, theriac, &c. Lastly, as occasion requires, we may call in the aid of absorbents, anthelmintics, martial preparations and aperients, sudorifics, antiscorbutics, &c. by which the various causes drawing the stomach into consent, are usually attacked. Moreover, these are assisted by emetics, demulcents, laxatives and carminatives.

It is indeed of the greatest moment in the cure of these species of pains, closely to attend to the matters lodging in the stomach, which produce the signs mentioned; for instance, whether they tend to acescency or alkalescency, lest after exhibiting the senseless farrago of remedies, the whole cure should be directed by the *juvantia* and *ludentia*. For the *acid matter*, after premising diluents and evacuants, is sometimes overcome by absorbents alone; to wit, chalk, coral, crab's eyes, magnesia, and others of the like nature. But the *alkaline matter* is treated with contrary remedies, namely, nitre, lemonade, and other acidulous drinks. But all these remedies are known to be often inert, and physicians having exhausted the resources of the shops, usually fly to mineral waters, as to the sacred anchor. Lastly, if other circumstances admit, a demulcent diet, namely, of milk, rice, barley, &c. has been serviceable in many cases. But the cure is without success, unless regard be first had to the primary disease.

As to *local* applications, many are used which impart relief, among which are emollients, in the form of liniments, fomentations, poultices laid to the region of the stomach. For chronic pains the best are aromatic, spirituous, balsamic and camphorated remedies, of which are prepared little bags, liniments, fomentations and poultices. Nor must we reject plasters of pitch, taca-mahaca, bay-berries, &c. Warm baths or semicupia have benefited some, nor are pediluvia useless. Lastly, many who after a long and tedious cure were failing fast, and not at all relieved, gave up all remedies, and by keeping the epigastric region well covered, and adopting a suitable regimen, have been gradually restored to health, beyond all expectation.

ILEUS. COLIC, ILIAC PASSION.

THIS affection takes its name from the intestine Ileum, although very often unhurt; and it not rarely attacks the cæcum and colon; and even the rectum. It is also called *Volvulus* from

rolling up, because the intestinal canal, on account of the mutual reception of its parts is so entangled, as to appear twisted. Lastly, from the dreadful vomiting, the anxieties, and extreme pains with which the sick are tormented, it is known by the barbarous name of *miserere*. The *Ileus* mostly comes on with a gentle pace, at which time also the matters contained in the stomach are first vomited up, then the bile is thrown out, which is followed by chylaceous matter; lastly, as the disorder proceeds, not only the alvine fæces, but even injections and suppositories are sometimes cast up by the mouth. In the mean time the belly is confined, the abdomen swells or is puffed out. *Tormina*, not rarely about the umbilicus, prevail; respiration is impeded, a hiccough arises, and immediately afterwards follow convulsions, faintings, cold sweats, coldness of the extremities, &c. Poisons, emetics, or other acrid matters may bring on *Ileus*; the *crapula* promotes it, also convulsive Colic, constriction of the intestinal tube, from hernia or other cause; and numberless organic faults concealed in the abdomen: to which may be added, violent anger, excessive running, &c.

From a proper examination of the matters rejected by vomiting, the seat of the disease is easily discovered. For those only that are collected above the obstruction, suffer the retrograde motion. Nor is the tracing of the affected part without its use, since from attending well to this, a more accurate *prognosis* may be formed, and the mode of cure become more clear. *Ileus* is numbered among fatal diseases, especially if there occur intense fever, acute pain, swelling of the abdomen, or other marks of internal inflammation. A cessation of pain, while other symptoms prevail, portends gangrene, which in a short time, for instance on the third or fourth day of the disease, sends the sufferers thither, whence all return is denied. Sometimes however this disease is protracted longer, to wit, for a week, and even months: which it is evident depends on the different cause of the disease.

It is known, as above hinted, from *dissection*, that the intestine ileum is not more frequently injured than the cæcum, colon and rectum; wherefore what remains to be treated of will be understood by all. There appear then in many the intestines beyond measure distended, seized with inflammation, or tainted with gangrene, and sometimes torn: whence from the abundant matters which they contained, arises a kind of dropsy, by which the abdomen is anteriorly swelled beyond measure. Abscesses every where present to view through the whole tract of the intestinal tube, or schirrous protuberances, by which the canal is altogether closed. In like manner it is obstructed by

hardened fæces, by concretions of a gypseous nature, by knots of worms, &c. There are discovered *susceptions*, or *insheathings* of the intestines; concerning which this occurs worthy of note, that this *ingross* becomes mutual, sometimes by the superior part, and *vice versa*. But we must not omit to mention that these duplications are observed in many, who had never been afflicted with the Iliac disease.

The intestines are very often met with, shut up by herniæ, or so drawn up, as to appear tied with a string; sometimes also entangled or intertwined, or their convolutions seem as if tied in a knot. Lastly, they are sometimes shut up by the compression of a tumor situated without the tube; by the mass of some stagnant liquor, &c.

The *cure* of this affection is to be hastened, since there is the greatest danger in delay. Yet it is necessary in the first place, strictly to enquire whether Colic proceed from hernia; which is not always conspicuous, especially in women. What is to be done in such a case, even the most inexperienced understands. Otherwise venesections afford immediate relief, both in reducing and preventing inflammation. Having emptied the vessels, demulcents are justly celebrated, namely, chicken water, oil of sweet almonds, fat broths, emulsions, flax-seed tea, &c. The paregoric sedatives are also successfully used, namely, nitre, camphor, mineral anodyne liquor, &c. Nor after premising these, must narcotics be omitted; viz. liquid laudanum and others of that kind, by help of which the bland laxatives may be rendered more effectual, which usually are of great service. But when there is neither suspicion of hernia nor inflammation, we may exhibit leaden balls, or a pound of quicksilver, or even two, in water or suitable broth. It is proper by the bye to remark, that in these circumstances a profuse ptyalism has sometimes been brought on.

Moreover, emollient injections and purgatives, even stimulating, are recommended through the course of the disease. Some, following the example of HIPPOCRATES, attempt to inject air into the anus, by means of a smith's bellows; but this method is not without danger, and is proved by experience frequently to occasion very excruciating tormina, by which the disease is exasperated, and in no wise relieved. Some have thought of an instrument in cases like these, which DEKKERS was careful to delineate, by means of which the smoke of tobacco is blown into the anus, whereby a kind of revulsion is excited, with very happy effect in many cases. Among the more common remedies are enumerated *local* emollients, namely, fomentations and poultices, also baths or semicupia of warm water,

or of emollient decoction or olive oil. With these are joined animals opened alive, and their caul or skin applied in the natural heat. Lastly, liniments made of lard and camphor are celebrated by some. Others extol very highly, cataplasms made of mint, theriac, &c. but to confess the truth, these external remedies are often used without effect, and I have believed that at times they could not be applied without danger.



CHOLERA. PURGING AND VOMITING OF BILE.

THIS is a most terrible and rapid disease, which suddenly comes on, and often prevails in a fatal manner during the *dog days*. *This affection is known* by vomiting and purging taking place at the same time; but these marks ought to be considered uncertain, since a depraved digestion of aliments, altogether void of danger, occasions it. Wherefore it is necessary to add to these *marks*, that there are more violent symptoms which give the character of Cholera; namely, very acute and burning pain of the bowels, a swelling of the abdomen resisting pressure, heart-burn, hiccough, anxieties, faintings, intense thirst, a pulse unequal, intermitting and feverish; convulsions, contractions of the limbs, cramps of the legs, cold sweats, coldness of the extremities, &c. Cholera, encreasing often in the course of twenty-four hours, is fatal; or it is protracted to two or three days. Matters are observed gushing in a full stream both ways, bilious, greenish, rusty, black, &c. Concerning the other species of Cholera, which they call *dry*, vastly different from this at present treated of, we have made some mention when on the subject of *flatulency*; therefore we will not serve up the same dish twice.

The Cholera, to which the bilious and passionate are subject, may be *brought on* by *melons and cucumbers*, mushrooms, and other aliment of a bad kind, by drastic, (very powerful) purges, and poisons. It attends some fevers, inflammation of the lower belly, or other oppressive disease. It appears under various grades, the lighter of which, not presenting the true type of the disease, are without danger. But the affection is thought *dangerous*, if the symptoms above enumerated prevail, especially when there is no previous evident cause, and matters issuing both ways differ in smell and colour from the natural character.

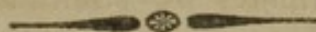
It is known by *examining the bodies*, that the bile is exuberant in its proper receptacles, by the redundancy of which, the or-

gans of digestion are defiled. In some cases the *ductus choledochus* is inserted near the *pylorus*, on which account it had thrown out the Bile into the cavity of the stomach itself, into which also it is sometimes implanted: The liver is found obstructed and hardened, affected with inflammation, or deformed by gangrene. Lastly, injuries of the other viscera are every where observed, to mention which, we have thought would be foreign from our design.

The cure is performed by the more simple remedies, nor is the unintelligible farrago of remedies brought forward by authors worth a pin, by which indeed the wiser precepts of medicine are overturned. They do great mischief, who confidently prescribe venesection here, since by drawing blood they often accelerate death. Nevertheless, under different circumstances it is allowable to open a vein, but these occur very seldom, and in distinguishing them numberless self-styled physicians are altogether in the dark. Emetics and cathartics add spur to the racer, which therefore ought to be banished; yet sometimes may be given with propriety, if the strength will bear, cassia, tamarinds, and other mild laxatives. Absorbents are of service in some cases, namely, testaceous preparations, crabs' eyes, and other earthy substances which are qualified to envelope the vellicating matters. But *astringents* are discarded by all judicious physicians, especially in the first stages of the disease, notwithstanding these remedies are exhibited by the unskilful, contrary to experience, which at the decline of the disease sometimes give relief.

It is expedient to hasten to more *salutary remedies*, which are taken from the class of diluents and demulcents, nor are any others to be freely drank in this stage of the very alarming disease: the most useful and efficacious are, simple water, or impregnated with lemon juice, or mineral acid; chicken water, and whey, which ought each of them to be given as aliment altogether, or with a liberal hand; nor are the common cooling and demulcent injections less beneficial. Milk, fat broths, oil of sweet almonds, and others of this kind are of surprising use, if there be suspicion of poison. After premising what are necessary, (hypnotics) anodynes and antispasmodics do good, if a drastic purge be the cause, or any other matter irritating the stomach and intestines: with which view laudanum and diacodium are successfully administered, the anodyne tincture, and tincture of castor, &c. But we must proceed cautiously with these remedies. Their place may be answered by stomachic roborants, namely, diascordium, theriac, and confection of hyacinth, which nevertheless cannot be safely prescribed

until after eight or ten hours from the first attack. There is no good to be expected from local applications to the stomach in this very rapid disease : emollients indeed might be successfully applied, but the perpetual tossings of the sick scarcely admit of them.



DIARRHÆA.

A FLUX of the bowels without blood, has a three-fold appearance, for sometimes it is called *genuine Diarrhæa*, sometimes it is named a *Cæliac Flux*, at other times it takes the name of *Lientery*. A frequent discharge of muckish, bilious, mucous, fatty matters, &c. produces the common *Diarrhæa*; this is attended with loathing of food, anxiety and fainting, flatulency, and (borborygmi) rumblings of the bowels, pains of the intestines, (tenesmus) continual inclination to stool, swelling of the belly, cramp of the legs, &c. in which situation the urine is passed in small quantity, reddish and muddy. The *Cæliac Flux* is known by stools of a whitish, milky, and slimy kind. This affection, arising from the entrance of (chyle) the juice into which the food is first converted, being prevented into the *lacteal* vessels, is followed by want of appetite and thirst, acid belchings and pains about the loins, which are sometimes attended with fever; the urine also is muddy, and passes in small quantity. *Lientery* is known by food evacuated half digested, or scarcely changed. This disease often follows *Diarrhæa* and dysentery, which also various chronic affections bring on: as it advances, the appetite is sometimes encreased, sometimes prostrated; the strength fails, and other symptoms mentioned, follow: lastly, there is poured out, in small quantity a thick and dirty urine.

These are the *differences* by which the species of Flux without blood are incidentally distinguished; but numberless others occur, which are derived from age and temperament, as also from mode of living, from medicines taken, and other attending or previous circumstances; by a close attention to which is discovered the genuine method of cure. Moreover, numberless remedies are usually given without effect, so that the sick, wearied out with a continued unsuccessful cure, commit the whole business to nature, or fly to old wives' remedies, not rarely more efficacious, unless they seek the advice of the

Clergy. The cachectic, bilious, gouty, &c. are thought *subject* to Diarrhæa; coldness of the feet sometimes *promotes* it, also peculiar aliments, unaccustomed water, &c. If it originate from purgative medicine, it is called *hypercatharsis*, (super-purgation.) Infants are subject to the Cæliac Flux; but the scorbutic are liable to lientery.

Diarrhæa often terminates by vomiting, great discharge of urine, or sweat; when recently caused by cold air, waters or aliments, it is *void* of danger and ceases in a short time: but when long continued it is thought dangerous, or when proceeding from an internal cause, especially if the strength fail. It is thought the more dangerous, the more the stools depart from the natural state in colour and smell: lastly, it is a sad case if attended with severe symptoms, namely, with fever, intense thirst, tormina and tenesmus, anxiety and hiccough, cold sweats and fainting, &c. The *bilious* Diarrhæa sometimes runs into the cholera morbus, or ends in dysentery. The *adipose* or *fatty*, which they call *colliquative*, brings on (marasmus) a wasting of the body. Sometimes the *purulent* is thought healthy, since by this means, abscesses lurking within are often exhausted; at other times it tends to death. Diarrhæa in acute diseases is often considered critical; but it does not shew this type in the first stage of the disease. We have above declared that in diseases of the breast it is often mortal. If Diarrhæa afford no relief in dropsical cases, it hurries to the grave. It is a bad omen in wounds, and especially of the head. It is not a little hazardous to pregnant women, and endangers the lives of *puerperal* ones: lastly, it carries off consumptive patients. As to Lientery, it is thought fatal at all ages, but it soon shortens the lives of aged persons. Yet the *Cæliac Flux* is judged favourable, if it owe its rise to the predominance of mucous matter; but when it depends on a certain organic fault, we may give the patient over.

Dissections discover a very great quantity of mucus infesting the first passages, whence the *chyle* with difficulty gets to the mouths of the lacteals. There are seen inflammations, ulcers, gangrenous spots, and putridities, both in the stomach and in the intestinal tube, the delicate silken coat of which is often found abraded. After a Diarrhæa originating from dysentery, we meet with very numerous cicatrices, by which the mouths of the lacteal veins are closed. The intestines are found connected, or collected into one mass. The liver sometimes of immense size, sometimes very much contracted, schirrous, dry and brittle, seized with inflammation; containing abscesses, or cystic tumors, filled with tubercles or putrid.

The gall-bladder with rusty and blackish bile, or full of stony concretions. The spleen presents of stupendous magnitude, callous, putrid, or like *pap*, becomes fluid by the slightest touch. The pancreas schirrous, and its secretory duct filled with little stones. The mesenteric glands obstructed and very large, many of which resemble the size of a filbert. The omentum very thick and schirrous, or affected with putridity. Moreover, tumors of different nature, sanious and purulent stagnations, or other faults in the abdomen and breast, which are purposely omitted as not pertaining to the subject.

When the pains are very severe, *venesection* helps some, provided the strength will bear it, otherwise it is useless or does harm. We have already noticed that *Diarrhæa* ceases with spontaneous vomiting; hence it is natural to believe that *emetics* would be serviceable, and daily experience testifies it. The (*radix Brasiliensis*) *ipecacuana* suits in this case, which, all agree, excels all other vomits against Flux of the Bowels: Nor are the milder cathartics of less benefit, namely, rhubarb, tamarinds, prunes, manna and cassia, which by gently promoting stool, often check *Diarrhæa*. Having premised these, we may freely use, in *Diarrhæa* from bile, or any other heating cause, *refrigerants*, namely, sorrel, water impregnated with lemon juice, or currants; whey, nitre, &c. which safely guard against Flux of the Bowels from the prevalence of bile. In the same case, as also in hypercatharsis, narcotic sedatives have done wonders, namely, laudanum, diacodium, anodyne tincture, *pillulæ de cynoglosso*, &c. but I have learnt by experience that these last medicines are inert, in serous flux of the bowels, or in other species.

Having attended to these things, we may use *stomachics*, among which are wormwood and lesser centaury, Peruvian Bark, cinnamon and cassia lignea, diascordium and theriac, cypress wine, Spanish wine, &c. If all these remedies fail, we prescribe astringents, namely, *pervinca*, pomegranates and red roses, tormentil, and *simarouba*, sumac, dog-rose or hip-tree, and bark of granates, catechu, dragon's blood, black thorn, extemporaneous syrups of dry roses, quinces, &c. to which may be added preparations of iron, which besides the above mentioned effects, have other virtues. But astringents are not to be used without the greatest caution, for mostly when prescribed imprudently or sooner than is proper, they occasion inflammations or obstructions far more dangerous than the flux to be cured: So that nothing more successful can be expected from exhibiting these ill-timed medicines, than that they be without effect. Lastly, milk, when every thing else

has been tried in vain, very often succeeds to the wishes of physicians ; nor are the various mineral waters less efficacious, to which practitioners flee as to a sacred Anchor.

With respect to febrile *Diarrhæa* ; we recommend demulcents, namely, whey, chicken water, rice water, white decoction, &c. Laxatives also are of service, to wit, cassia and manna, nor are anodynes forbidden, as laudanum, diacodium, diascordium, &c. Lastly, crabs' eyes, coral, and other absorbents, not omitting diaphoretics, and especially the kermes mineral.

The *lientery* is cured by the same means ; absorbents and stomachics seem to suit it best, the more approved are testaceous preparations and coral, wormwood, rhubarb, Peruvian Bark, nutmeg, quince, toasted bread soaked in generous wine, &c. Respecting the *Cæliac flux*, after premising what is necessary, the rhubarb, wormwood, lesser centaury, and other bitters are much esteemed : But when in this disease there is any suspicion of mesenteric obstructions, martial preparations and other aperients may be given with advantage. Moreover, demulcent sedatives or astringent glysters, as occasion requires, have no small effect, in any species of flux. Nor are local strengtheners, applied to the region of the stomach, to be despised. We have noticed above that *Diarrhæa* is often removed by artificial or natural sweats ; hence it is inferred that exercise of the body, travelling, and frictions are beneficial, to which may be added warm baths, clothing made of very fine woollen cloth, and others of that kind which promote perspiration. Lastly, it is well known that *matrimony* has been beneficial in many cases : but perhaps a very cautious diet excels all these remedies ; for animal food, unripe fruits, pickles, &c. are forbidden.

BLOODY FLUX.

THIS, as well as *diarrhæa*, is of three kinds, namely, *dysenteric*, *hepatic*, and *gastro mesenteric*, to which may be added the *hæmorrhoidal*, by which, when associated with *diarrhæa*, many are deceived. To begin with *dysentery* : This is sometimes acute, sometimes chronic, and often prevails epidemically, especially in extremely hot weather, or in autumn. It mostly commences with shivering and fever, which is followed by thirst, great pain called *tormina*, and heat of the intestines ;

stools of a mucous, fatty, clayey, greenish, and bloody nature; frequent desire to go to stool, &c. by which signs it is easily distinguished from the *hepatic*, *mesenteric*, and *hæmorrhoidal*. But these differences do not always clearly appear, on account of the almost numberless grades, in which this affection shews itself. A *dysenteric fever*, at the commencement so gradually comes on, that it often obtains predominance, or is taken for a fever of a bad kind, attended with Bloody Flux. At first the stools are bilious, afterwards mixed with blood; in the mean time the sick complain of foulness of the mouth, loathing of food, want of sleep, and prostration of the strength. Some are troubled with heart-burn, vomiting and flatulency; which as they proceed, occasion stools mucous, like liquid tar, sanious, or containing matter, and sometimes even little fleshy substances are evacuated, like scrapings of the intestines. Lastly, sometimes the viscera seem to partake of *lientery*. It is necessary to bear in mind, that in some epidemics the stools are bloody, while the other symptoms of the disease are at their height; so that then it appears to differ but little from *Cholera*, especially if vomiting come on. It is no wonder, therefore, if this affection should be described by authors under both titles.

The *dysentery*, when mild, namely, free from fever, and bringing on no alarming symptoms, is called *benign*: on the contrary, when violent and contagious, on account of the severity of its symptoms it is named *malignant*; during the prevalence of which, the fever becomes violent, and clear blood is sometimes passed by stool; the tongue seems dry, covered with mucus, and very much chapped, the mouth disfigured with little apthous ulcers, profuse vomitings break forth, and the skin is marked with purple spots: To which may be added, that hiccough, delirium, convulsions, and other terrible symptoms usually accompany the malignant fever. From the pains about the navel, as also from the liquid or very thin stools, it is reasonably conjectured that the small intestines are affected; but the disease gradually reaches to the larger, and excites most severe *tenesmus* (frequent desire for stool) from which sometimes arises prolapsus ani, and indeed in some who are very lean, the anus remains paralytic, relaxed or open, presenting indeed the most loathsome appearance. Gouty and scorbutic persons are liable to *dysentery*: bilious fever promotes it; snow water, unripe fruit, and other aliments of a bad kind; very powerful purges, called *drastic*; the air of camps, hospitals, and prisons, or tainted by crowds of people.

The *hepatic flux* ought to be classed among the rare disorders, unless, as is customary, discharges resembling it are called by this name. The genuine is known by slightly bloody stools, or like the washings of flesh: it is attended with slow fever, as also loathing of food, and bitterness of the mouth: besides flatus is discharged; the urine made is bilious, the right hypochondrium swells, with pain and resistance to pressure: the face puts on a dirty appearance, cough and difficulty of breathing come on, lastly, blood flows from the nose or mouth. Some of the ancients have rashly taken this affection for a kind of inward piles: but observations taken from *dissection* seem to prove that the liver was not undeservedly accused by the ancients. Moreover, the blood from the hæmorrhoidal vessels, or piles, coming from within is evacuated clear, and never intimately mixed with the *fæces*. Add also that *jaundice*, inflammation of the liver, and other diseases of that organ, often bring on *hepatic*, or *liver Flux*, to which besides, hypochondriacs are thought *subject*, who are perpetually complaining of the liver.

There is another *Bloody Flux*, in which the blood is discharged in great quantity, differing very much from the *dysenteric*, *hepatic*, or *hæmorrhoidal*, which on account of its double origin is called *gastro-mesenteric*. The *dissection of bodies* teaches that this species of hæmorrhage arises from the ruptured vessels of the *stomach* and *mesentery*, hence is understood why bloody vomiting should mostly take place. The blood discharged by stool, from the different degrees of delay in the first passages, and from the various seat of the disease, namely, sometimes in the stomach, sometimes in the small intestines, or in the large, has a multiplied appearance. Wherefore it is found either clear and florid, or much mixed with alvine *fæces*, and muddy: sometimes without smell, sometimes very offensive, according to the longer or shorter duration in its passage, before evacuation: For in proportion to the delay of the intestinal tube, it varies its appearance, and contracts different degrees of *fætor* or smell, and from this putrid fluid there arises a kind of very destructive poison, which not only brings on faintings, but also death. From the black colour of the stools, the *gastro-mesenteric Flux* has been called by HIPPOCRATES the *black disease*, to which practitioners know that the melancholic and scorbutic are *liable*.

There is scarcely any thing *to be feared from the mild dysentery*, but in the severe, the hope of health depends on *sweats breaking out*. The case is dangerous, if fever encrease, torminage, the strength fail, vomiting break forth, hiccough come on, apthæ appear, and the belly subside: if the stools are uncommonly offensive, or mixed with matter, or scrapings of the

villous coat; lastly, if as the other symptoms proceed, the pains altogether cease, the limbs become cold, &c. When during the severe pains about the navel, blood is excreted in great quantity, inflammation of the small intestines is at hand, which usually soon terminates in death. Dysentery of infants and old persons excites great alarm, as also that of *cachectics*, scorbutics, and women in childbed. It is well to know that this affection when removed is apt to recur, unless its return be prevented by a proper regimen; otherwise it runs into a very obstinate *diarrhæa*. Moreover, physicians after HIPPOCRATES have observed, that from dysentery checked too soon, the matter of disease rushed to the liver, which was affected with purulence, to which we may add, that asthma and dropsy not rarely have the same origin. Concerning *dysentery without blood* (*dysenterie blanche*) or *white dysentery*, we have already noticed that it is no less dangerous and scarcely differs from cholera. The *hepatic*, or *liver Flux* is less severe, but far more obstinate, and frequently brings on *cachexy*, dropsy and marasmus.

The *Gastro-mesenteric Flux* is doubtful on account of the greater expense of blood, or putridity contracted from the very long retention of this humor; from which double cause we have above remarked that the symptoms become more severe. It is thought fatal if associated with putrid fever, or other disease of doubtful event. Lastly, persons who have had one or two attacks, ought to guard against its return.

On dissection after death, the bile is discovered greenish, dusky or black, lodged in its proper receptacles, and in the cavity of the intestines. These viscera are found dry like parchment, unusually turgid with flatus, seized with inflammation, filled with pus, eaten with ulcers, sphacelated and torn. There are also perceived in them tubercles, schirri, callosities, &c. Lastly, they are found grown together, or agglutinated one to the other. The stomach is injured in many ways, to wit, ulcerated in holes, obstructed, schirrous, &c. The liver, affected with a paleness, receding from its natural size, dense and firm, mortified and putrid. The mesentery obstructed, suppurated and gangrenous: The omentum, greenish, schirrous, and putrid. Moreover, the spleen is found tumid, and like thin paste. Not to mention other faults, and various matters fluctuating about the viscera.

Those who die of *hepatic Flux* exhibit the liver partly putrid, or evidently affected altogether; and its proper covering, like a bag, often containing a matter, sanious, or like the washings of flesh. In some the viscus is found inflamed and obstructed, without putridity. Whether these last have laboured under

genuine hepatic Flux, is doubtful. From examining these defecations, may we not infer that *hepatic Flux* principally depends on a putrid dissolution of the liver? But by what way this matter gets to the intestinal tube is not obvious. Yet if we are allowed conjecture, we think that this colluvies, by means of the well known biliary duct, is thrown into the cavity of the intestines: although it does not appear clearly how, after so great a destruction of the viscus, the branches of this vessel should be preserved entire. Lastly, this is not to be omitted, that the liver is sometimes found tainted as just described, yet without any previous *hepatic Flux*, which perhaps ought to be referred to the destruction or obliteration of the said secretory ducts, or to the passage of this matter to the intestines being denied.

In those who fall victims to *gastro-mesenteric Flux*, the jejunum and ileum are found inflamed, turgid with flatus, and marked with spots like gangrene: But above all, the colon is beyond measure expanded with flatulency. A black, bloody and stinking matter contaminates the whole tract of the intestinal tube, and in many cases is collected within its cavity in great plenty. Concerning the seat of the disease, nothing certain can be established, since it is observed sometimes in the stomach, sometimes in the small intestines; but more frequently in the *Cæcum*, above which there appears at that time, not the least vestige of blood. Moreover, the omentum and mesentery are found emaciated and contracted. The liver, in some cases obstructed, schirrous, or dry. The splenic and mesenteric vessels, now turgid beyond measure, now altogether emptied. But it is necessary to note, that all these faults are detected also in many, who have never suffered the mesenteric Flux.

The cure of *dysentery* is commenced with venesection, provided the pulse and strength admit. Having depleted the vessels, an emetic is very serviceable. The *ipecacuana* which in this case bears the title of a specific, scarce excels the rest; nor is the *cerated glass of antimony* more beneficial, although celebrated in our day with the highest praise; which notwithstanding, unless I am deceived, is now becoming out of use. Laxatives are safely prescribed, namely, manna and tamarinds, rhubarb and catharticum. Demulcents are in extensive use, such as chicken and veal broths, rice and barley waters, whey, the white decoction, oil of sweet almonds, spermaceti, &c. Some prefer, if fever do not forbid, milk boiled with three times the quantity of water and exhibited freely. Refrigerants also deserve

praise, namely, water impregnated with lemon juice or nitre, decoction of pimpinella and greater comfrey, &c.

These being premised, *sedatives* have a wonderful effect; both paregorics, as camphor and mineral anodyne liquor, and narcotics, as laudanum, syrup of white poppy, SYDENHAM'S anodyne drops, and others of that kind, which may also be suitably joined with cathartics, provided there be no suspicion of gangrene. Vulneraries and balsamics are useful, as St. John's wort, and pervinca, balsam of capivi and Lucatellus, and other such like. Diaphoretics are useful in some cases, as scorzonera, China root, guaiacum, &c. The common absorbents may also be given with advantage; but stomachics and astringents ought to be cautiously exhibited, by the well timed administering of which the cure is often completed: in this number are red roses and pomegranate, tormentil, and simarouba not undeservingly celebrated by *recent* practitioners, acacia, mastich, alum and martial preparations, diascordium, theriac, &c. Lastly, no one is ignorant of the singular efficacy of milk diet, and of the surprising virtues of the different mineral waters, which after the unsuccessful use of even the most exquisite remedies, may answer the wishes of the sick.

Demulcent and cleansing injections must not be omitted, which are properly administered at the commencement of the disease, and through the whole course of cure; the more suitable demulcents in the first stages of the disease are prepared of milk, broth of tripe, or the heads of sheep, of decoction of althea, mullein, flaxseed, &c. Detergents succeed these, which consist of St. John's wort and pervinca, red roses and conserve of the same, yolk of egg, honey, turpentine, &c. with which camphor is often not unsuccessfully joined. But *local* applications do little good, as well emollient as roborant, except that they cause some little ease. These are the remedies used in general against every species of dysentery, but every one knows that there needs a choice, according to circumstances. Wherefore if this affection tend to malignity as it is called, we must adopt a fixed method; to this we may add, that the same mode of cure is not suited to *each epidemic constitution*, for example, bleeding, according to the certain temperature of the air, or different nature of the disease, is sometimes salutary, sometimes fatal; the same may be said of ipecacuanha, simarouba, milk, &c. Nothing therefore is to be left undone, first of all to discover the character of the disease, or of the miasmata lurking in the air: otherwise we must try remedies with caution; since very often the way of cure is not discovered till after various experiments.

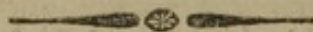
A want of observation forces us to embrace in few words what remains to be said of the *cure of hepatic and mesenteric Flux*. To begin then with hepatic Flux; from all that is written on this subject, and from our own observations, we learn that various temperant plants, aperients and bitters, have not undeservedly been called *hepatics* by the ancients, since after premising what is customary, nothing perhaps more efficacious, is found against this disease, provided it have taken deep root: the more select and commonly used hepatics, are agrimony, succory, dandelion, and hartstongue, lesser centaury, rhubarb, &c. Some other helps on occasion are called in, such as absorbents and stomachics, the stronger aperients and sudorifics, which seem to have done good in many cases. But milk given at proper times, when the stomach will admit, I have experienced to emulate the virtues of the choicest. As to the cure of *gastro-mesenteric Flux*, we must first give diligence to clear out the blood lodged in the intestinal tube, lest by longer delay it contract a poisonous putridity: nevertheless injections alone may be given with this view, but with great caution, lest hæmorrhage be promoted. After these remedies, the antiputrid acids are of singular service, which not only check the hæmorrhage, but even prevent the corruption of the stagnant blood: chicken water, or rice water impregnated with lemon juice or essence of *rabel*, is indeed preferable to the rest. In some cases the natural balsams have done good, namely, the Peruvian, tolu, &c. Decoction of camomile taken inwardly, or injected by the anus, is said also to have been serviceable. A cathartic medicine completes the cure; which nevertheless must be prescribed in such manner, that the sick may incur the least danger of a return. Many things on the character of this last disease, and its cure, are accurately set forth in the *MEDICAL DIARY* of *March 1758*, and *December 1760*, which it will be proper to consult.

TENESMUS.

NO one is ignorant that a frequent desire to go to stool, is thus called. Sometimes only the effort to evacuate is excited, sometimes there are excreted, together with the fæces, mucous, bloody, or purulent matters. Tenesmus (*epraintes*) as above noticed, usually attends dysentery, and diarrhæa. Calculus of the bladder also promotes it, or strangury arising from any other cause. It is caused and increased by the piles, and little worms

called *ascarides*, by exulceration and fistula of the anus, &c. The tenesmus of gravid women is not without *danger*, on account of threatening abortion. But the *prognosis* will be various, according to the primary disease of which it is a symptom, on the accurate view of which the principal point of cure depends.

There want not, nevertheless, some suitable *medicines*, which may allay irritation from any cause; of this kind are emulsions, chicken water, rice water, whey, milk, &c. and even the milder laxatives are safe, viz. manna, cassia, tamarinds, rhubarb, &c. Absorbents also may be successfully used, as also the various remedies directed for dysentery, which may quiet the tenesmus, when other things agree. But external remedies afford the greatest relief, among which the common demulcents and detergents have the preference, in which may be boiled, if nothing forbid, the heads of white poppy. With the happiest effect also are used semicupia, emollient and resolvent fomentations, of which the best is, the decoction of elder flowers in milk. Of no less benefit is the vapour of warm water, or of the althea, mullein, and others of similar nature. Lastly, the ointment of poplar is highly esteemed, used as a liniment, also deer's fat, oil of eggs, and others of a similar nature.



ALVUS ADSTRICTA. COSTIVENESS.

WE meet with many, of both sexes, who ease their bowels not oftener than every third or fourth day; and there are not wanting some who have been bound for ten or twelve days, although often stimulated to stool: but long continued constriction of the bowels is very rare, unless aliments be altogether deficient. The belly confined too much is not without danger, but rather brings on other inconveniences, and indeed occasions grievous diseases; for those who are costive complain of flatulencies, piles, gripings and anxieties; of bitterness of the mouth and loathing of food. Sometimes the abdomen swells, the head is affected with vertigo, the breathing is somewhat hindered, and the strength fails. From the same source sometimes proceed inflammation of the belly, ileus, epilepsy, apoplexy, &c. yet in the greater number, this inactive state of the bowels does not impair the health; it is common to melancholics and hysterical persons, to the scorbutic and gouty. This morbid disposition

attends the studious, and lastly, it is produced by very copious sweats, a milk diet, &c.

From *dissection*, the intestines are found unusually obstructed and distended with abundance of food, hardened feces, and a kind of mucous, dried matter; or containing a very great quantity of wind, or knotted in various ways. The duodenum especially is found stuffed with the remains of digestion. The colon and other large intestines, obstructed with feces compact and almost like stone. Fleishy excrescences of a great size are observed in the intestine ileum, callosities, or tumors having the nature of cartilage, by which the tube is narrowed or altogether closed. The said organs are presented to view putrid and gangrenous, not seldom torn, with staginations of matters collected before in the cavity of the abdomen. There are observed here and there coalescences of the rugæ or wrinkles, or cicatrices by which the canal is made narrow. The colon much enlarged, is removed from its place. The rectum also attains almost the same size, which is often filled with a kind of whitish matter, like plaster of Paris. Moreover, the stomach is not seldom perceived thrust from its situation. The liver, schirrous, with the gall-bladder emptied, or abounding with stony concretions. The omentum, very thick, and grown to the intestines. Tumors every where arising from the stomach, mesentery, uterus, vagina, and other parts, by which the intestinal tube is often compressed. Finally, the bladder appears turgid with urine, almost to bursting, or containing vast stones. To which we may add various faults of the brain and spinal marrow, which bring on palsy of the intestines.

Costiveness, whereby the functions are not at all prevented, is void of danger, and requires no remedy; for there are many examples of persons attaining a great age, or enjoying very good health, who have not eased their bowels until after three or four days. But the case is otherwise, if from sluggishness of the belly there arise various inconveniences, which bring on inflammation, ileus, most violent cholic, immoderate piles, and prolapsus ani. On which account nothing is to be left untried in order to prevent by timely remedies, these misfortunes. It will be obvious to every one, what is then to be done; which it is proper to run over in a few words.

Venesection sometimes does good, especially in plethoric cases, or in those liable to inflammation. But among the most approved remedies are classed diluents and laxatives, as whey, decoction of white beet, the herb mercury, dock, red cabbage, raisins, and damascene plumbs; cold infusion of the

flowers of mallow and althea, oil of sweet almonds, cassia, manna, tamarinds, &c. Peruvian Bark is useful in some cases, exhibited daily in refracted doses; *Stahl's* pills, and syrup of gentian. Crude tartar has been of great service to some in the quantity of six drachms given in broth. As to cathartics, namely, rhubarb, sal polychrest, rupelle or Epsom, folia orientalia, &c. they ought rarely to be prescribed; because, after the evacuation which they promote, the belly remains more dry.

Many receive benefit from *rye bread*, cold meat, milk quite cool, pot-herbs, ripe summer fruits, papaws, boiled apples, &c. Drinking rye, prepared like coffee, is recommended by some. The morning air, breathed in an open place, assists many. Some have drank, with good success, a large cupful of water at going to bed; to say nothing of numberless old wives' remedies, which are not always to be despised. But emollient and purgative *injections* deserve no little praise, into the composition of which oil and butter enter; common culinary salt, diaphœnicum, catholicum, and electuaries of that kind. Let the stools be solicited by means of suppositories, made of wax, lard, soap, boiled honey, butter of cacao, &c. the efficacy of which is encreased by salt, jalap, agaric, aloes, colocynth, euphorbium and others of that kind mixed with them, which stimulate the bowels to a discharge. Ointment of sow-bread in the form of liniment applied to the abdomen, and directed for infants, is little valued by physicians; but the simple and emollient baths and semicupia are more esteemed: All these remedies however are inadequate to overcome the disease; if after the imprudent use of absorbents, or from any other cause, the *fæces* becoming very dry and hardened, should stick within the intestine rectum even more than usually distended: In which case they ought to be cut by a spatula introduced within the anus, that they may afterwards be brought away by the help of injections. I know a very noble Lady, who being by degrees accustomed to this method, emptied the bowels by this art alone, twice or three times a week, at pleasure. Lastly, there are not wanting some, who laying aside all medical means, open the bowels satisfactorily, by walking a little while barefooted; although they often incur danger of colic.

COLIC PAIN.

IT is evident that this affection takes its name from the intestine of the same name; (Colon.) But setting aside the derivation, almost all acute pains whatsoever affecting the abdomen, are usually thus denominated, the seats and characters of which mostly lie in obscurity; on which account, whatever has been written by authors on this subject, seems dark and intricate, or full of scholastic stuff. It is plain from hence, how difficult it is to extricate the *genuine Colic* from the spurious: No wonder if the incautious and precipitate in judgment should fall into the error which *anatomical examination* discovers, and the sick suffer for. Among so many intricacies, there is need of an *Ædipus*: therefore we leave a more accurate treatise on this subject to those whose delight it is to frame hypotheses: on which account we have undertaken to treat of those things only, although not perfectly clear, which we have collected from our own notes, as appeared to us more consistent with reason and experience, in *laconic stile*, according to *our custom*. By the name of *Colic Pain*, we wish to be understood that troublesome and griping sensation which affects some one part or other of the series of intestines, which, consisting of a four-fold order, exhibits so many *species of Colic*, namely, the *bilious*, *flatulent*, *spasmodic*, and *saturnine* or *leadén*; concerning which it is necessary to treat separately.

Bilious Colic is known by thirst and bitterness of the mouth heat of the intestines, and a well known appearance of matter, discharged by vomiting or stool. The pain for the most part severe, now infests one part, now creeps from one to another; at other times it seems to pervade the whole tract of the intestines. It is referred to the *navel* when the jejunum and ilium are affected: to the back if it invade the duodenum or beginning of the jejunum; it rages in the epigastric and hypochondriac region, or is propagated to the groins as oft as it rushes to the colon. Lastly, many patients complain of a sort of tightness of the abdomen, not unlike being girt with a rope and cry out as if they were dying with agony. The bilious Colic often produces vomiting and purging, which sometimes ends in ileum and cholera, or brings on paralysis and convulsions. Some, during these violent pains, have voided scrapings of intestines, and some, as I remember to have observed, have passed entire portions of the tube. Short is the stage of bilious Colic, but it often recurs with such violence, that it threatens

inflammation. Sometimes on account of the seat of pain, it is taken for *nephritic Colic*, but the *drawing up of the testes* rightly distinguishes the Colic of the *kidnies* from that of the *intestines*. Moreover, the *bilious Colic* is relieved by vomiting and looseness of the bowels, which evacuations afford no ease in the *nephritic*. Finally, the urine is turbid in the bilious Colic, but is observed to be limpid or altogether suppressed in the *nephritic*.

The *bilious Colic* often originates in the *duodenum*; whence it is little wonder if pain fixed in this intestine, should often be taken by the inexperienced for heart-burn, hepatic or *nephritic Colic*. It is necessary to observe, by the bye, that this intestine contains the seed of various fevers, the pains of which are transmitted by the mesentery to the back. From the same source also seem to proceed the anxieties and pains which announce the bilious vomiting and cholera. The duodenum is infested not only by heated or exuberant bile, but often is perforated by worms lodging therein; for the bitterness of the bile which is poured out pure into the cavity of this organ, does not hinder the production of worms here.

Flatulent Colic seems to take its rise from a kind of spasmodic disposition; differing little therefore, as to character, from the species hereafter to be mentioned; but on account of the peculiar symptoms by which it is attended, and the different method of cure, we thought it necessary to exhibit it separately. *Rumbling pains* of the intestines, belching and crepitus denote this, inflation of the abdomen, or a resisting intumescence which sometimes encreases to such a degree, that the navel, unequal to restrain the bowels, makes way for their egress; no wonder therefore, if from this tympany there should arise a difficulty of breathing. The pain mostly violent, rarely affects a peculiar part, but often seems to pervade every part of the abdomen. It exercises the greatest tyranny, if it affect the duodenum and the other small intestines, but in most cases it attacks the uppermost part of the colon, or that which lies against the stomach; whence this tormina is scarcely distinguished from pains of the stomach or of the liver, especially if implicated with heart-burn. Lastly, sluggishness and costiveness, and sometimes ileus, usually attend flatulent Colic, and not unfrequently this dire disease brings on palpitation of the heart, faintings, coldness of the extremities, &c.

Spasmodic Colic, no uncommon disease, owes its rise to a cause lurking in the nerves themselves, by which it differs from those that resemble it. It is very difficult to be distinguished, on account of the various seats which it occupies, even in the

same fit; so that now it resembles Colic of the stomach, now the intestinal, again the hepatic or nephritic; and such is the liability to error, that each of these species of pains is attended with nearly the same symptoms, namely, vomiting, costiveness, suppression of urine, tremors, prostration of strength, anxieties, faintings, cold sweats, hiccough, convulsions, delirium, &c. Meanwhile the pulse is found small and hard, and sometimes feverish, the respiration anxious; the pains which, as just hinted, wander through the whole abdomen, often abate, only to return with violence; yet they are sooner removed than if they had originated from a cause remaining in one or other of the viscera. But it is not to be concealed that these pains are often complicated, so that even the more judicious are altogether inadequate to unravel them, unless they be well acquainted with the constitution of the patient, his manner of living, and all the preceeding circumstances. The spasmodic Colic often comes on periodically, which like the other species may be promoted by excess in living, especially in melancholics and studious persons, who are thought obnoxious to it.

The saturnine Colic, commonly called *colique des peintres*, painters' Colic, has a place in the class of spasmodics, unless it proceed from a peculiar and well known cause. Pains mostly remitting in this species, sometimes prevailing epidemically, not only pervade the stomach, intestinal tube and mesentery, or obstinately adhere to a peculiar part of these organs; but even are not unfrequently propagated to the groins, back, breast, &c. The colica pictorum, or painters' Colic, is observed to be more severe and obstinate than the other species, since it is sometimes protracted to the twelfth or fourteenth day; and torments the miserable patients with such cruelty, that they become altogether desperate. The pulse during its continuance is contracted and without indication of fever; the sick are worried with nausea, or vomit up great quantities of bilious and greenish stuff. In the greater number of cases there is belching and crepitus; the urine flows sparingly or is suppressed. The bowels are often so closed, that injections can scarcely be introduced. The belly sinks, and the navel is as it were drawn towards the back, which last sign some take for pathognomonic. The patients are tormented with anxieties, which not only dispel sleep, but even are the forerunners of delirium with raging, or comatous drowsiness. Some are seized with shivering, others suffer pains, contraction or stupor in the limbs, which threaten paralysis. Moreover, hiccough erects its head, convulsions arise, cold and clammy sweats

break out; faintings come on, and other violent symptoms, common in severe diseases. Even when the disease is removed, all are not restored to their pristine health, but rather fall into most obstinate convulsive asthma, jaundice, diarrhæa, &c. To these marks we may add the well known cause of this disease, namely, the poisonous matter of lead, which in various ways injures the organs exposed to it. Painters receive this poison, who mix the various preparations of lead in their paints: Labourers who work in the different manufactories of this metal, and also potters who handle it. Lastly, this fault is contracted by wine adulterated with litharge, by water received and collected in leaden vessels, &c.

Besides these *essential species of Colic*, there occur numberless *symptomatic*, which coincide with the foregoing; for besides hypochondriacs, hysterical and scorbutic, many depend on diarrhæa and dysentery, hernia, inflammation of the belly, malignant fevers, &c. Moreover, checked perspiration, suppression of the menses, and piles, the repelling of eruptions, gouty and rheumatic matter mixed with the blood, stone in the kidneys, teething, childbearing, &c. occasion Colic. Emetics promote it, so do drastic purges and poisons; worms, retained fæces, and coldness of the feet. Sometimes these tormina preceed a fit of intermittent fever, the flow of the menses, &c. But in this number are not included pains of the liver, spleen, pancreas, stomach, kidneys, uterus, &c. which are often imprudently taken for Colic. It is proper to add, that almost all the species of Colic, or other abdominal and flying pains, are mostly occasioned by an excess in living, which evolves the latent cause.

The *saturnine Colic* excruciates the patients with such violence and ferocity, that they can scarcely speak; the most violent may also be considered *spasmodic*, for those who are seized with either, fill the house with their cries, and no wonder, since they are sometimes brought to the verge of life. The bilious Colic does not rage so severely, or excites less fear than the flatulent, which is mostly removed in a short time. Colic Pain is indeed considered more dangerous and obstinate, of what kind soever it be, when it tears a particular part, obstinately adhering to it, than that which creeps from one place to another. Hiccough, shivering and fever, anxiety, fainting, &c. taking place in the pains of Colic, are considered as fatal symptoms. No one is ignorant that Colic sometimes ends in jaundice, dysentery, cholera, inflammation of the abdomen, ileus, &c. Moreover, it brings on violent epilepsy or other convulsive disorder, stupor and paralysis, blindness, &c. Last-

ly, sweats, blood issuing from the nose, anus and uterus, scorbutic efflorescences, gouty attacks, &c. put an end to Colic.

The history of *dissections* affords a very fruitful field for our subject, by which are discovered not only the various ravages pertaining thereto, but also different injuries of the viscera, which were formerly rashly referred to Colic Pain. The intestines therefore are to be seen inflamed, containing abscesses, eaten with ulcers, or disfigured with gangrenous spots, their vessels unusually obstructed, and very conspicuous near the surfaces of these viscera. The intestines, and especially the duodenum and colon, appear transparent, uncommonly turgid with flatus, and sometimes torn. It is well to note, by the bye, on this subject, that the intestinal tube, as also the other hollow viscera, scarcely ever afterwards recover their usual tone, after this enormous dilatation: which I lately observed in a man fifty years of age, who had suffered most violent Colic about fourteen months before, from which time he had complained of a pain in the intestines, although obscure: his body being subjected to the knife, exhibited the principal part of the jejunum, on account of the stupendous dilatation, pushed from its proper seat, mortified and torn in its lower part, as is common in *tympanitis*. The cavity of the small intestines, (to continue the case) filled with greenish, rusty, or blackish bile, or a glutinous and purulent matter. The larger intestines obstructed by hard and dry *scybala* or *balls*, and the colon in some old persons, on account of the unusual curvature of the false ribs, blood-shot. There occur every where through the whole tract of the tube, worms, bilious and stony concretions, different foreign substances which had been swallowed, various nuclei, sometimes bare, sometimes covered with a crust, &c. The very small intestines by mutual adhesion, often resemble a kind of ball. There are met with in the substance of both, callosities by which the tube is narrowed. Lastly, they present to view constrictions, without manifest cause, as though the canal were drawn tight by a thread round it, which is frequently noticed in the end of the duodenum, and is familiar in those who, while living, evacuated fragments of the intestines.

Besides this multiplied injury of the intestines, the stomach appears inflamed, swelled with wind, marked with gangrenous spots: The mesentery is found schirrous and mortified, and containing anomalous tumors and hydatids. The peritoneum is discovered inflamed and purulent or gangrenous, or having a collection of blood in the cellular texture. The omentum presents to view very thick, mortified or putrid, rolled up as it were in a ball, containing bloody or sanious matter, and

its vessels occur obstructed and varicous. The liver is discoloured, obstructed, inflamed, putrid; of a vast size, and full of tubercles and hydatids: from which sometimes proceed tumors of a cystic or other nature. The gall-bladder now tumid with bile, now full of stony concretions, by which the ductus communis is not rarely obstructed; at other times it is empty and wrinkled, or ruptured, with stagnant bile in the cavity of the abdomen. The spleen is perceived pale, swelled, pushed out of its place, and as if fallen into the pelvis. The pancreas schirrous, inflamed, containing pus, ulcerated, sphacelated, or putrid. Sometimes, lastly, the *aorta*, from which the *celiacæ* and *superior mesenteric* take their origin, is found beyond measure dilated: To say nothing of various faults of the kidneys, bladder, *capsulæ atrabiliaria*, &c. and of the different familiar stagnations. But it is not to be concealed that after recent spasmodic Colic, nothing of injury is perceived but flatulence. In fine, it appears as clear as day, from the histories, although contracted, of the bodies of those who die from Colic, that there are many faults of the organs, concerning which we have made mention, after other writers, which pertain to no species of Colic.

No one is ignorant that almost every species of Colic is attacked with the same weapons, namely, venesections, emetics and cathartics; diluents, lubricants, demulcents and anodynes, baths, local emollients, hot cloths, &c. Nor are these remedies used only against the violent pains of the intestinal tube, but also in pains of the kidneys, liver, and other abdominal viscera. Neither ought they to be considered futile, since by their means the excruciating pains of the abdomen, of what kind soever, and in whatever part, are assuaged; and on this account the misapprehensions of the inexperienced, respecting the true nature and seat of the disease, are less to be feared. Nevertheless, the *method of cure* ought to be *varied*, not only according to the part affected and nature of the disease, but also on account of innumerable circumstances, which cannot without blame, be omitted by physicians: Hence it has appeared more adviseable to treat of the best method of cure in each species respectively.

It consists with experience that *venesections in bilious Colic* are more serviceable than other remedies: but diluents and demulcents are not less useful, namely, chicken and veal broth, whey, oil of sweet almonds, spermaceti, &c. the place of which may be supplied by simple water very freely drank. Especial care must be taken to carry off the bilious matter, if nothing forbid, by the help of emetics and cathartics. Anodynes truly

merit no small praise, which repress the violence of the pains; but they are to be cautiously administered, notwithstanding what many authors of the first note, and even SYDENHAM himself, have adduced to the contrary. Emollient, anodyne and laxative injections are more efficacious, and most in use, as well as fomentations; bladders half filled with milk, hot cloths, baths, &c. Lastly, the internal and external use of chamomile is much celebrated, and perhaps not undeservedly. These are the remedies usually given, during the paroxysm; but others, namely, *prophylactics*, are called into use against chronic bilious Colic; namely, milk, and mineral waters, aperients, sudorifics, antiscorbutics and a good many others, according to the primary or implicated disease, or other circumstances, requiring a peculiar treatment.

Against flatulent Colic, sometimes venesection is beneficial; but diluents, demulcents and sedatives are always given to advantage; and laxatives are not without their use. Which being premised, *carminatives*, so rashly despised by our cotemporaries, are of service; of this kind are the leaves of balm, sage, Jerusalem oak, and southernwood; seeds of anise, coriander, and fennel; *balsamum commendatoris* and *fioraventi*, extract of juniper, Salomons opiate, theriac, orvietanum, &c. To which we may add emollient, lubricant, anodyne, and carminative injections, and also the various local applications above mentioned, which are qualified to impart flexibility and softness to the more rigid and overstretched parts.

Spasmodic Colic is mostly exasperated by venesection, and not at all moderated; therefore we must spare the blood; but diluents and demulcents are to be given with a free hand, such as whey and chicken water, oil of sweet almonds and spermaceti, &c. *Sedatives* excel all others, both the anodyne and antispasmodic may be used, viz. a mixture prepared of anodyne drops and tincture of castor, laudanum, diacodium, &c. by the help of which that species of pain is mostly overcome, the cause of which exercises its severity without the first passages, while they only afford ease in other species of Colic produced by some stimulating matter: such is the efficacy of these, that I have seen many reduced, as it were to the last, fixed to the bed, lying as if at the point of death, who, to the surprize of the bystanders, after taking the above mixture, rose up and walked. Laxatives suitably given have afforded present help, especially if wind and feces within the colon have been suppressed by the spasmodic constriction of the intestinal tube; which has certainly not escaped the notice of experienced physicians in this species. After these, the anodyne and carmina-

tive emollients are excellent, to which may be added sea salt, if retained feces be in fault. Nor must we consider as useless emollient fomentations and cataplasms, baths and semicupia, hot cloths, bladders half filled with warm milk, &c.

The saturnine Colic demands a peculiar treatment, although it partake of spasm, in which, venesection is thought not hurtful, nevertheless often practised without effect. As in the preceding species, diluents, demulcents, and antispasmodics are of service; but narcotics are not to be prescribed without great caution, even when mixed with cordials, lest they accelerate palsy, to which the sick are prone. An emetic, even repeated, seems to take the palm from the rest, which, after premising diluents, conduces to eradicate the cause lying in the first passages, and hence to allay the pains of the stomach. Which being done, we may now and then, say every third hour, give one or two ounces of oil of sweet almonds, with an equal quantity of vulnerary water: which simple preparation, although empirical, the illustrious SENAC, one of the chief physicians, considered as proper: it is necessary then to have recourse to laxatives, all other things agreeing. As to injections, the emollient and demulcent are praised, with which are mixed oil of nuts, turpentine, balsam of capivi, oil of anise, &c. But stimulants are considered as more efficacious, which consist of emetic wine, colocynth, &c. not to mention the topical emollients above recommended. Those who have frequently escaped this disease, taught by experience, refrain from wine; for wine, although not adulterated, dissolves the metallic particles that were before inert, and sets them in motion. Moreover, oil of tartar per deliquium, as every one knows, is considered the most excellent among the efficacious *prophylactics*. Palsy, as above hinted, especially follows this species of *saturnine Colic*. The mineral waters mostly remove this affection of the nerves, which being wanting, we may have recourse to the usual remedies, concerning which in their place. But pains of the limbs, also numbered among the remains of this disease, are usually removed by aperients and preparations of soap. In this case the *martial tartar* is very highly recommended, taken in some opening broth. Lastly, let both those who have escaped, and those who labour under this disease, very carefully avoid cold, and especially let them not in the least vary from a suitable manner of living.

The very experienced DUBOIS treated the saturnine Colic by another method, in the hospital, called *de la Charité*; namely, from venesection, oily preparations, and other lubricants and demulcents (freely used by others) he altogether abstained;

but prescribed for drink a diaphoretic *ptisan*, and on the *first day* of the disease he was careful to inject emollient, anodyne and laxative clysters; the *next day* he prescribed glass of antimony or other emetic, and exhibited theriac with a grain of opium every night, which narcotic was repeated on the *third day*, that a stimulant cathartic might be given on the *fourth*, by which he is said to have finished the cure. But whether this method may always succeed to our wishes, and agree with every one, we leave for the judicious to determine.

That we may leave nothing untouched, we will add some observations by way of overmeasure, concerning a kind of fabulous disease, if I mistake not, which is falsely said to be endemic among the *Picts*, as if it invaded those of that country alone; whence the *Colica Pictonum* so much celebrated by recent authors. CITESIUS first mentioned this species of Colic, occurring perhaps to those physicians "*qui nubem pro Junone amplectuntur.*" This author supposes it to belong to *bilious* diseases; and usually comes on, as he says, suddenly with prostration of strength, the extremities become cold, and faintings come on. Meanwhile the sick complain of heart-burn, vomit up greenish bile, and hiccough comes on. The absence of fever does not prevent an intense thirst, the belly is confined, and the urine flows sparingly. The patients complain of a burning heat in the epigastric region, and in the hypochondria, and of very severe pains which wander through the whole abdomen, and often reach to the breast, back, and shoulder blades. The abdomen is constricted, as appears to them, like being drawn together with a cord. The pulsation of the *cæliac* artery, or its branches become evident, lastly, the pains are followed by palsy of the limbs, while feeling remains unimpaired; which lasts for many months. At other times there comes on an epilepsy verging to death, or bringing on blindness for many days; while the judgment continues sound. This species of Colic, mostly ending in palsy, usually exercises the greatest tyranny over the weaker sex, and lastly reduces the aged to the risque of life.

The above-mentioned author adds, *that this disease is produced* by sour and unripe wines, by immoderate exercise, watching and passions of the mind, and is familiar to those who rarely desire to go to stool. He thinks the cure ought to be commenced with venesection, because he had learnt from experience, that the flow of the menses and piles had been beneficial in many cases: but he candidly confesses that he had been not a little frightened by the public clamor of his cotemporaries. After depleting the vessels, he proposes *laxatives*, but the stronger ca-

thartics, although cried up by the ancients, he believed could not be administered without danger. Yet when many of the milder purgatives had been given without effect, he not without reason supposed that *crocus metallorum* or other emetic would be efficacious. He moreover prescribed demulcent clysters, namely of milk, broth of tripe, wine and oil, &c. as also emollient fomentations, semicupia, &c. He finished the cure with aperient temperants, martial mineral waters, acidulated drinks, &c. From which, if I am not deceived, we may infer, that this disease, at that time epidemic in that country, could not be distinguished by any peculiar character from the above described species of Colic; and from what has already been said it more than sufficiently appears, that when these attain to the last grade, they put on the same appearance. Concerning a similar affection prevailing through the whole Roman Empire, which was followed by palsy, epilepsy, &c. PAULUS ÆGINETA has made mention. Various histories of palsy from Colic are given by SCHENCKIUS, and other medical writers: whence it is plain that this species of disease was not observed more frequently among the Picts, than in other countries.*

Nor does the very celebrated TRONCHIN oppose this opinion who has lately written on the subject; since he supposes that this species of Colic running into palsy or epilepsy, was well known to the ancients under various titles: And from the signs given by CITESIUS, he adds that the sick complain of a certain sensation of heaviness for three days before the accession of the disease: when this is severe the navel is depressed towards the back bone, tenesmus comes on, a hoarseness takes place, and the sight becomes dim. Lastly, according to the same author, pains of the limbs, or fits of epilepsy longer than usual, are the forerunners of palsy. From the foregoing we learn, that the Colica Pictorum is not a disease *sui generis* as commonly supposed, and this eminent author seems to subscribe to this sentiment, who is of opinion that various species of tormina occur which may be referred to Colica Pictorum, although they arise from different causes, and require a peculiar method of cure: to transcribe the order of which, and abridge them in few words, we have thought would not be foreign from our subject.

The *first species* follows *fevers preposterously cured*, and brings on palsy, lethargy and convulsions: against which, from the assertion of our author, emetics and drastic purgatives, and even

* It is possible that the too common supposition of this species of Colic being exclusively endemic among the Picts, may have originated from a mere typographical error; the letter *n* being substituted for the *r* in the word *pictorum* (*painters'*) *T.*

narcotics, are of no effect; but he speaks highly of antispasmodics, semicupia, fomentations, cataplasms, and emollient clysters: he prescribes a kind of opiate also prepared of manna, cassia and oil of sweet almonds rubbed together, of which he gives one drachm every two hours, diluted in whey. Lastly, he advises the juice of brooklime, or dandelion, and finishes the cure with acidulated mineral waters.

The *second species* takes its rise from *lead*, copper, cinnabar, ceruss, verdigris, and antimony, and frequently from wine adulterated with *saccharum saturni* or litharge: with which, in those of youthful and vigorous constitutions, venesection agrees. He advises vomiting, then anodynes are to be used, not neglecting fomentations, cataplasms, and emollient clysters, baths, &c. Lastly, laxatives, the basis of which is whey, are commended; to which he adds blisters on the legs.

The *third species*, the author proceeds, is occasioned by *austere and unripe wine*, and acid liquors, against which he disapproves of venesection, emetics and drastic purges: he allows however one or two grains of tartarised antimony, dissolved in a large quantity of water, provided a narcotic be exhibited at night. He does not reject clysters and local emollients, but he has his doubts concerning baths. He proposes oil of sweet almonds, and other laxatives, as also demulcents, viz. chicken water, or milk diluted with seltzer water. Lastly, he completes the cure with martial preparations continued for a month, and longer, together with riding on horseback.

The *fourth species* is called *arthritic* and *rheumatic*, which often brings on palsy and convulsions, in which species, according to this author, venesection is beneficial, if the strength permit. Emetics and the stronger purges are superfluous; blisters immediately applied to the legs are of great use, the suppuration of which should be continued a long time: dry cups, applied to the soles of the feet morning and evening have given relief; the legs also are with advantage fomented with an emollient decoction, or the vapour of hot water. Laxatives and lubricating clysters are proper here. Finally, he has a great opinion of milk diet, riding on horseback, and other exercises of the body, and does not prohibit wine in weak habits.

The *fifth species* owes its rise to *suppressed perspiration*: in which the above cited author supposes venesection mostly to be useful. Laxatives and oily medicines do wonders; dry cups also on the abdomen, or blisters, clysters, demulcents, &c. The infusion of sassafras, or other diaphoretic drink is used with the happiest success. Laudanum, in very small repeated doses, gives relief, with which camphor in a double proportion is

mixed, all which are succeeded by the sulphureous mineral waters.

The *sixth species* he calls *scorbutic*, in which venesection is abstained from; laxatives agree with this, viz. whey, cassia, manna, and oil of sweet almonds, to which we may add clysters of local emollients. Blisters to the legs do good, and lastly, mineral waters, to say nothing of specifics and antiscorbutics.

The *seventh, which is common to melancholics*, he thinks, approaches very near to *bilious Colic*, for the cure of which, venesections, emetics and stimulant cathartics are inert, but let demulcents and laxatives fill every void, viz. chicken water, whey, cassia, &c. Nor does he seem to be afraid of the ointment of sow-bread applied to the abdomen. And lastly, he thinks that we should prescribe acidulous mineral waters, riding on horse-back, &c.

The *eighth species, finally, arising from passions of the mind*, is familiar to the hysterical and hypochondriac; in the cure of which, venesections, vomits and cathartics ought to be banished. We must first endeavour by every mean, that the sick enjoy quietude of mind and body; nor are narcotics forbidden with this view. In the mean time laxative and lubricating clysters usually succeed to our wishes; fomentations and emollient cataplasms, pediluvia, cups put upon the thighs, sinapisms to the legs. Laxatives are not prohibited, nor are preparations of milk despised. Moreover, he gives the last touch to the cure, by Peruvian Bark, and other roborants. It must not be omitted that change of air has been of great service, not only in this species, but also in the other chronic ones.

Respecting palsy, it not unfrequently follows at the heels of almost all these species. He recommends baths, frictions, and exercises of the body; the paralytic members are wrapped in the warm skins of animals recently slain, which it is necessary to repeat frequently: The warm mineral waters are used internally and externally; liniments are made with martiated ointments, &c. The balsam of Peru, gum ammoniac, generous wine, &c. are of no small use. These are the *diseases* which the celebrated TRONCHIN comprehends under the general title of *Colica Pictorum*, to which we have subjoined his method of cure; which although not inconsistent with reason and experience, we think ought to be received, *cum grano salis*.

FLATULENCY AND TYMPANITES.

TO any one, even just entering the threshold of physic, it must be obvious how *meteorismus* or *disease from wind*, takes its rise in the first passages. For the *ingesta*, or aliments taken in, becoming heated by long retention, or any other cause, suffer a kind of solution, whence *moleculæ* of air mixed and as it were incarcerated with the matters broken down, are extricated and evolved. These particles being formed *sui juris*, because of their affinity, are in a short time united or run into bubbles, which are denied entrance into the lacteal vessels, on which account, when grown to a certain size, they make themselves an outlet either above or beneath: We add no more on this subject lest we should seem to be carrying *Owls to Athens*, or *Coals to New-Castle*.

It cannot be doubted, to return to our subject, but that flatus collected in the stomach and intestines, and by the heat of the place prone to rarefaction, occasions the most troublesome dilatation of these organs, whence arises *flatulent colic*: but flatus is often accused undeservedly; namely, where pains proceed from a spasmodic cause, by which the retarded passage of the *fæces*, gives rise to an harmless Flatulence. Do there not daily occur men subject to flatus, affected with rumblings, belchings, and loud *crepitus*, who, even with an inflated abdomen, are altogether free of pain; while others who scarce complain of flatus, suffer very severe tormina?

Belching and crepitus frequently and abundantly breaking forth, *rumblings* of the intestines, inflation of the stomach, hypochondria, and of the whole abdomen, evidently discover Flatulency, which so long as it is not excited by fever, occasions slight inconvenience, if it pass either way. But the case is otherwise when it is confined by any spasmodic constriction, and forced to the utmost expansion; whence the abdomen is puffed out, the belly rendered costive, and the most severe pains take place. From the same source also proceed *nauseæ*, anxieties, faintings, head-achs, vertigoes, difficulty of breathing, &c. Faults in the digestion are known by insipid, acid and putrid eructations, which also the different fetor of the *crepitus* makes known. We have already noticed that dry cholera consists in the very frequent eruption of flatus both ways; for it is often expelled in such abundance that it resembles a mere *æolipile*; which they who unadvisedly check, incur the danger of the most violent

colic, or Tympanites, nor are there wanting various examples of these misfortunes.

From the above it is collected that *Tympanites* is the last grade of Flatulence, or allied to colic, which appears by the stupendous inflation of the abdomen, or swelling, by which the abdominal muscles and skin are so drawn asunder and distended, that sometimes when the belly is struck it gives a sound like a *drum*: but this phenomenon is very far from being observed in all; although by authors, the most of whom after the stupid manner of cattle, tread in one another's footsteps, it is considered as a *pathognomonic sign*: this we have often found to be most false, and have offered it for examination to some physicians who had previously been blinded by these prejudices, and did not blush to confess that they had been deluded by the confidence of others. The swelling of the belly in *Tympanites* is less than in *ascites*, and in every situation of the body preserves the same form and size, and there is perceived no fluctuation, nor does this tumor gradually and in one tenor become increased, as is observed in *ascites*, but often rises to its greatest bulk in a short time; nor does it remain in the same state as in *dropsy*, but has alternate grades.

Tympanites is numbered among chronic diseases, although sometimes it takes off the patients suddenly. This great flatulent tumor of the abdomen sometimes follows hysteria and hypochondriasis, asthma, convulsions, obstruction of the mesentery, costiveness, jaundice, slow fevers, difficult parturition, suppression of the lochia, abortion, &c. which is attended with severe pains in the various parts of the abdomen, about the navel, and in the back: as it proceeds, there come on loathing of food, nausea, vomiting; a cough rises, breathing is impeded; the pulse becomes unequal and frequent, the skin dry and the belly bound. Moreover, the sick are oppressed with an increasing desire of belching up wind, who nevertheless vomit up all the contents of the stomach, and fall into mere ileum, which is followed by entire prostration of strength and atrophy. It is necessary to remark that the flatus, in *Tympanites* is not always confined within the stomach and intestines, but is not rarely contained without these viscera and in the cavity of the abdomen itself, or, what is more common, it occupies both places. If this disease has its principal seat in the stomach, the face is suffused with redness, belchings are more easily and with relief brought up, and besides the epigastric region is swelled so as to threaten rupture. From the same cause arise difficulty of swallowing, suffocation, palpitations, anxieties and vertigoes, &c.

No one is ignorant that Flatulency is very familiar to hypochondriacs, and hysterical persons, the studious and aged, infants and women. The nephritic and gouty, cachectic and afflicted are *obnoxious* to it: acid and nidorous crudities, costiveness, suppression of sanguineous discharges, &c. promote it. It is occasioned by previous severe discharges, by immoderate hæmorrhages, by ill-cured intermittent fevers, &c. Beans, squashes, fish, and many other well known eatables occasion it.

But as the fever comes on the particles of air are extricated, not only from putrid matters lodging in the stomach and intestinal tube, but also from the blood itself, the receptacles of which, as above noticed, are very often found swelled with wind.

Restrained flatus may induce severe diseases, namely, colic, suffocation, Tympanites, ileum, apoplexy, &c. A *windy swelling*, conspicuous by a puffing up of the hypochondria or whole abdomen, argues the *obstinacy of fevers*, which are almost never terminated, until the first passages be cleared of this matter: which appears clear as day from the great inflation of the abdomen in those who die of these fevers. Tympanites is justly numbered *among fatal diseases*, which often like dropsy, is protracted for months, and admits of no cure, if by the enormous and long continued dilatation of the intestines, their tone should be broken. Thirst, as it advances, suffocation, heat of the surface of the body and of the intestines, œdematous swelling of the legs, lixivious urine, prostrated strength, lowness of spirits, anxiety, fainting, coldness of the extremities, &c. as must be obvious to even the most rude and inexperienced, are considered dangerous symptoms. For from strict attention to the forerunners of this disease, and its symptoms, and also the best method of cure, it is easily understood that Tympanites is a mere spasmodic affection, tending to atony. When Tympanites is long continued, it is usually implicated with dropsy, and hence becomes more *difficult of cure*.

The dissections of bodies exhibit the stomach beyond measure turgid with wind, affected with mortification, and sometimes ruptured; the intestines discover the same injury, sometimes filled with numberless flatulent tumors, and at other times containing a very small quantity of feces. But to this amazing dilatation the cæcum and colon are more liable, which in some resemble the thigh in thickness. A less or greater number of worms is found in these canals, the convolutions of which are even knotted in various ways. Flatulency, as already hinted, is collected in the cavity of the abdomen, and without the viscera, so that the abdomen, swelled to an immense size, subsides and becomes flat on being first opened, unless the in-

testines contain some quantity of air. Once, for instance, I remember to have seen in many Tympanites the whole mass of air contained by the peritoneum, while the intestines were altogether free. Moreover, the liver appears schirrous and putrid, contracted and hard; the spleen is also affected in like manner, which now is observed very much encreased in size, now so small as to resemble a spare kidney. The omentum in some altogether putrid, as if wanting. The pancreas is discovered schirrous or tabid, and the mesentery obstructed; to which we may add a serous collection in the abdomen, nevertheless in small quantity. We have purposely omitted various defecations of the lungs, kidneys, and other viscera; little pertaining to our subject.

In order rightly to commence *the cure*, the attention of physicians ought to be turned to allaying the heat of the intestines, and lubricating and relaxing the first passages, for the more easy explosion of the wind. For this purpose, whey and other common diluents have been much esteemed, in the number of which are the various natural mineral waters, which may be given with advantage. Temperants have their own merit, among which the best are fumitory and succory, nitre, vitriolated tartar, &c. Emetics are abdicated by the wiser physicians, unless nausea be urgent; but laxatives may be successfully used, namely, oil of sweet almonds, manna, Epsom salt, rupelle salt, &c. Afterwards the bitter stomachics may come in with advantage, among which the bitter tincture of STAUGHTON, the syrup of wormwood, of gentian, &c. have not the last place. As to *carminatives*, formerly so much extolled, and now so much neglected, the seed of anise and fennel, flowers of chamomile, zedoary, &c. afford no little help, after premising diluents. Various moderns, induced by some trivial reasons, have declared these medicines altogether unfit to work the desired effect; but these opinions have been refuted by the solid experiments of the celebrated HALES, second to none in scrutinizing into the laws of nature. Wherefore, whether carminatives remove or create flatus, we leave for others to examine; but taught by practice, we do not hesitate to assert, that these medicines, taken from the class of aromatics, possess a kind of sedative virtue; this anodyne quality of carminatives has not escaped the knowledge of the ancients, on which account they wisely mixed these fragrant matters with drastic purges, nor was this practice injudicious, which, I know not why, has for some time past been despised by the moderns: in short, carminatives may supply the place of anodynes and antispasmodics, which are not rarely forbidden. Lastly, when

all the above remedies have been given without effect, we must try venesection, provided the strength and age will bear it; but through the whole course of the disease, emollient, purgative and carminative clysters may be advantageously given; baths, emollient fomentations, anodynes and aromatics, dry cups to the abdomen, &c.

When Tympanites, or the last grade of Flatulency, occurs; it is treated by almost the same method, unless on account of the exceedingly violent symptoms, it demand more powerful remedies. Wherefore the diluents, lubricants and temperants, above treated of, are to be frequently used. Some practitioners of credit have highly recommended the coldest water. Laxatives have been very successful; but emetics are most unfit to overcome the disease; it is better therefore to abstain from them, lest we make bad worse. Having cleared the first passages by the help of diluents and laxatives, stomachics, roborants and carminatives may be opportunely exhibited, viz. sage, germander and elecampane, Spanish wine, extract of juniper, elixir proprietatis, &c. Antispasmodics also suit this disease, namely, balm, castor, asafœtida, orange flower water, &c. But these remedies often do no more than afford a little relief, wherefore we must take to the more efficacious, which may pervade the inmost recesses of the body; this is best effected by aperients and diuretics, or salt of tartar and broom, martial tartar, and arcanum duplicatum, (or vitriolated tartar) preparations of soap and iron, but perhaps the various mineral waters excel these. Blood drawn by the lancet, or by leeches has been of use in some cases; but it is proper to remark, that death is often occasioned by ill-timed venesections. We add nothing of antiscorbutics, antivenereals, and other remedies, which may occasionally be called in to our aid.

Respecting external remedies, which may assist the internal, emollient fomentations, cataplasms, &c. are prepared. Some put snow or powdered ice upon the belly; but it is necessary to proceed cautiously with this local application; which nevertheless, a certain mountebank advised with happy success, even contrary to my orders. We may more safely use frictions with hot cloths, with camphorated oil of sweet almonds, &c. all which failing, and there being danger of threatening death, nothing forbids having recourse to a surgical operation. There is certainly no doubt that *paracentesis* suits very well, when wind is collected without the viscera, and perhaps many have seen their last hour, who altogether refused this help. It is certain that this case is not discovered by any art hitherto known: but in a doubtful and very urgent case, is it not better

to try some remedy than none? It appears not moreover, that this operation would be fatal, even if the intestines were wounded: But rather there are innumerable surgical operations, which seem to prove the contrary: add also that rashness often effects, what prudence cannot accomplish.

WORMS.

IT is universally known that *lumbrici*, *ascarides*, *gourd-seed Worms*, and *tenia* or *tape Worm*, are hostile inhabitants of the first passages; to say nothing of various insects, out of the common order of nature, concerning which, VANISLIERI, ANDRY, LECCLERC, and BIANCHY have given an accurate history, who seem to have entirely exhausted this subject; which, to confess the truth, is more physical, or natural, than medical. The *lumbrici*, which are common from the sixth year to puberty, but which spare no age, are known by sour breath, loathing of food, or insatiable hunger; a spitting breaking out at night, the mouth in the meantime remaining dry; eyes inflamed, blueness of the cheeks, gritting of the teeth in sleep, or a peculiar motion of the lips and jaws, resembling swallowing; excessive night sweats, and terror in sleep, from which the sick suddenly awake up. Meantime there come on vomiting, heartburn, rumblings of the bowels, and a most troublesome sense of pricking or biting, which is allayed by food; tenesmus, fluid, whitish stools, cough, hiccough, &c. swelled belly, sometimes much elevated, sometimes depressed, and flattened beyond measure. In some cases a fever comes on, with chills recurring irregularly; the pulse in some is found equal and obscure, and indeed it is sometimes quite obliterated. To these marks we may add various symptoms arising from the generation of Worms, namely, ileum, suffocation, vertigo, convulsive fits, comatous affections, stupidity, delirium, loss of voice, blindness, palsy, fainting, &c.

From all other signs, even more evident, the Worms themselves take the palm; these are passed through the mouth, nostrils, or by stool, in which last way they come in heaps. But often this mark is wanting, because the Worms being killed in the first passages, are soon dissolved, whence nothing but a viscid and glutinous matter, mixed with the feces, is evacuated. With such impetus do these fits of Worms come on, depriving of sensation, that they are taken for genuine apoplexy, if

attention be not paid to the contracted pulse and coldness of the extremities, which excite suspicion of the genuine cause: but those convulsive accessions of Worms, common to children, are with difficulty distinguished from epilepsy, so that there is often need of *Ædipus*, unless its character be learnt from an accurate attention to the history. Besides, Worms are numbered among the symptoms of oppressive diseases: for small-pox and measles promote their formation, as also putrid, malignant, petechial, epidemic fevers, &c. which are therefore by the unskilful called *worm fevers*. The *lumbrici* sometimes bore through the stomach and intestines, out of which they make their way, and roll into the cavity of the abdomen, or getting further, perforate the peritoneum and abdominal muscles: when lodged in the adipose substance they excite inflammation, terminating in abscess, from the opening of which proceed worms, which medical writings testify to have often taken place about the navel and groins.

Ascarides shew themselves, evacuated together with fæces, like *cheese worms*, round and very small. They infest the intestine rectum, and excite tenesmus or very troublesome itching in the anus. In such a heap do they sometimes infest this *den*, that if the bowels are not open they make their way through the neighbouring parts. The *cucurbitini* are thus called from the *cucurbit* or *gourd* seed form, which they bear with sufficient accuracy: they are more conspicuous than *ascarides*; and afford no uncertain sign of *tape-worm*. They sometimes stick together in a distinct series, and are linked, and when thus joined, are with difficulty separated. These insects sometimes produce a most troublesome itching in the anus, and, like the *ascarides*, make themselves an outlet, in living bodies, when the feces are retained.

The *Tania*, or *Solium*, *le Solitaire*, is a broad and flat worm, distinguishable by numberless knots, of stupendous length, and lodging in the first passages. Accurate histories, and very neat representations of this insect are in various books. Yet there is nothing certain concerning its length; since this prodigious worm is never excreted entire, but we may conjecture it to equal twenty-five French ells, and indeed *PLINY*, *TULPIUS*, *RUISCHE*, *BOERHAAVE*, &c. testify that it sometimes exceeds this measurement. This insect is commonly supposed to be *solitary*; yet there is no doubt that many of this kind are found in dogs, and some other quadrupeds; some conjecture that they have been numerous in man, from various reasons. It is gathered from pictures and descriptions that this worm has a kind of head; which nevertheless I have not yet happened to see,

among my numberless subjects of examination: but have rather found them acuminate at both ends, yet I leave this undecided, that I may hasten to things of greater certainty.

The affinity of the solium and cucurbitini is very obscure, yet it is plain, as already hinted, that the excretion of these argues its presense. But there are not wanting other signs, by which this most troublesome tenant shews itself; of this kind are nausea, loss of appetite or voracity, a foul mouth, frequent spitting, a livid face, a certain sense of weight in the abdomen, pains which seem to be fixed sometimes in the stomach, sometimes in the liver or back, mucous stools, &c. The belly in some women is very prominent, the appetite depraved, and the menses suppressed, so that they are sometimes considered pregnant. Lastly, this most troublesome worm excites more oppressive symptoms, namely, faintings, vertigoes, convulsions, comatous affections, &c. The *tania* stretches through the whole course of the intestines, and not rarely ascends from the stomach to the throat, not without anxiety and terror of the patients, nor are there wanting some who throw out large pieces by vomiting. Lastly, patients recovering from very oppressive diseases, are scarcely ever restored to their former health, if they have *tania*.

As to the prognosis, it is obvious from what has been said, that the *lumbrici* portend great danger, on account of palsy, mania, convulsions, epilepsy, ileum, and other dreadful symptoms which they may occasion. They sometimes exhaust the nutriment from the emunctory organs, and such severity do they sometimes exercise, especially the red ones, that they excite very dangerous *worm fevers* justly so called: But we have already observed that putrid and malignant fevers are not included in this number, although they promote the production of worms, in which we prognosticate favourably if they are expelled by stool, but the case is otherwise if they pass out by the mouth, especially if they bring up with them a blackish and fetid matter. *Ascarides*, which excite a troublesome sensation in the anus, are void of danger. The *cucurbitini* are not thought dangerous of themselves, but as the forerunners of *tania*, excite no little terror. But the *broad lumbricus* which many think to be congenital, causes dreadful symptoms, which ought to be considered as so many very dangerous diseases; for besides those already mentioned, it brings on slow fever, marasmus, dropsy, ascites, tympanites, &c. Some think that pleurisy sometimes proceeds from the same source; whether rightly, I leave for the wise to consider.

Anatomical observation exhibits *lumbrici* in the throat and œsophagus, in the stomach, and every where throughout the

tract of the intestinal tube. Sometimes these worms are enclosed within follicles of different size, or rolled together in a heap like a ball: in some they enter the biliary and pancreatic ducts, and are found confined there. They occur in the cavity of the abdomen, in abscesses, &c. Yet it often happens that after their entire dissolution, there is no vestige of them perceived, except a kind of mucus, into which they are changed. Lastly, there are found inflammations, suppurations and putridity in the stomach, intestines, &c. As it respects *ascarides* and *cucurbitini*, they are never seen after death, no remains of them are noticed. But the *tænia*, somewhat changed in appearance, is found in the stomach and intestines, and like the *lumbrici* sometimes sends its upper apex into the *ductus choledochus*. To say nothing of various injuries of the viscera, which differ very little from those just described, and are mere morbid products.

My work would increase to an immense size, were I to add all the *anthelmintics* spoken of by authors, there are some, although very celebrated, concerning the virtues of which, many writers of the first rank, supported by many experiments, have altogether doubted; whom nevertheless others of no inferior note, taught by experience have contradicted, so that "*adhuc sub judice lis est.*" But setting aside these controversies, we shall according to our manner, cull out the more select or more approved, from the immense farrago of vermifuges. *Purgatives by the bowels* evidently take the lead, viz. rhubarb, folia alexandrina, jalap, aloes, diacrydium, compound powder of scammony, syrup of peach blossoms, *trochisci alhandal*, *confectio hamec*, &c. which not only kill the worms, but also bring them away even living. *Mercurials* do not give place to cathartics, they are the most troublesome enemies of worms: namely, calomel, panacea, æthiops mineral, &c. But there is little confidence to be put in the decoction of quicksilver in water, or any ptisan, usually prescribed as a common drink to kill the worms in infants. *Bitters* hold no mean place in the order of anthelmintics, such as worm-seed, southernwood, wormwood, tansey, gentian, peach kernels, &c. *Absorbents* also are much esteemed, as coral, prepared hartshorn, &c. *Oils* expressed from olives, nuts and almonds seem to possess specific virtues; petroleum, asafætida, &c. which it is said, kill the worms by obstructing the spiracula of respiration. *Acids* also obtain their place in the class of vermifuges; namely, ver-juice, lemon-juice, spirit of sulphur, &c. Lastly, some recommend very highly the coldest water, which they say is inimical to worms, nor perhaps undeservedly: not to mention wine, garlic, onion, theriac,

and numberless others celebrated by the common people and good women.

External remedies are not without their use, for clysters of milk and sugar are not improperly injected, by which the worms are allured, and brought towards the lower parts; or of the decoction of fern, hedge-hyssop, wormwood, tansy, &c. to which are added oil of nuts or olives, theriac, &c. Epithems are applied, composed of aloes, myrrh, ox gall, juice of wormwood or lesser centaury, petroleum, ointment of sow-bread, soot, &c. Of these materials are also composed suppositories, much more efficacious. These are the internal and external vermifuges usually exhibited by judicious physicians, yet, as is plain, they ought never to be given indiscriminately, but rather on account of their different effects, ought to be chosen according to circumstances; since many are opposed one to the other, and work contrary effects. But these medicines of both kinds ought to be considered unfit to perform the intended offices, if Worms owe their rise to any fever of a bad kind: in which case they are to be assisted by more efficacious ones: not omitting afterwards those vermifuges, which may be suitably called in to our aid.

From the well known seat of the ascarides, it is easily understood that internal remedies do little good, if we except the *aloetic* purges, which are apt to kill them and bring them off. But *clysters* prepared of oil, colocynth, mercurials, &c. have a powerful effect, the virtues of which are rivalled and perhaps excelled by suppositories made of lard or cotton dipped in the Neapolitan ointment, or in beef's gall, a solution of aloes, &c. Nor can we find better remedies than these for dispelling ascarides, since they leave numberless little eggs, which sooner or later produce a stupendous quantity of these insects, so that sometimes the cure ought to be protracted, in order to *prevent another generation of them*.

The greater part of the above-mentioned vermifuges are useless, against the *tænia* and *cucurbitini*, but emetics and cathartics are given with advantage, namely, tartarised antimony, or emetic wine, aloes, diacrydium, calomel, &c. The *Root of Fern* is sold as a specific, the powder of which is prescribed to one or two drachms for an adult, in honey or wine: giving a cathartic the next day. Many think that the roots of Blackberry agree in virtues with the fern; this they prescribe from two drachms to twice that quantity, boiled in water, for two doses, to be taken morning and evening, by which medicine they say the bowels are somewhat opened. We ought not to leave unmentioned an anthelmintic against the *tænia* recommended in the *MEDI-*

CAL DIARY of the year 1757, page 305, and 1761, page 214, which is nothing but oil of nuts mixed with a Spanish wine, commonly called *d'Alicante*. Other remedies against the broad lumbricus are proposed, which seem to have been of great use in many cases, namely, the seed of rue, red precipitate, æthiops mineral, preparations of iron, and mineral waters partaking of iron, &c. which, although of a different nature, may be given with advantage, so long as their use is directed by the *juvantia* and *lædientia*. My narrow limits forbid me adding more.

HEPATIC, OR LIVER COLIC.

It is known that the gall-bladder, and other receptacles of the bile, are the *seat* of this most violent disease; for there the spurious stones concrete, which either by their size or figure, wound these organs, or by filling those tubes, hinder the bile from reaching its usual channel: the same effect is produced by tough and viscid bile, by which these ducts are obstructed. Hence it happens that the gall-bladder and biliary canals, are above measure distended, even to bursting, by reason of the regress of bile; from whence arises the most acute pain. Nor is the flow of this bitter fluid always intercepted by an obstruction of the secretory vessel, but frequently this canal is compressed by the size of the obstructed pancreas, or by some other tumor of the neighbouring parts: sometimes also it is so confined by spasmodic stricture, that it altogether denies the entrance of the bile towards the duodenum: nor is the intestinal tube free from this spasmodic affection, by which the mouth of the biliary duct is so drawn up, that not even a drop of bile can escape. We have noticed already, that Hepatic Colic is often difficult to be ascertained; yet there are various signs which may discover this disease; namely, heat, more or less troublesome about the affected part, pain and resistance to pressure, of the right hypochondrium, and adjoining epigastric region; flatulency, nausea and vomiting, anxiety, tightness of the precordia and breast, &c. Meanwhile the tormina which now seem to affect the stomach, now the kidneys, at other times the back, suffer violent exacerbations. As these rage, the *fever* encreases, and sometimes is protracted to the twelfth or fourteenth day. Yet in some, the pulse is found without fever, and the fever comes on not without flying pains, lasting not more than two days. The face in most cases is overcast with a yellow or greenish colour,

or the sick fall into genuine jaundice. The belly is mostly constive, the urine suppressed, or in small quantity, and, not without a jerk, evacuated turbid and foul. Lastly, many patients pass, both by vomiting and stool, *false stones*, or bilious concretions, of different colours, light, inflammable, and soluble in hot water.

It is necessary to remark, that the gall-bladder sometimes attains to such a size, from retained bile, that a tumor projects outwardly, which the unskilful sometimes mistake for abscess, for which error the sick often suffer undeservedly; who after the preposterous cutting of it, are afflicted with an incurable fistula, or are reduced to the last extremity by the profusion of bile into the cavity of the abdomen. Nor is it always easy to extricate the true from the false, since both tumors are affected with nearly the same appearances: and indeed sometimes these diseases are implicated, concerning which many observations worthy of note are to be read in the first and third part of my Surgical Notes. Moreover, there arise here and there other tumors, proceeding from almost the same source, where for instance, the inflamed and ulcerated gall-bladder is torn, and gives an outlet to the bile, which, entering the cellular texture, is widely diffused, and often excites inflammation and abscess projecting outwardly, in some part or other of the abdomen: from which when opened, pus escapes together with the bile, sometimes also with discharges of biliary concretions: whence proceeds a fistulous ulcer, which, on account of the unceasing flow of bile, can be healed by no method whatever.

The Hepatic Colic does not rarely occur periodically, namely, once a week, month, year, &c. The time of the paroxysm is limited to a few hours; otherwise it is protracted to one or two days, and longer, yet with some intermissions. The *event* of this disease is doubtful, which sometimes brings on more serious disorders; namely, inflammation of the liver, jaundice, slow fever, dropsy, phthisis, wasting of the body, &c. yet we find by the relation of physicians, that it very often vanishes in a short time, or spontaneously. But whether these writers have always treated of genuine Hepatic Colic may be doubted; because the liver, as well as other viscera of the abdomen, often labours under an affection merely spasmodic, which very accurately resembles the Hepatic Colic, and indeed often brings on slight jaundice. It happens sometimes that Hepatic Colic at first view, scarcely differs from nephritis, to which the attention of physicians is sometimes turned; who by examining the bodies dissected, silently acknowledge that they have missed the mark.

Dissections discover a greater or less collection of biliary calculi; we are told of *three hundred* that were found in the gall-bladder, some of which were as large as a filbert. There are not unfrequently met with, *spurious stones* of this kind, which exceed the size of a chesnut, or grow to two ounces or more, and therefore fill the whole cavity of the cyst. Besides, that receptacle is often filled with glutinous or very tenacious bile, or contains worms, hydatids, &c. In some, it is lined as it were with a stony crust, or divided by various partitions, into cells. At other times this follicle grows to an immense size, on account of the flow of bile, to the quantity of four, six, or eight pints. The biliary ducts suffer the same dilatation; and are often found obstructed by stones and worms. The liver presents itself schirrous, inflamed, suppurated, putrid, &c. In some there is a protuberance of the obstructed pancreas, by the size of which the mouth of the ductus communis is closed: other tumors have the same effect, arising from the mesentery, intestinal tube, &c. We cannot doubt from a view of these injuries, that Hepatic Colic is in fault, yet it is not to be concealed that the same destruction is seen in the bodies of many, who while living, were altogether ignorant of this Colic: what is to be inferred from hence, I leave for the examination of wiser heads.

Hepatic Colic is commonly cured by nearly the same method, as other tormina of the belly. It is proved from the foregoing observations, that during the paroxysm, remedies which move the bile are not profitable, which, nevertheless, after this has ceased, are given with advantage, since by their means a return is prevented. At the commencement of the disease, *a vein is immediately to be opened*, for this remedy has not its equal for keeping off a threatening inflammation. Without delay also, diluents and demulcents are to be administered, viz. chicken water, whey, emulsions, oil of sweet almonds, and spermaceti; infusion of the flowers of althea, flaxseed, &c. Nor are laxatives less useful after the cessation of the pains, namely, cassia, manna, tamarinds, &c. which, if given without effect, it is proper to have recourse to narcotics, the best among which are syrup of white poppy, both kinds of laudanum, and such like, by which the pains are quieted. In all stages of the disease also emollient and anodyne injections with oil, butter, althea, mallows, flaxseed, &c. have given present relief. Nor must we omit fomentations and cataplasms, baths, semicupia, and other local applications, concerning which we have already surfeited the reader. Lastly, in a very urgent case, or when the sick is reduced to the last risque of life, we think, according to the advice of CELSUS, that the gall-bladder protruding outwards, should be opened; al-

though from this operation there should be but the smallest hope of cure.

When the disease is removed, another duty awaits the physician, that is, to prevent its return. With this view laxatives are used, the best of which seems to be rhubarb. Moreover, grass, wood-lice, nitre, preparations of iron, of soap, aperients and diuretics of various sorts, or antibilious medicines ought to fill every void. Wormwood, wild germander, gentian, and other bitters also deserve praise. But from all these remedies, the cold and hot mineral waters certainly take the palm. Lastly, in some cases, preparations of milk are useful, which, when other circumstances permit, may answer the purpose of other *prophylactics*, even the most exquisite.

HEPATITIS.

NO one is ignorant that by this name is designated *the inflammation of the liver*, which either attacks the whole viscus, or some part of it. Sometimes the liver alone is injured, and the neighbouring parts are brought into sympathy; on which account it appears under various forms, and is often with difficulty distinguished from diseases resembling it. Hepatitis begins with shivering and chill, followed by acute fever; during which the sick complain of heat and oppressive pain of the right hypochondrium, which resists pressure and is sometimes prominent. The belly in this disease, is sometimes costive, sometimes loose; with tormina and bilious stools. The urine is in small quantity, of a saffron colour and turbid. The face, of a greenish paleness, well known to experienced practitioners. The tongue at first dry, is gradually covered with a kind of yellowish, or blackish fur: the thirst is intense, a cough rises, respiration, becomes weak, a very difficult hiccough comes on, and delirium ensues: lastly, some fall into jaundice.

It is necessary to remark that the sick are mostly plagued with nausea and vomiting, especially if the lobe of the liver next the stomach be affected, in which case, even very judicious physicians have often been in doubt concerning the seat of the disease. But when inflammation occupies the convex surface of the liver, a more severe pain extends to the scrobiculus cordis, or diffuses itself towards the breast, and indeed reaches to the clavicles and scapulæ, on which account the sick cannot lie on the side affected; whence this disorder resembles the pleurisy. The pain

is also very frequently spread to the muscles of the abdomen, and excites no small suspicion of an inflammation of these organs. Yet from strict attention to the signs of these two diseases, it is easy to discover the nature and seat of the affection now treated of, so long as Hepatitis does not join with inflammation of the neighbouring viscera. Otherwise we candidly confess that this implicated disease is doubtful, or hard to be distinguished.

When *Hepatitis verges towards suppuration*, there takes place pain with pulsation, the heat becomes intense, and the affected part protrudes with more resistance to pressure. Then come on irregular chills, and the fever is exacerbated, until from pus being formed, or abscess ruptured, it runs into a slow fever, usually attended with frequent fainting. A fluctuation of pus becomes evident, if abscess be seated in the front part of the liver, but we must beware, as already hinted, lest a swelled gall-bladder be mistaken for a collection of matter. At other times the abscess being deeply seated, altogether eludes the touch. We ought not to omit, that pus is often secretly formed in the liver, without any previous inflammation, as it would seem, namely, after the small-pox, fevers of a bad kind, &c. Jaundice and chronic obstructions of the liver also produce suppuration difficult to be discovered, as also an old contusion of this part. The drying of ulcers of the head, and of other parts also bring on this misfortune. Lastly, repelled eruptions, &c. It is proper to add that from this obscure formation of pus there often arises an abscess of immense size; such as I remember to have seen in a man, 50 years of age, and of athletic habit, who about two years after a repelled *herpes*, had a tumor in the right hypochondrium, which gradually assumed such an increase, that it occupied the half of the abdomen, not without a very troublesome difficulty of breathing, until pus, by degrees corrupting the neighbouring parts, worked its way to the breast, whence arose a stupendous evacuation of pus, like a vomica, by which the strength being exhausted, the miserable patient sunk after the fourth day. This matter, amounting in the judgment of the bystanders to six or eight pints, had the colour and consistence of the dregs of wine, and sent out such a smell, that it infected the whole house.

Hepatitis is justly reckoned *among fatal diseases*; yet there is some hope of a cure, if inflammation affect the outer part of the liver, and be confined to certain limits; but when it is more deeply fixed, and spreads itself widely, it soon hurries the patient to the grave. Sometimes, like other inflammations, it terminates in resolution: but more frequently runs into abscess, or brings on schirrus, in which there is danger of death. Delirium,

vomiting of blackish matter, faintings, hiccough, cold sweats, &c. portend death. Lastly, if pains suddenly cease, while other symptoms continue, we may send for the hearse. This inflammation, terminating by resolution, is not extended beyond the third or fourth day, but if it reach the seventh day, there is no room for doubt of suppuration and schirrous obstruction. There is indeed the greatest danger from the formation of abscess; but yet we must not altogether despair; since it sometimes happens that by the spontaneous efforts of nature, there is an evacuation of pus by vomiting or stool. The matter absorbed is not rarely carried off by urine, or a purulent expectoration is excited: but then an ulceration of the lungs or phthisis threatens, especially, if from the erosion of the intermediate parts, the purulent matter collected in the liver should reach the lungs by a strait course. In the greater number of patients, the pus from the ruptured abscess is poured into the cavity of the abdomen: whence arises a *purulent dropsey*, by which in a short time the viscera of the abdomen are contaminated, whence slow fever, marasmus, &c. In some cases the abscess projecting outwards, by an event truly the most happy, the matter finds an outlet by the skin; whence an ulcer which after some months is agglutinated by the help of surgery. We may conclude by adding that an abscess arising from inflammation of the liver, threatens speedy death; or becomes long continued, if it owe its rise to a chronic disease.

From *dissection of the bodies* inflammation of the liver is manifest, sometimes confined within narrow cells, sometimes widely diffused: this viscus is often found of a monstrous size, and grown to the neighbouring parts, or containing many abscesses of different size. From the erosion of the intermediate parts there is seen a union of pus with the lungs, stomach and intestines. The biliary duet sometimes throws up the matter into the intestines, and examples of this appearance are not wanting: but very often an entire abscess is found, of various magnitude, or by a previous dilaceration opening into the cavity of the abdomen. Besides, the liver is found exulcerated, mortified or putrid; or like a bag, empty and collapsed. In some cases the matter is found in its own receptacle, hard and dry; in others the gall-bladder filled with matter, the ribs vitiated by caries, &c. Lastly, the diaphragm, pleura and lungs, are often disfigured by inflammation, suppuration and gangrene. The same faults are seen in the stomach, intestines, pancreas, omentum, kidneys, &c. To say nothing of various stagnations, of a sanious, purulent, and very stinking kind, frequently to be met with in the cavity of the breast and abdomen.

In this inflammation, as also in other internal ones, the cure is to be commenced with blood-letting, which ought to be often repeated according to age and strength, provided it be not continued beyond the fourth day, unless necessity urge. Of no less use are diluents, demulcents and temperants, namely, whey, chicken or veal broth, emulsions, decoctions of agrimony and succoraceous herbs; spermaceti, &c. Sedatives of nitre and camphor are much esteemed; but anodynes ought to be cautiously prescribed. When the pains abate, and the symptoms remit, say, about the sixth or seventh day of the disease, laxatives are given with advantage, namely, cassia, manna, &c. Sudorifics, and especially POTTER's antihectic are recommended by some, but it is best to deal cautiously with these remedies, lest by their improper use, the blood become too much heated. Vulneraries and balsamics also do some little good, unless there be ulceration of the liver.

As to external remedies, emollient and laxative clysters ought frequently to be injected; fomentations, cataplasms, and other local emollients, resolvents and ripeners do service, when used according to circumstances and the various state of the disease. But when abscess presents to the view or to the touch, there is no doubt that it should be early opened by the knife or caustic. This operation which I have often performed, is void of danger, while the abscess is connected with the parts to be cut, otherwise there is fear lest some portion of the matter should be poured into the cavity of the abdomen, to the extreme damage of the patients. We add nothing concerning jaundice, schirrus, ulcer, and other consequences of Hepatitis; since we have elsewhere treated of each of these affections, arising from any cause,

ICTERUS. JAUNDICE.

BESIDES the yellow colour of the skin and adnata of the eye, by which this disease is obvious to all, it is known by *other signs*, namely, itching of the whole body, bitterness of the mouth, want of appetite, saffron-coloured urine, whitish stools, &c. Objects are sometimes perceived yellow by the sick, the spittle and sweat sometimes have the same colour, by which also dissection shews all the viscera to be affected. Vomiting, heart-burns, anxieties, pain and resisting swelling of the right hypochondrium; difficulty of breathing, spontaneous lassitude,

faintings, &c. These are the more common symptoms by which Jaundice is attended, which is not rarely associated with fever; at other times the pulse is found slow and weak. When the disease becomes confirmed, the skin by reason of its leaden, or blueish green, lived or brown colour exhibits the *black jaundice*, into which the yellow usually runs. Hepatic, hysteric, hypochondriac, or other species of colic *bring on* Jaundice; inflammation, abscess and obstructon of the liver, ileus, retarded or obstructed bile, in its way to the duodenum. It arises from violent purges, and poisons, from the bite of animals, from the recession of cutaneous diseases, from the suppression of the menses or piles, from ill cured quartan or other intermitting fevers, from venesection at improper times, from cachexy, and vehement affections of the mind. It is also brought on by gluttony, gross food, or of a bad kind, &c.

The *yellow* Jaundice is not free of *danger*, but the case is far otherwise in the *black*, especially in advanced age. If Jaundice, in acute fevers, shew itself before the seventh day, it is a sad omen; but if later, it promises, like a crisis, a happy event. Jaundice from colic, emetico-carthartics, and anger, soon ceases: but in gravid women, it only terminates by parturition. It is thought very obstinate if it proceed from cachexy and scurvy, or have no evident cause. As the disease advances, a swelling of the belly, tympanitis, vomiting of pus, and stools of the same nature; suffocation, faintings, marasmus, dropsy, &c. all portend death. From urine that is turbid or saturated with bile, there is hope of health; but when limpid, it occasions no vain fear. Lastly, sweats, piles, and dysentery, &c. remove the Jaundice. But let those once affected by it, beware of its return.

It appears from *anatomical observations*, that not only the cellular texture and all the viscera, but also the cartilages and bones are tinged of a yellow colour; in like manner as the skin. But we may perceive almost numberless faults and ravages, in the liver, the principal seat of the disease; for it is found livid, greenish, or of a leaden colour, inflamed, obstructed and schirrous; firm and dry, or of immense size: now dug out by ulceration, disfigured by gangrene, or putrid; again it contains absesses, different in number and magnitude, and filled with tubercles of a stony nature. The gall-bladder is met with, sometimes subsiding and empty, sometimes containing a greenish black bile, thick and glutinous, serous and insipid. There are also lodged in it bilious *concretions like stones*, sometimes almost innumerable, sometimes of very great size, even as large as a hen's egg, and entirely filling the cyst. Thus the biliary vessels are found dilated beyond measure, stuffed with calculi; or ob-

structed by fleshy excrescences proceeding from their sides ; sometimes also compressed by the prominent pancreas and mesentery, by the enormous size of the colon, or some other tumor. Lastly, these receptacles of the bile are so dried up in some cases, that they resemble the hardness of cartilages or bones. Among the various injuries of the breast, which it would be superfluous to recount, a great tumor occurs, worthy of remark, growing to the pleura, by which the lungs and liver are overwhelmed. Moreover, the stomach is observed of immense size from flatulence ; and torn from its seat : the colon also acquires a prodigious size ; the other intestines do not suffer so great dilatation, which also contain heaps of worms. The spleen appears now of very great size, now very small, and reduced to almost nothing. The pancreas deformed, obstructed and putrid. The omentum very thick, sphacelated, and altogether corrupted. Not to mention numberless other faults little pertaining to our subject, and usually observed in all who die of chronic disease.

From the foregoing it is understood, that Jaundice depends on almost numberless causes, which being overlooked, the *method of cure* will remain incongruous. But from attending well to these it is plain what selection is to be made among the various remedies, which we submit to the judgment of the physicians. The cure of *recent* Jaundice, therefore, is performed with simples ; but this is not to be hurried too much. In the *chronic*, the cure ought to be longer delayed, lest by untimely haste the patient's case should be rendered more serious, which physicians of experience know to have often happened. Experience teaches that venesection is inert or hurtful ; unless there be certain signs of plethora or inflammation, or usual flows of blood be suppressed. Among the more salutary medicines against Jaundice, may justly be reckoned an emetic, provided the stomach will bear it ; for it is useful in all stages of the disease ; but more serviceable in the beginning : nor does it rarely happen that by this remedy alone, the disease is banished. Cathartics are not less useful, given often in the course of the disease : but the milder are to be chosen, namely, rhubarb, cassia, manna, tamarinds, salt of Epsom, Sedlitz, Glauber, &c. which are given with advantage either by themselves, or associated with remedies to be mentioned hereafter.

Diluents, temperants and refrigerants, are not undeservedly extolled : of this kind are whey, chicken water, emulsions, and lemonade. Decoctions of grass, borage, succory, agrimony, fumitory, maiden hair, hartstongue, chervil, dock, sorrel, strawberries, &c. to which we may add crab's eyes, pulvis tempe-

rans, &c. Sedative antispasmodics have no small effect, such as saffron, pulvis de gutteta, &c. But the more celebrated practitioners advise that anodynes should be cautiously prescribed. Sometimes also bitters and stomachics do good, as wormwood, lesser centaury, gentian, elecampane, Peruvian Bark, and cinnamon: extract of juniper, confection of hyacinth, theriac, &c. But we must not follow the example of the generality of physicians, and trust too much to these remedies. Lastly, there is excellent service derived from aperients and diuretics, namely, pellitory, celandine, parsley, asparagus, madder, and florentine orris; nitre, salt of broom, and tamarisk, crocus martis, globulus martialis, gum ammoniac, borax, soap, sal diureticus, vitriolated tartar, martial soluble tartar, millepedes, &c. all which perhaps with good reason were by the ancients entitled *Hepatic*s. For in like manner, as by the light of experience, pectorals and uterines are distinguished from demulcents, vulneraries, incidents, and diuretics, from which class they are usually taken: so, from the list of temperants, aperients and stomachics, as well bitters as acids, some remedies are collected more suited to the liver. Whether these medicines have a kind of affinity with this viscus, or with the fluid secreted therein, we leave for the consideration of others.

Nor are *antictemics* or remedies against Jaundice confined to these limits, but rather many others are called in as aids; namely, absorbents, diaphoretics, depurants and antiscorbutics, which according to various circumstances and implications, may do good in a long continued cure, to which the way is often prepared, not untill after various experiments. Lastly, the various mineral waters complete this, and are not undeservedly held in high esteem. Meanwhile the belly is to be kept open through the whole course of the disease, by suitable medicines. In some cases emollient fomentations have been of service; and the baths themselves have benefited some, especially if there be great itching: these may be repeated with advantage even after the disease is removed; that the pristine beauty of the skin, tinged with this loathsome colour, may be restored. But it is universally known that the eyes, after the cure is completed, often with difficulty free themselves from these remains of the disease; to disperse which, it is said that the fume of vinegar is useful,

NEPHRITIS.

THE character of this disease is very diverse, for sometimes it depends on *inflammation of the kidneys*, or a spasmodic constriction of these organs; sometimes it proceeds from calculi and sand lodging in the pelvis; or confined in the ureters; from mucous urine lining the receptacle, &c. But from what cause soever this affection arises, it has long intermissions, and usually recurs by a careless manner of living. Hence we understand why there should be various grades of pains, which mostly exercise such tyranny, that the miserable patients fill the whole house with their cries, until the nephritic pains remit, or an absolute intermission taking place, they cease altogether. The pains seem fixed on the loins, or to attack the stomach, and in many cases are propagated to the root of the penis, or to one of the groins. And indeed they affect the testis itself, which suffers a kind of retraction. Nor does it rarely happen that the leg of the same side is affected with torpor. In the mean time the urine is suppressed, or flows very sparingly and with strangury. As the *paroxysm advances*, it becomes limpid, but towards the end, turbid, mucous, and filled with gravel. The belly is oppressed with very severe pains, and nausea and vomiting are excited. Nephritis is mostly attended with fever, the duration of which is from some hours, to many days; profuse discharges of urine, or the voiding of some calculi, denote its solution.

Nephritis shows itself by some *marks*, but sometimes it is hardly distinguished, because its appearance is often resembled by various colics, namely, the hepatic, and duodenal, which rage with the same violence. Pains attacking the colon also, put on an appearance not unlike it; for this intestine, as every anatomist knows, has relation to each of the groins. Besides there occur various pains of the abdomen which resemble Nephritis; of this kind are some violent scorbutic and hysteric pains, as also the tormina which seem fixed in the kidneys, at the commencement of intermittent fevers, or the eruption of the catamenia. Lumbago is often mistaken for Nephritis, although it affects the organs of motion only, which is therefore increased by handling, or any motion of the spine; this never happens in true Nephritis, unless it be complicated with ischiatic pains, as not unfrequently happens; on which account various nephritics experience some relief from the inflexion of the body.

Having accurately distinguished Nephritis from affections which resemble it, another duty awaits the physician, namely, to discover the *genuine character* of the disease: whether it arise from inflammation, spasm, calculus, or mucus. Inflammation of the kidneys is known by the obstinacy of the pains, scarcely ever remitting; by an acute fever; by urine first of a flame colour, afterwards very limpid, &c. In *calculus* of the kidneys, (concerning which it is proper to remark by the bye, that it mostly affects the right kidney) there is either no pain or a very mild one, the pains have some intermissions, which at other times, from the various movements of the calculus, are often so violent as to excite inflammation. Torments arising from *spasm* are more severe, but are propagated to various parts of the abdomen, and soon cease; moreover the urine, from the secretory organs being too much constricted, is whitish, distils by drops, or is altogether suppressed. Nephritis arising from *mucous urine* never excites such disturbances: for the pains are more mild and obscure, and all the symptoms are observed to be more remiss. The disease is never void of *danger*, of whatever nature it may be, since it not rarely reduces the patient to the last extremity. If the pain continue beyond the seventh day, and as the fever encreases, and chills recur without regularity, there be pulsation in the part; we may suspect a collection of matter. A sudden cessation of violent pains, a depressed and intermittent pulse, cold sweats, and black and stinking urine, afford most certain marks of gangrene. The studious are thought to be *prone* to Nephritis, as also the inactive, the votaries of Bacchus and Venus, the melancholic and gouty, &c. Lastly, such as have had one or two fits are thought obnoxious to it, especially if there be an hereditary fault.

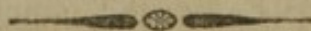
Dissections exhibit the kidneys of very ample size, or wasted and wrinkled; more compact and firm than usual, or attaining the hardness of cartilage; inflamed or containing abscess; pitted with ulcers, spotted with putridity and gangrene, schirrous and filled with tubercles, and having their surface covered with granulae or pustules; and rough with varices, &c. In some bodies there is seen nothing but a sack containing a greenish, sanious and purulent matter. Sometimes there remains but one kidney, multiform; situated to the right or left, or in the middle. Besides there occur very frequently in the pelvis, sand, calculi and stones of different size and figure, by which the ureters are often obstructed, or altogether stopped, which causes these canals from the suppressed urine sometimes to become immensely large. We read of a prodigious kidney weighing thirty-five pounds: another has been mentioned which was di-

lated beyond measure by mere flatulence: nor are there wanting histories of petrefaction of the kidneys, and of them becoming white like alabaster. But it is truly wonderful that stones of different size, even very large, lodging in the pelvis of the kidney; or the greatest destruction in one of the kidneys, should sometimes be found in dissecting the bodies of some, who while living, were unconscious of the excretion of gravel, mucus or pus; and had never suffered a fit of Nephritis: which amazing phenomenon I remember often to have seen. Nor do the other viscera appear uninjured in those who die of Nephritis; for the pancreas is discovered schirrous, purulent, or sometimes containing stones: the mesentery obstructed or defiled with pus; the spleen more firm and compact, thrust from their situation, lying upon the right kidney, or when handled, fluctuating like thin pap. Not to mention schirrous tumor of the ileum, aneurism of the aorta and of its branches; caries of the vertebræ, abscesses every where to be met with, collections of serum about the spinal marrow; and other faults altogether unconnected with Nephritis.

The principal indication, during the Nephritic fit, is to allay the pains; namely, that flexibility and softness be restored to the irritated organs. Both purposes are answered by venesection as soon as possible, and repeated according to the age, temperament and strength, or the violence of the fever and acuteness of pain. With this view also let *diluents* and *demulcents* be freely administered, such as whey, chicken or rice water, infusion of the flowers of mallows, and of flaxseed, oil of sweet almonds, and spermaceti: emulsions of the common kind, or prepared of white poppy seeds, syrup of violets, of water lillies, &c. Nor are *anodynes* less useful, namely, diacodium, liquid laudanum, pilulæ de cynoglosso, syrup of karab, &c. but the use of narcotics ought to be limited, since by the preposterous use of them, the powers of the organs peculiarly necessary for the excretion of the calculi, are broken; and they ought to be altogether banished when there is even the least suspicion of gangrene. Solution of cassia, and other bland laxatives cannot be used until the pains have remitted. If suppression of urine be long continued, with imminent risque of life; it is necessary to have recourse to an emetic, as to the sacred anchor; for it is proved by experience, and I myself have often seen, that this remedy has, as it were, called many from the grave. Nevertheless, in this state of things, an emetic is never without danger, since sometimes, when inadequate to overcome the disease, it hastens death: but in straits like these, or in a desperate case, we cannot forbid experiments, from which there is any hope of

cure. Lastly, some very highly recommend the seed of an exotic fruit, named *Sapotille*, produced by an *American tree*, called *Achras* by PLUMMER: but whether it excels the others already mentioned, is doubtful.

After driving off the paroxysm, it is necessary to use *prophylactics*: in the right administering of which, consists the principal point of cure. Diuretics, so greatly to be feared when the pains are violent, do wonders in keeping off their return. The best, and most in use are, *pareira brava*, *lignum nephriticum*, *pellitory*, *rupture wort*, roots of *elecampane* and *purple star-thistle*, *nitre*, *Peruvian balsam*, *turpentine*, &c. But experience proves that STEPHEN'S *lithontriptic pills* excel all these remedies; and may even be given with safety during the fit, provided the disease be occasioned by gravel or calculus, otherwise they are of no use. Moreover the virtues of the most exquisite prophylactics are emulated, and perhaps exceeded by *milk diet*, which if the stomach does not reject it, very seldom fails. The various hot and cold mineral waters are also used with success, which by reaching the kidneys with greater impetus, hurry the gravel along with them. Nor is common warm water to be despised, drank in the quantity of about two pints every morning: for it is proved by repeated experience, that many have prevented the threatening accessions, by this domestic remedy alone. In all stages of the cure, we ought to call in the aid of emollient and demulcent clysters, prepared of *althea*, *flaxseed*, *oil*, *butter*, &c. Much benefit is also derived from fomentations, baths, *semicupia*, &c. Lastly, sometimes leeches have been applied to the anus, which under some circumstances may do wonders, to wit, when the overheated blood is compelled to stagnate about the kidneys.



LITHIASIS. GRAVEL IN THE KIDNIES, AND STONE IN THE BLADDER.

THE little sand which is formed in the pelvis of the kidney, may be hurried on by the preterfluent urine, and carried off with ease: but if they be detained there, and acquire a certain size, they often produce the most troublesome irritations, as well in the pelvis as in the ureters to which they are directed: whence arises the nephritis just treated of. From the coalition of these little grains, or their ultimate increase, arise *calculi*, which are also easily detrudded by the flow of urine, into the bladder; or

excite only an obscure pain. Yet they often occasion very excruciating pains, which seem to affect the back, stomach, groins, &c. but larger calculi confined in the kidneys, which do not remove from their seat, give little or no trouble, unless they be torn from their beds. (typis.)

Lithiasis of the kidneys may be known by previous nephritis, by mucous urine, or branny and filled with sand, &c. and from the excretion of stones; from previous attacks of gout, sciatic, &c. add to these strangury with bloody urine after riding on horseback, or in a chaise, or other unaccustomed exercise. But this last *sign* seems rather to denote *calculus of the bladder*, especially if dysury come on, with pain reaching to the end of the penis, after making water. Nor are there wanting other signs of a stone lurking in the bladder, namely, tenesmus accompanying every attempt at making water, a certain sense of weight in the perinæum, frequent titillation of the genitals, or an itching, to allay which, either sex is often compelled to apply the hand, with a gesture truly indecent: which is especially noticed in children, who very often take hold of the penis and pull it, in order to favour the exit of the urine, or to assuage the pains. Meanwhile the urine is often stopped while running, or is evacuated by starts, and alternating with pains, unless the sick, being taught by experience, empty the bladder while lying on one or other side, so that the stone occupying the neck of the bladder, may, by its own weight, be rolled to the fundus or side of this organ.

It is not to be concealed that inflammation, abscess, exulceration, schirrus, &c. of the bladder are also indicated by the *signs* mentioned, how numerous soever; so the diagnosis of this disease remains doubtful, unless calculus of the bladder be felt by the finger introduced into the anus, or touched by a catheter let into the bladder. But the finger in the anus rarely can reach the bladder of adults, although there is no doubt concerning children. *The trial of the catheter*, nevertheless, sometimes fails, for instance, where the stone is hid about the sides of the bladder, and there works itself a cavity, in which recess, it escapes the point of the silver pipe. Pains indeed, of whatever kind they be, continued or intermittent, ought to be numbered among *fallacious signs*, since, as we have already inculcated, they arise from another cause; and there are some patients who enjoy very long intermissions. Some are even free of pain, and without being conscious, carry great stones both in the kidneys and in the bladder, and suffer nothing, that moves suspicion of calculus. Indeed it is little wonder if a stone of a smooth surface, gradually and in process of time worked into its cavity,

should be so fixed in the texture of the kidneys, and soft and flexile bladder, that it should not at all impede the flow of urine; or should be so shut up and bound in its peculiar capsule, as to lie there immoveable and inert. Let those who operate for the stone, beware in such a case, lest in drawing out the stone, they tear off some portion of the bladder, which they usually exhibit for fungous excrescence, to the deluded bystanders: which I remember to have often seen, not without heart-ach; and none, if I mistake not, of those who had suffered this misfortune, was restored to health. Hence we understand why many calculous persons have spent a life without inconvenience; which also sometimes happens, if the stone, although large, having a polished and smooth surface, create no uneasiness in the bladder, except a certain sensation of weight, about which the patients care very little. But if its surface be unequal, rough, or full of little points; it occasions the greatest pain with every contraction of the bladder; from the continuance of which arises inflammation, followed by an ulcer, which gradually eats, not only the bladder but the adjoining parts: hence it happens that the stone is not seldom rolled into the scrotum, or enters the rectum, and passes out by stool.

Lithiasis, which very frequently is hereditary, spares not any; but it is well known that children and old people are more subject to it. Debauchees are prone to it, or such as too early addict themselves to immoderate venery. It threatens epicures, who delight in dainties, and frequently overtakes drunkards. The gouty are seldom free from it, whose urine commonly deposits a gypseous sediment, or full of sand; hence it is often confounded with genuine nephritis; besides certain fits which accurately resemble this affection, as well as pains arising from calculus of the bladder. But hysteric, hypochondriac, scorbutic persons, and such as are subject to the flow of piles, frequently suffer spurious accessions both of nephritic colic, and calculus of the bladder, accompanied even with strangury; who otherwise had never experienced genuine calculus.

Dissections discover multiform and large stones, often unexpected in the kidneys; and indeed they not unfrequently occur of a prodigious size, in some who, as already hinted, while living, had no suspicions of this disease. The kidneys also exhibit purulency, putridity, and other injuries mentioned above; the right one has sometimes been seen adhering to the liver or colon. The ureters are found filled with stones, altogether choaked up, beyond measure dilated, tortuous, callous, &c. The bladder appears thick and compact, and so rolled about the calculus, as that there scarcely remained an opening for the emis-

sion of urine; heaped with stones, inflamed, ulcerated, blackish and mortified; and forming a double sack, like a *gourd flask*. This organ is also observed, by prolapsus of the vagina, removed from its seat, at times dug out by ulcer, and opening into the rectum, or it adheres firmly to the intestine by an extensive cicatrix. In some cases there occur stones of stupendous magnitude, to wit, of the size of an orange; or of an Ostrich egg, or equalling that of a boy's head; or weighing about four pounds. Some stones are hollowed out by a central foramen, or a gutter or little channel is formed in them, to give passage to the urine. Sometimes they are observed highly polished, and as if glazed, again they present to view, rough, sharp, filled with tubercles, and horrid with sharp points, &c. Respecting their firmness, some are found soft and brittle, or like gypsum; but others are harder like a flint, from which, if struck with a steel there issue sparks of fire. They vary also in colour: for some are whitish, yellowish, or greenish; others brown, black, &c. nor are there wanting some which possess a kind of transparency. Urinary calculi are mostly found fluctuating loosely in the bladder, yet some, as already hinted, are found so fixed in the sides of the bladder, that they seem inclosed in a capsule, and thus elude the catheter. It is universally known that the nuclei of these stones, are sometimes pins, needles, thread, pieces of wax, of lead, or other extraneous substance, which by degrees encrease and become stones. Lastly, calculi, are found in the urethra or without the inclosure, namely, in the cellular substance of the perinæum, scrotum, &c.

The *little sand in the kidneys*, as above noticed, is with little difficulty removed; but it is otherwise with calculus of a certain size and form, impacted in these viscera, which hitherto have not suffered extraction by any know art, and these admit of but a *palliative cure*; if we except *Nephretomy*, or *cutting of the kidney*, concerning which there is a great controversy: for we can scarcely conceive how, without risk of life, a wound could be inflicted on this very deeply seated part, nor is the mode more easily understood, of turning off the urine gushing from the wounded kidney, thus preventing the cicatrix. On this controversy, see the **THIRD VOLUME OF THE SURGICAL ACADEMY**, in which are many curious things, worthy of being known. But when the calculus lodged in the pelvis of the kidney, obtains a round form, and has not yet become large, it is easily carried along by the urine as it passes, and is rolled through the ureters to the bladder. In this state of things, nothing is found more efficacious, *than large draughts of water*. By which means the urine issuing from the bladder in a full stream, takes this foreign substance with it. For it is known that some stones

as large as an olive or filbert, have often been carried out by this way: to which also emollient clysters, baths, &c. are conducive. It also happens that a very large calculus, not to be overcome by the contractile power of the urethra, has lodged there and altogether stopped the urine, until by abundant draughts of water, the flow, and impetus of urine, removed the obstructing cause. Yet if this fail, it is proper to have recourse to *cutting the urethra*, which very simple operation is altogether free of danger. When the calculus in the bladder has been remarkably large, and there remains no hope of its spontaneous exit, the attention of the physician is generally turned to a *palliative cure*, namely, to clysters, injections into the urethra, and local emollients of some kind; with the addition of internal paregorics, and suitable regimen; unless the extreme pains with which the sick are tortured should demand *Cystotomy, or cutting of the Bladder*, which experiment was first submitted to, by order of LEWIS 14th, with the happiest success, at *Paris* in the year 1474; by a certain man condemned to death for his crimes; through which unheard of attempt he was relieved of this terrible disease, and escaped an ignominious death. Yet this operation, with the various methods of which every one is acquainted, although, in our times, under the care and attention of a certain very celebrated MONK at *Paris*, and of others well esteemed in Surgery, it is performed in cases almost without number; is notwithstanding not without danger; but rather hurries many to that bourne whence no traveller returns; besides, that the stone, on account of its size, is often unfit for extraction; but those who are impatient of their pain, are forced as it were, to undergo this danger.

There are, notwithstanding some *lithontriptics* recommended by authors, in whom we may mostly place confidence; namely, *golden rod*, winter-cherry, onion, horse-radish, lime juice, *pareira brava*, and *lignum nephriticum*. For this purpose also the various mineral waters are with much benefit brought into use. The very celebrated DE HAEN, who deserves a high rank among the great men of the profession, has much extolled the *Uva Ursi*; but whether the relief which the sick enjoy while using this remedy, may not rather be referred to the paregorics, and to the linseed oil injected into the bladder, I leave for the examination of wiser practitioners than myself. Much is also said by recent writers, of lime water prepared from oyster shells, both for internal use, and for injection into the bladder. Concerning the wonderful virtues of this water, there are histories innumerable; from which, at least it appears, that it might not be hurtful: this however is to be submitted to the test of further

experience. But among the various lithontriptics made public these few years past, there is perhaps none equal to STEPHENS' remedy, principally composed of *soap* and *lime*; the efficacy of which, although attacked by powerful arguments, is proved by accurate clinical experiments; by close examination of which, it is clearly manifest that *soft* or *gypseous stones* have been dissolved by this remedy, but that *hard* or *rocky ones* have not. It is little wonder if through the neglect of this distinction, physicians of the first rank should have differed much and rashly on this subject, or altogether have discarded this remedy; among whom we are grieved to mention the very celebrated MEAD. But setting aside these disputations, which are of little or no use in elucidating the subject, we will candidly discover what is gathered from our own observations, as well in public as in private practice: first giving the history of a certain patient who, by the long continuance and severity of the disease, was reduced to the last extremity; but was, beyond all doubt, restored from the grave by this lithontriptic.

The man was about fifty years of age, of no mean condition, and, worn down by slow fever and pains arising from calculus of the bladder, earnestly demanded Cystotomy. For a long time the urine had flowed in ceaseless droppings, the appetite was altogether prostrated; the most severe pains in the part, drove away sleep, and his strength being exhausted, he was fast hastening to inevitable fate. In which situation, after I had often felt the stone by means of the catheter, I proposed to him, reluctant as he was, the ENGLISH REMEDY, now so frequently used, and prepared for its exhibition immediately. In the second month he experienced some relief, in the third he felt better; in the fourth there were greater intermissions; and he could retain his urine a whole hour and longer; which had never been the case for many months before. What need many words: every thing succeeding properly, he was entirely well in the eighth month, not a vestige of the disease remaining. It is necessary to remark that through the whole course of the cure he passed innumerable fragments of stone, and a tough and gypseous matter, together with his urine, which afterwards became clear, and as in vigorous health, was emitted from the bladder, now obedient to the will, and flowed at pleasure without the least pain. He then recovered his appetite, sleep, and strength; and lastly, becoming plump, with a florid countenance, he was as healthy as though he had never suffered the disease. Although there was no room to doubt of the entire and absolute cure in this case, yet I thought it would not be unsuitable to make a public examination by the catheter, by which means, after the trials of all the by-

standers, as well surgeons as physicians, (especially of the surgeon to whom he had committed the operation about seven months before,) it was proved without dispute, that the calculus of the bladder had altogether vanished, or had gone off in pieces with the urine.

It would be a very tedious and superfluous work to mention *all the observations on this subject*, which I find in my note-book, both respecting calculus of the bladder and Lithiasis of the kidneys: wherefore what is to be inferred from comparing these, it has appeared to me not unadvisable to abridge in few words by way of finish. *In the first place* then, from the numbers who have laboured under calculus of the bladder, and committed themselves to my care; four only have been restored to their former health, within the space of eight or ten months: others worn out by the tedious cure, and not submitting to the repetition of the medicine three times every day, so ungrateful to the palate and nauseating, have altogether refused to obey the directions of their physician, although they felt better: among whom only one old man, who was in his eightieth year, and whose calculus had become as hard as a rock, experienced such relief from this remedy, that for many years he continued its use; until worn out with age, and I know not what disease, he departed to rest. There was another who besides calculus of the bladder, laboured under ulcer of the kidneys and slow fever, together with marasmus, from which he died; to whom this remedy had been administered not more than a month: but it had exerted an amazing effect upon the stone, (an engraving of which is to be seen in the ROYAL ACADEMY OF SCIENCES,) which having been eroded throughout its whole surface, was cause of admiration to all who were present at the public examination of the body. *Secondly*, The pills of the same author, called *nephritic*, were no less beneficial, which as it were, altogether carried off the disease in the greater part of the sick, and in the rest afforded very great relief. *Thirdly*, The case was different in Lithiasis of the kidneys. Persons afflicted with both these disorders apparently, committed themselves to my care; to whom the aforesaid remedy gave some help; but they experienced nothing except a remission, with which, however, they were highly delighted. From all which we may collect, that this remedy, besides the virtue of expelling sand or gravel, which it possesses in a high degree, is a perfect *lithontriptic* against calculi in the bladder, provided they have not attained to a stony hardness; and therefore deserves not the least rank in the list of *most excellent remedies*; whatever those may say to the contrary who are gaping after lucre, and usually despise all other me-

thods than their own. Nor do I value the assertion of the very celebrated HUXHAM, who thinks that this medicine brings on a scorbutic diathesis, and therefore can never suit persons labouring under that disease; which I do not remember to have observed: but led by the authority of this great man himself, I think it ought further to be investigated.

BLOODY URINE.

IT sometimes does not clearly appear, whether *blood* passing its bounds and affecting the urine, *proceeds from the kidneys or bladder*; although *mark of both states* are not wanting. For this affection is mostly attended with no pain, if the blood distil from the kidneys, unless it be implicated with a stone, or other organic fault; or the flow of urine be intercepted by grumous blood stopping up one of the ureters, whence pains are excited, which can only be assuaged by overcoming the obstruction; but more severe ones are felt when the blood bursts from the sides of the bladder, namely, as often as the urine is expelled from these recesses. Sometimes bloody urine proceeding from both organs, recurs periodically, or at stated times, namely, every month. But the fits recede from their usual order, if the sick indulge in gluttony and drunkenness. There are various examples among medical writers, of a kind of menstrual flux through the penis. There is another kind of hæmorrhage of the urethra, void of pain, and familiar to debauchees, in which the pure blood distils from the penis by drops, while the urine remains limpid. Bloody urine is mostly dependent on calculus of the kidneys and bladder; which also proceeds from varices, by which the vessels of the bladder are disfigured; besides this affection sometimes takes its rise from cantharides taken inwardly or applied outwardly, from aloetics, from the terebinthinated balsam of sulphur, and other stimulants. It is also promoted by a stroke, a fall from a height, imprudent straining of the body, immoderate exercise, venery, the free use of wine, violent anger, &c. This disease may be brought on by suppression of the menses arising accidentally or from age: the same takes place from suppressed piles. Moreover, melancholics and scorbutics often pass blackish red urine, even in perfect health, very little differing from bloody. Something of a similar kind happens from obstruction of the liver, from which the disease now under consideration sometimes takes its rise. Lastly, from the variety of things

taken in, it is well known that the urine is tinged in various ways.

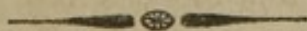
Bloody Urine is never without danger, especially if attended with fever and pain, but there is mostly the greatest hope of cure. Every one knows that many evacuate highly red-coloured or blackish urine, for a long time, and without any trouble; and indeed bloody urine is sometimes considered salutary in ardent fever. The case is otherwise in other species of fever, but it is especially considered among the alarming symptoms in small pox, measles, and malignant fevers. Periodical bloody urine is not thought dangerous, while it supplies the place of the menses and piles, nor does it excite much fear if it originate from immoderate exercise or any temporary cause, except that if long protracted it threatens ulceration of the injured organs. When it proceeds from calculus or other injury of these viscera, it usually baffles the art of physicians, and puts an end to the sufferings of the sick.

There are very numerous *anatomical histories* of this disease from which we learn that bloody urine is very often occasioned by calculus of the kidneys and bladder, in examining which, the remains of blood very easily lead to the wounded vessels, above which the parts are found without blood. Concrete blood is seen fluctuating in the bladder, or confined in the ureters, an obstruction of a similar kind is also found in the urethra. The kidneys, moreover, are found ulcerated, or altogether putrid; the vessels of the bladder, especially those supplying its neck, turgid with blood, and varicous, besides calculi of various forms. This viscus sometimes contains worms, and is frequently marked with gangrenous spots, &c. But we meet with other injured viscera; namely, the liver inflamed, schirrous, purulent, and mortified: the spleen of amazing size, and obstructed; the heart contaminated with matter, or containing stony substances, not to mention numberless other faults which appear altogether foreign from our subject.

There is no doubt that blood-letting and other remedies directed for hæmorrhages are mostly of use in Bloody Urine; it has escaped no one that the *Saphena* is to be opened if the menses or piles be suppressed. But diluents, refrigerants, and temperants afford great relief; namely, whey, and decoctions of borage, succory, agrimony, pimpinell, hartstongue, maiden hair, nettle, and comfrey. Demulcents are no less beneficial, namely, the flowers and roots of althea, linseed, milk, emulsions, spermaceti, &c. Sedatives of nitre and camphor are given with advantage, especially when Bloody Urine is a symptom of a fever. When other circumstances permit we may give laudanum, dia-

codium, and other narcotics, if the sick have restless nights. It is necessary to deal cautiously with astringents although many boldly advise quinces, catechu, bole armenian, &c. For experience makes it easy for me to believe that these cannot be given without danger.

Vulneraries, may be given with benefit, to wit, St. John's wort, speedwell, ground-ivy, *Gordon's* troches, &c. But balsams and turpentine although numbered with celebrated vulneraries, rarely succeed to our wish in this state of things. As occasion requires, we may profitably make use of rhubarb, manna, cassia, and other laxatives, nor ought the stronger cathartics to be omitted, to wit, Jalap, and diacrydium, provided they are associated with milder ones, in very small doses. *Aperients* are also happily used, such as crocus martis, chalybeate tartar, millepedes, and numberless others of that kind: nor are the *aromatics* and *roborants* less useful if nothing forbid; namely, cassia lignea, and cinnamon; sage, mint, balm, &c. although they may seem like mere *empirical* medicines; for oftentimes physicians have observed these remedies, when prescribed with another view, to have evidently, as it were by good luck, checked Bloody Urine. This wonderful effect I happened once to observe in a noble lady, who for about two years, if I mistake not, laboured under Bloody Urine, the cure of which, after many remedies had been given in vain, she committed to nature; this notwithstanding was effected by *sage*, which she was then using in order to strengthen her stomach. To return to my subject: if the above medicines proved vain, it is proper to take to the use of what they call *acidulous mineral waters*, which may advantageously be mixed with milk: for in the use of this remedy consists the last hope. In fine, external remedies are usually resorted to, namely, injections of cold water, or of the various mineral waters, leeches applied to the hæmorrhoidal vessels; and numberless others, which if used in time, may succeed to our wishes.



ULCERS OF THE KIDNEYS AND BLADDER.

IT is obvious to every one that the kidneys and bladder are often wounded by angular or sharp pointed stones, nor is it less intelligible why these little wounds excited by the same cause remaining there, should in a short time run into ulcers. But it is difficult to find out why cantharides taken inwardly, or other stimulant diuretic medicines, should have the same effect. These

organs, as well as the other viscera, contract this disease from a bad state of the blood and humors. There is no doubt that in this affection the urine is muddy, purulent and offensive to the smell; but *this sign* is fallacious, since it often indicates nothing but a metastasis or translation of the matter lurking within the viscera, to the kidneys; which phenomenon, as above noticed, does not rarely happen. Besides, the urine is often passed turbid, whitish, and indeed fetid, or having the appearance of pus, notwithstanding it is of another nature; about which the *medical vulgar* is daily deceived. Wherefore exulceration of the kidneys is not known, unless by well attending to antecedent circumstances; these consist of *nephritis*, or inflammation and *signs* of lithiasis of the kidneys; to which we may add an incessant heat, and obscure pains usually referred to the loins, slow fever, and other signs of internal exulceration, from the concurrence of which it is not falsely conjectured that the kidneys are diseased. As it respects the bladder; an elastic swelling of the hypogastric region, and pain which is encreased by the touch, or in making water, strangury, urine mixed with pus, tenesmus, troublesome tickling of the genitals, followed by a desire of scratching, *afford no fallacious marks of Erosion of the Bladder*. Concerning purulent matter from an ulcer of the urethra, distilling from the penis, as in gonorrhœa, we have spoken elsewhere.

An ulcer, provided it have not become deeply rooted, is more easily cured in the kidneys than in the bladder; for the unceasing motion of this latter organ, hinders the flesh from being united by the nutritious gluten, although vulneraries, and the best detergents injected, reach the affected part. In a word, *Ulcer of the Kidneys is with difficulty healed*; but the same disease of the *bladder* can be overcome *by no art*, especially in advanced age. *The more fetid the urine, and the greater the quantity of matter, and the more frequent the discharge of caruncles or fragments of the inner coat, the greater is the danger of death*. Since under these circumstances it is natural to suppose that the ulcer is widely diffused, or of a bad kind. But it is necessary to observe that Ulcer of the Kidneys, as well as this disease of the lungs, is often hid in obscurity, and quietly lies in wait for life. For example: A young man, who two months after being relieved of a nephritic fit, seemed to enjoy perfect health, and indeed had taken a wife; when the second attack of nephritis came on, in four days bade a last farewell to this world. Being alarmed at this sudden death I was desirous to open the body; in which the left kidney was found full of purulent and gypseous matter, and very numerous stones; its surface eaten by ulcers, or evidently become putrid; whence

indeed it followed that this disease had been for a long time *incurable* and *fatal*, which however was discovered by no signs, on account of the stoppage of the left ureter which denied an exit to the purulent matter; the right organ performing the office of the diseased one.

To pursue my plan: It is evident from many *histories of dissections*, that Ulcer of the Kidneys very frequently takes its rise from calculus. Sometimes one of the kidneys is found like a sack, either collapsed and depressed, or expanded beyond measure, turgid with purulent and sanious urine, and floating calculi: and sometimes the feculent urine is collected here in such quantity, as to amount to twelve pints; it has been even contained in one of the ureters to the quantity of two pints. Besides, the kidneys are seen dry and wrinkled, adhering to the surrounding parts, containing worms, &c. There is observed in the bladder an ulcer more or less spreading, as also stones of various forms, and different sizes. The urine is found muddy, in which are floating little pieces of flesh, or fragments of some membrane of the viscus. The recesses or capsules are seen filled with pus, stones and little sand. Sinuous ulcers are discovered opening into the intestine rectum, &c.

The *cure* of these affections differs little from that which is suitable in other internal ulcerations, of which we have treated above. Yet, lest we should seem to have omitted any thing, it is thought best to mention the medicines most in use. Wherefore let temperants and demulcents, (having premised general remedies if the case demand) fill every interval; to this class belong succory, agrimony, borage, dock and comfrey; flowers and roots of althea, linseed, whey, or milk itself, which perhaps has not its equal in this case. The various mineral waters are of no little benefit. Detergents, *vulneraries* and balsamics are also much esteemed, namely, St. John's wort, speedwell, and the Helvetic vulnerary herbs; turpentine, balsam of Copaiba and Peru, *Gordon's Troches*, hydromel, lime water, &c. Hypnotics are very serviceable, which nevertheless are to be cautiously exhibited. Laxatives, the best of which in this case is rhubarb, may be used as occasion requires, but pareira brava, butcher's broom and parsley, æthiops mineral and many others of that nature, which are unadvisedly recommended by some; cannot be given without danger. Lastly, we ought never to omit, in ulcer of the bladder, injections, both demulcent, as of milk; and detergent as traumatic decoctions, lime water, *Gordon's troches*, &c. Nor are demulcent and terebinthinated clysters to be omitted, which usually quiet the pains both of the kidneys and bladder.

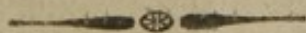
DYSURY, OR DIFFICULTY OF VOIDING URINE,
AND STRANGURY, OR A DISCHARGE OF URINE
BY DROPS.

FOR as much as these diseases, very frequently joined together, may proceed from one and the same cause, they are not rightly distinguished by the generality of physicians; or are usually taken for *difficulty of voiding urine*, more or less troublesome. Yet each has its peculiar *signs*, by which it differs from the other. For in *Dysury* the urine flows with difficulty, but when the bladder is emptied, the desire to void it ceases. The case is different in *strangury*, in which it distills as it were by drops, and with pain; and the stimulus being almost unceasing, even the neck of the empty bladder is irritated. Inflammation and ulceration of the bladder is attended with both affections; in the same manner as calculus and bloody urine. These diseases are promoted also by inflammation or ulcer of the urethra, to which we may add imaginary caruncles treated of elsewhere. The use of cantharides, both internal and external brings on Strangury. Sometimes it is occasioned by fresh ale or beer, which also brings on a spurious gonorrhæa very easily cured. It also arises from suppressed piles, menses and lochia. Lastly even the most inexperienced physician knows that venereal affections are very often attended with Strangury. Moreover the gouty, when the paroxysms have subsided, are sometimes tormented with Dysury. Old persons are thought to be liable to the most obstinate Strangury. Hypochondriacs and scorbutics are often slightly afflicted with it.

From the relation of *anatomists* it is gathered, that Dysury and Strangury are very often occasioned, by stones or exulceration of the bladder. Calculi are found very large and of different forms, namely of unequal surface, angular, tuberos or having horrid sharp points, sometimes floating in the bladder, sometimes hid in the peculiar capsule, which was treated of above. There are seen ulcers occupying the fundus and sides of the bladder, but often affecting its neck. Besides the receptacle of the urine is observed to be seized with inflammation; callous, black and mortified. In its cavity occur abscesses fungous or cancerous; excrescences, pustules of various sorts, sometimes entire, sometimes eaten by ulcers; the vessels of the whole organ, but especially of the neck, are found turgid and varicous. The bladder in some cases is dilated beyond measure, and also torn; in others, contracted both by previous disease, and by its own conformation. Lastly sometimes this organ is altogether wanting,

the offices of which are performed by the ureters: to say nothing of other congenital faults that are very rare. But sometimes the neck of the bladder is compressed by tumors of the neighbouring parts, by aneurism, by the stupendous size of the vagina, by a tumid rectum, &c. It is necessary to remark by way of conclusion, that sometimes nothing is met with but an injury of the kidneys from inflammation, exulceration, &c. while the bladder is entirely sound: and indeed in some cases no remains of disease are detected, neither in the kidneys nor in the bladder; the cause probably lurking in the nerves or blood vessels.

In the greater part of the sick, *venesections* are thought serviceable, which especially give great relief, after the suppression of a customary discharge of blood. But diluents and *demulcents* are much esteemed, such as chicken or veal water, whey, infusions of mallows, linseed and poppy; of the roots of navew, althea, water lilly and strawberries. Mucilages, oil of sweet the almonds, emulsions or milk itself: to which may be added various mineral waters, cold, or acidulated, impregnated with iron, which experience has proved to have been of great use in many cases. *Sedatives* deserve no little praise, namely nitre, camphor, and mineral anodyne liquor; and indeed *narcotics* may be cautiously used. Meanwhile the belly must be kept open by means of laxatives, such as cassia, tamarinds, &c. From the above history of *dissections* it is well understood that the use of vulneraries and balsamics is of great moment, and these are especially given with advantage, by the advice of authors of the first rank: to wit, Balsam of Copiaba and Peru, turpentine, and others of that kind. Moreover *injections* must not be omitted, either *demulcent*, as prepared of milk, whey, oil of sweet almonds, &c. or *vulnerary*, as of decoctions of agrimony, alchymilla, St. John's wort, birthwort, &c. Lastly, laxative, demulcent and oily clysters are highly esteemed *in foro medico*; as also fomentations and emollient cataplasms, baths, semicupia, &c.



ISCHURY OF THE KIDNEYS AND BLADDER.

IT is easily distinguished whether the urine is *suppressed* from the fault of the kidneys, or retained by the bladder. Every one knows that *Ischury of the Kidneys* arises from nephritis, calculus, inflammation, or other injury of the kidneys. But that spasmodic constriction of these organs does not clearly mani-

fest itself, which spares not the other viscera of the abdomen; such as is daily observed in acute diseases, in hypochondriac and hysteric affections, &c. Nor is that flaccidity and flattening less obscure, or that depraved state of the humours, which even bring on this affection. Renal Ischury, besides the signs of nephritis already mentioned, is attended with an obscure and heavy pain about the kidneys. Heartburn, nausea, and vomiting come on: the mouth is affected with the taste of urine; there arise difficulty of breathing and drowsiness, &c. Some with difficulty bend the spine; but whether in this case the ischury or *suppression*, be implicated with *lumbago* or *sciatic*, as frequently happens, we leave for the judicious to determine.

Ischury, or *suppression* of the bladder, is known by other signs, viz. by a swelling or puffing up of the hypogastric region, by a certain sense of weight in the perinæum, and an irritative desire to void urine: with which those who labour under genuine Ischury of the Kidneys, are rarely oppressed. But nothing more clearly manifests this disease, than the catheter let into the bladder: which also by promoting the exit of urine affords present help. Ischury of the bladder, from atony of the organ or torpor; from a stone closing up the neck, and any chronic obstruction, is mostly without fever: but if it arise from inflammation and suppuration both of the bladder and prostate, as often happens in the suppression of gonorrhœa; fever is excited, pains are exasperated, the strength is prostrated, and delirium ensues, &c.

It is well known that *Ischury of the Kidneys* of long continuance, is *dangerous*: it is true that a very plentiful flow of sweat procrastinates death to the twelfth or fourteenth day of the disease: otherwise the sick are removed about the seventh day; and even sooner if Ischury of the Kidneys proceed from a wound or fall from a height. Drowsiness, hiccough, and suffocation, during the suppression of urine, are *fatal symptoms*. *Ischury of the bladder*, which the generality of physicians refer to paralysis, and to which the aged are liable, seems to proceed from torpor of the bladder; for it ceases spontaneously in most cases after fifteen, twenty, or thirty days; provided the urine be often drawn off through the day by the catheter. Women about the last months of gestation, are subject to this species of Ischury, from which they are instantly relieved by parturition. Persons incur this misfortune who retain their urine too long; *salacity* also may promote it. The prostate gland swelled or seized with spasm, usually occasions this disease, which is at other times excited by the remains of gonorrhœa. Inflammation of the bladder has Ischury associated with it, which within four or

five days takes the patient off, unless pus be formed; whence proceeds an ulcer, not to be overcome by any art, which gradually reduces the miserable patients to the grave. It must not be omitted that a cause of ischury, not unfrequent, has very lately been discovered, namely, a protuberant caruncle situated in the neck of the bladder, which often swelling to a great extent, not only stops the flow of the urine, but also hinders the introduction of the catheter; which obstruction when it is known, may easily be removed by a skilful hand: concerning which, see the **ACTS OF THE ROYAL ACADEMY OF SCIENCES, Anno. 1753.**

The bodies when opened, exhibit a viscid and mucous substance, a gypseous mud, little sand and calculi in the bladder and ureters; as also in the pelvis of the kidney; which is even lined with a stony crust; the ureters are not seldom obstructed by stones, or grumous blood, and above the obstruction are distended to bursting, or appear callous and dry. The kidneys are seen inflamed, suppurated, putrid, torn, and almost obliterated; wrinkled, depressed, and dry, or of great size: in some cases, nothing remains but a sack turgid with urine or fœtid matter, which at times is of such a size, as to resemble a transparent bladder. But one kidney furnished with its ureter, is discovered sometimes in its proper situation, on the right or left side; sometimes placed in the middle. It is said by some writers of credit, that calculi have been found in the emulgent veins: concerning tumours of the neighbouring parts pressing these organs, we have also made mention. It is proper, by the bye, to observe that by one diseased kidney, the other is drawn into consent although altogether sound, and often becomes unable to perform its usual offices. Lastly, there are not wanting bodies in which the kidneys and ureters seem quite free from injury, although the collapsed bladder afforded not even the most sparing quantity of urine.

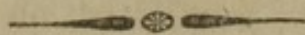
To pursue our design: *injuries of the bladder* are observed to be no fewer and less frequent; for besides sand and calculi found in the greatest number of bodies, this organ is affected with inflammation, abscess, ulcer, gangrene, &c. and sometimes torn. Polypous excrescences also present themselves, which fill the whole cavity of the bladder; or schirrous and cancerous tumours which are as large as a fist. Besides, this viscus is also found contracted, callous, and almost cartilaginous. That *process of the bladder*, which, like the uvula, looks toward the mouth of the bladder, is found tumid, inflamed, schirrous, and callous. The *prostate* also suffers its injuries, and is very frequently inflamed, or of a great size, schirrous and callous; nor is the *urethra* free, which is discovered choaked with calculi, and altoge-

ther closed. Lastly, we discover herniæ of great size, abscesses, and other tumours of different kinds, situated about the neck of the bladder; a wonderful enlargement of the vagina and uterus, and also of the rectum. Lastly, as above noticed, the bladder is dilated beyond measure, without any conspicuous defect: for I have seen such an one, rising above the umbilicus, and filling one half of the abdomen, which was swelled as in the gravid state, in a man forty years of age, who, I know not by what fatality, committed himself to the care of a young and unpractised surgeon.

We have said nothing of the *cure* which Ischury of the Kidneys requires, when proceeding from fever, inflammation, or nephritis, lest we should be guilty of needless repetition. In other cases blood-letting is used with advantage, especially from the *saphana*, if age and strength permit: which remedy sometimes also suits in Ischury of the Bladder, especially if it be excited by suppressed gonorrhœa. Meanwhile diluents and demulcents must be used with caution, which when they cannot overcome the obstruction, exasperate the disease, as must be obvious to every one. But diuretics may have the best effect, so long as the kidneys have contracted no organic injury. And among those in greatest esteem, are nitre, lemon juice, pellitory, purple star-thistle, radish, alkekengi, asparagus, and broom. Nor are cataplasms useless, prepared of boiled onions and pellitory, and applied to the loins with this view. But the *pareira brava* has not perhaps its equal as a diuretic. There is also great benefit from the use of wood-lice, balsam of copaiva, salt of amber, spirit of nitre and of vitriol, &c. By some the powder of bees is celebrated; nor are cantharides themselves forbidden, if danger threatens. Lastly, when all these remedies fail we must flee to an *emetic* as to the sacred anchor; and I have seen patients that were struggling with death, snatched from the jaws of the grave by the timely use of this remedy.

There is no one that does not perceive that all diuretics would be very injurious in ischury of the bladder; but emollient and oily enemata are of service. We may also use fomentations, emollient cataplasms and liniments, baths and semicupia: nor ought the pediluvia to be thought futile, as well hot, as cold. But much has been said in favour of cataplasms prepared of pellitory or boiled onions, and applied to the hypogastric region, both in this complaint and in Ischury of the Kidneys. Nor must we despise liniments made of the oil of ants or scorpions, the use of which has been rashly exploded. If all these fail, the *catheter* is to be introduced, which is the only remedy in advanced age. There is also perhaps, no little benefit derived from *leaden*, or

simple or compound *waxen probes* (or bougies,) of different thicknesses, when the morbid obstruction is in the urethra. But if they cannot enter the bladder, it is necessary without delay to have recourse to *paracentesis* by the perinæum or hypogastrium. This is the most common method, which, to confess the truth, has not always rightly succeeded: wherefore I have used another and more simple one, with success: which consists in *introducing a strait silver probe alone*; this, in a skilful hand, may overcome any obstruction, if we except a stone impacted in the urethra. But simple remedies are not fashionable, as I have often found, with novices and scoffers, who set themselves up for great things, that they may raise a dust. My plan will not permit me to add more on this subject, nor does my narrow page allow it.



DIABETES.

A VERY plentiful or unusual flow of Urine is thus named. This is a disease very familiar to old and cachectic persons, and more frequent than is commonly supposed. But it mostly escapes the notice of patients and physicians, who care little about the urine, till it arrives at its height. The urine in this case is not only voided in greater quantity than usual, but also varies from the natural character, for it is full of *chylaceous* or *oily* matter. At the first stage of the disease the patients suffer little or no inconvenience, and are quite ignorant of their threatening danger. But *as the disease progresses* it is otherwise; for then comes on a slow fever attended with thirst; a frothy saliva is excreted, the belly becomes costive. Meanwhile the sick complain of heat of the intestines which exerts its principal severity on the loins: the strength is protracted, the whole body wastes away, and other symptoms arise which usually attend hectic, or what is called *colliquative* fever. It is evident from this, that Diabetes when arrived to a certain grade is a *fatal* or *incurable* disease, especially if it be owing to an organic fault of the kidneys or bladder, which anatomical examination proves not rarely to be the case.

Diabetes may be brought on by arduous labour, and other immoderate exercises; venery, or the ardour of love changed into fury; the too free use of ardent liquors known by different names. Sometimes also the imprudent use of stimulant diuretics causes this affection; nor have the cold and hot mineral wa-

ters themselves occasioned a different effect, if given at improper times and longer than is right. Lastly, cholera does not unfrequently bring on Diabetes, which on this account is not undeservedly reckoned among the remains of grievous diseases.

From *dissections*, we find the kidneys flaccid, and collapsed; full of stones, tainted with suppuration, or putrid. These viscera sometimes appear of prodigious size, or wrapped in very thick, and almost cartilaginous coverings; the ureters are found bent from their strait or usual course, beyond measure dilated, or full of calculi. Nor is the bladder uninjured, but rather has often contracted very great thickness, or is seen marked with gangrenoid spots. The liver in many cases is diseased; for it is observed to be deformed or of stupendous magnitude; or obstructed and schirrous, livid, putrid, &c. to say nothing of callous and putrid spleen, or other lesions of the viscera usually observed after all chronic diseases.

From the foregoing it is plain what must be done: that is, our attention must be directed to abating the heat of the blood, breaking its force, and restoring entirely the balsamic particles with which it is endued. On this account we give with advantage temperants, namely, whey, infusions and decoctions of succory, borage, agrimony, pimpinella, and comfrey: but *demulcents* answer every purpose, to wit, milk, barley-water, rice water, emulsions, soups of shell fish; to which may be added, gum tragacanth, arabic, &c. These being premised, we recur to absorbents, such as coral, crab's claws, prepared hartshorn, &c. *Astringents* are also profitably administered, as red roses, plantain, horse-tail fern, sumach, bistort, quince, catechu, blood stone, acacia, alum, and preparations of iron, or mineral water of that nature, &c. As to venesection, it ought to be altogether banished, although it is proposed as a *polycryst* remedy by some, who have never smelt out the true character of this disease. But the bland *cathartics* are of no little service, which by inviting the serum from the sides of the intestinal tube, subtract it proportionably, from the kidneys; purgative clysters also have the same effect, and are otherwise of use to prevent costiveness. *Sudorifics* are recommended with the same view, to wit, guaiacum, sassafras, POTTER'S antihectic, &c. But we must be cautious in the use of these last, lest the blood already barren and heated, become more inflamed. Sometimes anodynes are thought beneficial, as laudanum, anodyne tincture, diacodium, &c. But these remedies must be prescribed with care, lest we add torpor to the morbid flaccidity of the kidneys. Lastly, other medicines are not wanting; to wit, aperients, roborants, vulneraries, detergents, which, as occasion requires, may often

advantageously be brought into use : it is indeed little wonder if Diabetes be very often complicated with various diseases, or depend on another.

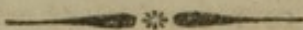
INVOLUNTARY DISCHARGE OF URINE.

THIS affection is familiar to infants or children and old persons, with this difference however, that infants or children wet the bed in their sleep, and the urine in old persons, even when awake, secretly flows out, although they very often use the chamber pot. *Incontinence of urine*, notwithstanding does not spare other ages ; it is *promoted* by imprudent use of diuretics, calculus of the bladder, a fall from a height, and immersion in cold water. Difficult parturition and *cystotomy* often bring it on. It arises from apoplexy and other drowsy affections ; and lastly, is numbered among the symptoms of dangerous diseases ; during the violence of which, the sick void urine without consciousness. Children somewhat advanced in years, who mind the commands or chidings of their parents, are liberated from this disease : which is difficult of cure in old age, or thought altogether *without remedy*, if it depend on any organic fault of the bladder.

For as much as the involuntary discharge of urine mostly proceeds from atony, or torpor of the bladder, it is obvious, why the remains of this disease *in the bodies dissected* should often escape our view. Nevertheless some faults are discovered both in the urinary organs and in the neighbouring parts ; for instance, a collection of serum has been found about the spinal marrow. The kidneys, sometimes of increased size, ulcerated and full of stones : The bladder, contracted, thickened, callous, and free from dilation, livid and gangrenous, ulcerated, containing abscess, and filled with stones. Tumors occur, growing to the surrounding parts, which press upon this viscus. The ureters are found uncommonly dilated, and performing the office of the bladder now too much compressed, and without the possibility of expansion, &c. Concerning various fistulous ulcers, through which the urine flows by the scrotum, perinæum and anus, in unceasing drops, and of that congenital disease in which the urine makes an outlet through the umbilicus ; I have thought it would be foreign from my subject to treat.

As it respects the *cure*, no one is ignorant that in children it should be committed to nature. It is also best to abstain from every remedy, in those advanced in years : but we must en-

deavour to restore the tone of the inert bladder. *Astringents* answer this purpose, namely water, in which a hot brick or iron is quenched, generous red wine, red roses, comfrey, horsetail fern, cypress nuts, catechu, and preparations of iron. *Aromatics* also may have the same effect, namely, mint, sage and balm; pepper, cloves, nutmeg, &c. With a similar view, if purging be necessary, rhubarb and Brazilian plum, (prune) are selected: Besides, aromatic and roborant injections are not to be despised; nor clysters, cataplasms, fomentations, semicupia, and liniments possessing the same virtues. Lastly, it is said that the cold bath has often removed this disease. Among old wives' remedies ought to be referred the *powder of a mouse* and such like highly recommended by the ignorant vulgar, which nevertheless nothing forbids to be tried, if they are very much desired by the sick; for no one is ignorant what effect the *faith of the sick* has, on all remedies. Finally some have contrived little machines by which the penis and urethra are compressed, to preclude the exit of the urine. To this end pessaries are devised, suited for the weaker sex; but the patients cannot wear them without inconvenience, and therefore altogether refuse any such things. But every one knows the vessels made of glass, silver, or leather, which being suitably adapted, receive the urine as it drops; nor can those who study cleanliness prevent the disagreeable smell by any other means.

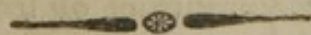


CATARRH OF THE BLADDER.

BY this title I have chosen to designate, an *unheard of disease of the bladder*, which I met with in a young nobleman, quite a lad, who, seven days before had recovered from a rheumatico-gouty fever of fourteen days duration. This affection, of *occult* character began with shivering, which was followed by fever; as this increased, the patient complained of heat in the epigastrium, which was immediately followed by strangury. Meanwhile the urine was voided, turbid; and afterwards *in the course of the disorder*, deposited a very plentiful whitish and mucous sediment, the quantity of which increased every day; so that, without doubt, it evidently exceeded the fourth part of the urine. The fever, encreasing towards evening, and putting on the appearance of catarrhal, ceased about the fourteenth day; yet the urine continued very thick for almost two months after the fever was removed. By which astonishing discharge of morbid matter his strength was very much reduced, and could

not be restored; and the emaciation of his whole body excited the greatest fear of marasmus. This secondary fever was removed by venesections repeated with the utmost caution, diluents, temperants, sedatives and laxatives. As to the remaining disease of the bladder, on rightly weighing all circumstances, it appeared to me most advisable to commit the cure of it to nature, together with a suitable regimen. Nor did the event deceive me.

It is not to be concealed that many *physicians of the first note*, were invited to see this patient who was of eminent Nobility, while under my care; these, after the most accurate examination, were, as usual, of contrary opinions; For many declared that this matter was merely purulent, among which, some referred its source to the *kidneys*; others denied it, and attributed the origin of this supposed *pus*, to the *bladder*. My opinion was not biassed by either sentiment: since it appeared to me that this *inodorous matter* was genuine *mucus*, transuding from the sides of the bladder, scarce unlike that which the pituitary membrane of the nose, fauces and bronchia yields in cattarrhal fluxions. That this opinion (to which a very eminent Practitioner agreed) was not foreign from the truth, was manifested as clear as day, by the termination of the disease. For it is hard to conceive how and by what means, an ulcer of the bladder or kidneys, which supplied such a quantity of pus, should have been cured in so short a time, almost altogether by the help of nature. Nor does there remain a doubt about the *part affected*; namely whether the *kidneys* or the *bladder* afforded this mucous matter, since from the signs mentioned, which are more than sufficiently manifest, it was an injury of this latter organ. But there has been an entire silence concerning this affection among authors, if we except the very celebrated HOFFMAN who has given a history in his practice of a certain affection little varying from the present, under the title of "*A Rare Disease of the Bladder*." From which it appears that there was no less controversy among his contemporaries, about the character of that new disease, which the above author did not hesitate to refer to the *bladder*.



DROPSY OF THE ABDOMEN.

BY a swelling of the abdomen and fluctuation of stagnant serum, the sound of which is sometimes heard, *Dropsy* called

Ascites, is discovered, which like the other species of dropsy, is usually preceded by œdematous swelling of the feet. It is accompanied with paleness of the face, want of appetite, and thirst, heart burn and flatulence, dry cough and difficulty of breathing, slow fever, emaciation of the upper limbs; and œdema not only of the legs, but also of the scrotum and penis itself. *As these proceed*, costiveness takes place, the urine flows sparingly, and is voided sometimes clear, sometimes turbid and of a brick dust or saffron colour. Meanwhile the belly becomes more prominent, and is so puffed out that by its own weight it sometimes falls down even to the knees, causing the integuments from over-distention, to be full of clefts. *Ascites* is sometimes complicated with tympanites and leucophlegmasia, and is also associated with genuine or spurious pregnancy. But now and then there occur young women tainted with forbidden embraces, whose tumid uterus resembles dropsy, which mistake is kept up by their history of the fabulous disease, craftily contrived: whence it is little wonder if even the more skillful are deceived. Nevertheless both states are distinguished by peculiar *signs*, for besides the fluctuation of a liquid which is altogether absent in the gravid state, in which also the hypogastrium is more prominent in Dropsy, the countenance of pregnant women preserves its beauty and colour, which in ascites is of a loathsome paleness. The signs taken from the menses however are fallacious, since in both states they may flow or be suppressed. But the *motion of the fœtus* gives the pathognomonic sign of gravidity, which becomes conspicuous about the fourth or fifth month. To say nothing of the other signs of conception to be mentioned hereafter.

It is also with difficulty known, whether the stagnation of serum be collected in the cavity of the Abdomen, so as that the viscera are soaked therein, or whether it originate by a peculiar cyst from the peritoneum and omentum; or from the coverings of the uterus, ovaries, kidneys, &c. For a fluctuation is perceptible in both diseases when arrived to a certain grade, whatever writers advance to the contrary, who follow, like cattle, in the footsteps of others. Nevertheless we can distinguish *cystic dropsy* about the first stage of the disease, before it get to a great size, by the surface of the tumor, which does not occupy the whole abdomen as in ascites; at that time also there is no fluctuation. But if as the disease continues the abdomen is much swelled out, there remains *one sign* to be taken from the fluid drawn by *paracentesis*; for a *cystic dropsy* usually affords a muddy, fetid, bloody and purulent fluid, which rarely happens in ascites. Some reckon a certain de-

pression of the umbilicus among the signs of Dropsy of the *peritonæum*; which nevertheless is often relaxed, so that *this sign* is also fallacious. Some suppose a *tumor of the scrotum*, to indicate Dropsy of the *peritonæum*, but this mark ought also to be considered uncertain, since this swelling, as every anatomist knows, proceeds from a double cause, namely, from an affection of the cellular substance, attached to the *peritonæum*, and enclosing the spermatic vessels; and from a general infarction of the teguments; as happens in almost every species of Dropsy, and especially in anasarca.

Yet if these be subjected to more accurate examination, the *diagnosis* of cystic Dropsy will clearly appear: for besides a prominent tumor in some *part* of the Abdomen, the splendor of the face is not obscured, the appetite is good, the respiration is more free, the uterus performs its office, and the parts rarely or later become emaciated; but we have already noticed that it happens otherwise in ascites. Besides its progress is more slow, and the legs swell later. Finally, this affection occasions very little inconvenience except a certain sense of weight, more or less troublesome in proportion to its size, of which the patients complain. But the first invasion of this disease lies in dark obscurity, since the forerunners which usually denote ascites, are altogether wanting here.

Both species of Dropsy are commonly *promoted* by a schirous obstruction of the abdominal viscera: but this organic lesion altogether escapes the touch of the fingers, while the abdomen is swelled, which is easily detected after the evacuation of the fluid, performed by the well known surgical operation. The waters let out appear sometimes clear, or like urine, sometimes greenish, oily, bloody, sanious, purulent; at other times gelatinous, muddy and fetid. Sometimes they resemble the lees of wine; or seem to have the nature of milk or chyle. The quantity of water is amazing which can be collected in the abdomen in both species of Dropsy; since various histories testify, that it has sometimes amounted to an *hundred* pints and more.

Drunkards are subject to Abdominal Dropsy; the cachectic, scorbutic, and gouty are thought liable to it: preceeding immoderate hæmorrhages, especially vomiting of blood, and bloody expectoration, and the very great loss of this fluid by venesections. Besides, the ascites is *promoted* by jaundice and leucophlegmasia; it arises from quartan or other obstinate intermittent. Severe acute diseases bring it on; the suppression of accustomed flows; the retrocession of cutaneous diseases; the drying of old ulcers. But more frequently, as already noticed, schirri, tumours, and other injuries of the abdominal viscera, are

attended with this stagnation. Finally, let puerperal women beware of it, who deviate from a proper mode of living; the luxurious also, who delight in delicacies and the coldest drinks, &c.

Practice teaches us that ascites is more easily cured in the female sex than in the other, but *cystic Dropsy* is more *obstinate* in both. If, as not rarely happens, ascites take its rise from suppressed urine, with no pre-existing injury of the viscera, it excites little alarm, and is *easy of cure*. For example: A woman thirty five years of age, who indulged too much in her cups, although not of the lower class, a short time ago laboured under ascites, the swelling of the abdomen and fluctuation of the water being very conspicuous. Having premised a light cathartic, I prescribed nothing for her when committed to my care, but a nitrous ptisan, and occasional diuretic broths, in consequence of which, the urine breaking forth very plentifully, the swelling of the belly went down within twelve days, and no remains of the disease existing, she was restored to her former health. It is little wonder if patients in ascites, as experience teaches, should be cured by a spontaneous flow of urine, or diarrhœa excited by no art. Nor are there wanting those whose stagnant waters have made their way out through the umbilicus, until the abdomen became flat, nor needed any other remedy. But these *favourable efforts of nature* are rare, in expectation of which, to abstain from all cure would be absurd.

Ascites, more difficult of cure than leucophlegmasia from which it often originates, is justly reckoned among the more *obstinate* diseases: and indeed, when of some years standing, or inveterate, it is considered incurable; because it is generally kept up by the greatest destruction of the abdominal viscera. Nevertheless, sometimes the waters are drawn off both by means of *tapping*, and of evacuant medicines, but the patients feel little the better, or rather are affected with marasmus, or fall again into fatal dropsy, which soon hurries them off. The *symptoms* called *dangerous* in this disease, are jaundice, atrophy, erysipelacious fever, high-coloured urine, bloody expectoration, immoderate flow of the piles, &c. A frequent dry cough excites suspicion of an injury of the liver, or dropsy of the breast. Lastly, shivering and chills, recurring at irregular intervals, afford no uncertain signs of internal suppuration. Vomiting and purging in the first stage of the disease are serviceable, but it is otherwise afterwards. A flow of urine in either disease is most to be wished for, but sweats rarely do good. Nevertheless, these desirable evacuations take place in vain, as above inculcated, if the affected viscera are undermining the life.

There is the *greater hope of cure*, the more the fluid drawn out resembles the nature of urine ; but limpid and whitish, offensive to the smell, bloody, purulent, and feculent waters, portend death. If after the abdomen is emptied and even, there remain a difficulty of breathing, it is reasonable to suppose that the lungs are also overwhelmed with a serous stagnation. Ascites joined with gravidity, is sometimes carried off by the efflux of waters before delivery ; but if Dropsy remain and the Abdomen be little lessened by the birth of the foetus, the case is dangerous. It is well known that dropsy is protracted to many years, for instance, ten, twelve, or longer. Mention is made of a certain poor woman who had been troubled with dropsy of the peritoneum for forty years. I saw a very noble lady who had a dropsy of the ovarium for thirty years, by which the abdomen had grown to such a size, that when she lay down, being naturally small, and low of stature, there was nothing scarcely to be seen but a ball. Finally, there is a history of a similar disease, lasting for fifty years in a certain virgin, who died about her eighty-eighth year.

There are very numerous *observations from dissection*, respecting both species of dropsy ; but I thought it most suitable to abridge in my *laconic* and usual style, what has been given by authors, and to add some memorable cases, taken from my own observations : besides the various fluids therefore, above mentioned, sometimes inodorous, sometimes fetid, there are found hydatids of different size, both in genuine ascites and in cystic Dropsy. The liver, in the greater part of the dead, is discovered to be vitiated, sometimes it acquires a great size, sometimes is shrunk, so as scarcely to equal the size of a fist ; besides it presents itself discoloured, livid, of a saffron colour, greenish, leaden coloured, or black. Its surface much covered with *granulæ*, tubercles, or vesicles : and the lymphatic vessels winding about there, are very conspicuous. The substance of this viscus, schirrous or callous, contracts such hardness sometimes, that it seems like wood or stone, and at other times is full of purulent or gypseous tubercles, or contains abscesses, hydatids, fatty excrescences, &c. It is said that a tumour has been noticed, almost as hard as a stone, and growing to the suspensory ligament of the liver. The gall bladder is found distended exceedingly, and containing seven or eight pints of bile, or sometimes mere limpid water, or whitish and without taste. Besides abscesses, anomalous tumours, hydatids, spurious stones, &c. which this follicle sometimes contains ; it is also detected in some cases depressed, wrinkled, and altogether empty. The spleen, of stupendous magnitude, schirrous, callous, or not unlike a

stone in hardness, or its surface rough with purulent or gypseous tubercles. The omentum, containing abundance of water or hydatids, and also sometimes very thick, and of immense size, even weighing eight or ten pounds, steomatous, purulent, wrinkled, contracted, or much infected with putridity.

Moreover, the stomach appears unusually distended with flatulence, filled with water, tainted with gangrene and putridity, torn; its sides schirrous and as thick as the thumb, &c. The *intestines* turgid with flatus ready to burst; and especially the *colon*, which sometimes attains to the thickness of the thigh; at other times is inflamed, ulcerated, putrid and torn: the *small* intestines in some cases, grown together, look like a ball. The *pancreas* is met with, obstructed, ulcerated, or fluctuating with putridity. The *mesentery* very thick with schirrous obstruction, indurated and almost cartilaginous; inflamed, filled with tubercles, and mortified. The *peritoneum* looks like cartilage, and is of amazing size, full of tubercles, and tainted with inflammation and gangrene. This membranous process has also been seen, like a partition, dividing the cavity of the abdomen into two parts, only one of which confined the matter. The *umbilicus* is seen open, from which distils the stagnant fluid, or the urine itself brought hither, through the pervious umbilical vein. The *kidneys* are seen, dry, naked, or deprived of their adipose covering, filled with hydatids, ulcerated, full of stones, exceedingly distended with fœculent urine, and sometimes dilacerated; as also the *ureters* and *bladder*, from which openings the urine is poured out into the abdomen. The *uterus* is discovered, now of immense size, now contracted, and containing calculi and hydatids, &c. The *ovaries* also grow to a very great size, and swell with water, a glutinous juice, adipose matter, &c. and sometimes, weighing about *one hundred pounds*, which at other times appear schirrous, purulent and putrid; the *fallopian tubes* contract the same diseases. *All the abdominal viscera* also, coalesce, having a tendency to putrefaction, and are covered with a gelatinous crust which is nothing else than concrete pus. Meanwhile fungous and cancerous tumors are found in the liver, stomach and intestines, &c. and hydatids floating in, or adhering to these organs. Lastly, sometimes a genuine collection of stagnant fluid appears in the opened lymphatic vessels, in the bursted lacteal veins, and in *Pequets* receptacle, or in the opened kidneys, ureters and bladder, while the other viscera are unhurt.

It remains briefly to relate what is observed in the other species of Abdominal Dropsy. The cyst, therefore, containing the morbid matter appears of a diverse size, and often rises to so great a bulk that the surrounding viscera are confined within a

very narrow space. Hence it happens that inexperienced examiners of bodies, having not the least suspicion of *tunicated Dropsy*, and perceiving nothing but water in the great cavity, are struck with admiration, on first opening the abdomen, at the absence of all the viscera, which nevertheless by stricter search, are easily detected. This species of dropsy which frequently attacks the peritonæum, has various situations, for the liquid is shut up between the said membrane and the abdominal muscles, which form a complete capsule, and hence arises that very extensive space, which is usually mistaken by the incautious, for the genuine cavity of the abdomen. Moreover water is collected in the omentum, kidneys, follopian tubes, ovaries, &c. the proper coats of which form the follicles themselves, and grow to very different sizes. The *ovaries* in the first place, become so very large, that sometimes, as examination proves, they exceed the weight of *one hundred pounds*: concerning which, it is proper to observe that their sides do not become thinner by this very great expansion, but rather acquire a stupendous thickness from the dilatation, so that the ovary when opened and emptied, has weighed even twenty-five pounds and more. Sometimes also these organs contain matters, gelatinous, like butter, fatty, &c. But the cysts are found attached to viscera which are sound, to wit, to the uterus, omentum, liver, &c. which do not at all acquire that great enlargement. Both kinds contain a fluid of a different character, a gelatinous matter, and hydatids of different size, sometimes solitary, sometimes in bunches. These capsules are now and then intersected by peculiar partitions; so that there arise cells between which at times there is no communication, on which account they not rarely contain fluids of different nature. We may add by way of conclusion, that sometimes there is found a serous collection in the aponeurotic capsule of the recti muscles of the abdomen, or between the laminæ of those adjoining, from which arises a kind of protuberance of the belly, which often resembles Dropsy.

Besides this destruction of the abdominal viscera, we may perceive some *lesions of the breast*. Namely, stagnations are found there, little differing from those described. The lungs are seen growing to the pleura, mediastinum and diaphragm; full of tubercles, contaminated by purulency and exulceration, and putrid, &c. The heart seems of prodigious size, or wasted and contracted, its valves, cartilaginous, bony, or like stones: its surface appears eaten by ulcers; adhering firmly to its covering, veiled with the gelatinous crust, mentioned before, marked with whitish spots, like pellicles adhering slightly, concerning which elsewhere: besides the pericardium very frequently contains a

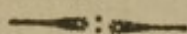
quantity of matter of a serous, sanious, purulent, fetid nature, &c. which at other times is altogether deficient; whereby the heart is found naked. Lastly, many faults are found in examining the head, which having little reference to the subject, we have thought it best to omit.

The *method of curing* ascites, differs little from that which suits in leucophlegmasia, which especially consists in evacuants and deobstruents of various kinds, calling in to their aid roborants, and some of the other medicines above mentioned. We will mention briefly such as are most in use, lest we should seem to serve the same dish twice. In the first stages of the disease, emetics are useful, which at other times ought to be considered futile and hurtful. *Purgatives by the bowels*, namely, rhubarb, jalap, florentine orris, *oriental leaves*, and the saline hydragogues, may be used throughout the course of the disease; in which remedies, notwithstanding, there is little confidence to be placed. The gum gutta (gamboge,) so celebrated by WILLIS, elaterium, troches of alhandal, and other drastics, that are useful in the cure of anasarca, suit less in ascites, and therefore ought not to be prescribed without the greatest caution. But let aperients, and especially *diuretics* fill every void; of this kind are succory, chervil, hartstongue, strawberry roots, wild parsley, broom, &c. Wood lice, nitre, vitriolated tartar, sal Glauberi, the salts of genista, and tamarisk, or ley prepared of the ashes of these plants, with water or white wine: to which we may add the various natural mineral waters. But nothing perhaps is found more efficacious than *squills*, subject to the well known preparations: for after all other remedies have been given without effect, it is proved by frequent experience, that many have been saved from death by this remedy alone. The best practitioners are not ignorant that *roborants*, both aromatic and bitter, viz. juniper berries, rhubarb, and elecampane; cinnamon and cassia lignea, wormwood and the lesser centaury, &c. have a distinguished place in the list of aperients and diuretics: to these may be added, crocus martis, chalybeate tartar, and other officinal preparations of the same kind. Lastly, in some cases, depurants and antiscorbutics occasionally do good: namely, fumitory, dock, nasturtian, brook-lime, &c. nor are *local* applications to be despised, of which we spake when treating of anasarca. Add to these, sea-salt applied warm to the abdomen, which from the testimony of BOERHAAVE has done good in some cases. We may observe, by way of conclusion, that many have been restored to health by withholding every kind of drink: who quenched the great thirst with which they were tormented, by a *toasted crust of bread soaked in spirit of wine*, nor are cases wanting,

wherein this regimen was kept up by LISTER, for three months and longer, with success.

If after all these remedies have failed, the size of the belly should become encreased, and very troublesome to the patients, nothing forbids the surgical operation of *paracentesis*, which succeeds well, if the disease have not gained deep root, and the viscera remain sound, otherwise it hurries patients to the grave, who might perhaps have lived some time longer. When, after having performed this operation, the belly again swells about the fifteenth day, there is scarcely any hope of cure: but then the operation ought to be repeated to prolong life. It is said that this has been repeated fifty times in a certain woman, and in another case more than *one hundred times* in three years. This is necessary to remember, that it is of the greatest moment after the water is drawn off, to bind and compress the belly with suitable bandages; for if the bandaging is neglected, the water rushes in greater quantity into the cavity of the abdomen, than before, or the vessels of the abdomen, deprived of the accustomed weight, become unable to perform their offices; indeed, this operation is very often unsuccessful, in consequence of the neglect of this caution; and it is necessary that the respiration, before impeded, should not be too much relieved by this operation. On which account judicious and experienced practitioners advise against the entire evacuation of the waters, when the abdomen is immensely swelled, lest the vessels should lose their elastic force: which young physicians ought very carefully to bear in mind. Nor is the most usual *puncture* sufficient for encysted Dropsy, since the canula for this purpose, stuffed with *fæculent fluid*, or *hydatids*, will not suffer it to escape: wherefore *incision* is justly preferred, which keeps it open; not only that it may the more easily promote the exit of the first matter through the opening, but also that detergent decoctions may at pleasure be injected, which are highly beneficial in this case; for this fistulous ulcer is with difficulty dried up: but we ought to think little of inconvenience, when imminent death is averted by it. Lastly, it is said, that in these difficult cases, the seton or cautery have been of service.

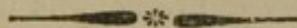
SYNOPSIS
OF THE
UNIVERSAL PRACTICE
OF
MEDICINE.



BOOK THE SECOND.
RESPECTING EXTERNAL DISEASES.

SECTION THE FIRST.

Of those which are General, or of Uncertain Seat.



OBESITAS. CORPULENCE, OR FATNESS.

IN the list of diseases, this disposition of the body scarcely obtains a place, although there is no doubt that it is not altogether void of danger; for *too much fat* hinders the organs of motion, in consequence of which lassitudes come on, and difficulties of breathing arise from slight labour, and the least exercise of body. Nor does it spare the viscera, for from its abundant collections the internal organs are so overwhelmed, that they cannot possibly perform the functions required, according to the order of nature; wherefore it is little wonder if this constitution threaten serious diseases, viz. asthma, dropsy, apoplexy, or sudden death. Meanwhile the body under this excessive corpulence often acquires a stupendous bulk; so that its weight sometimes amounts to eight hundred pounds. The circumference of the abdomen exceeds eight French feet, and the sick unable to bear so great a load, sink under it. This may be noticed by the bye, that this stupendous size of the body does not hinder them being very agile in swimming, and indeed corpulent per-

sons incur less danger of drowning. Nor are naturalists ignorant of the cause of this phænomenon.

Anatomical examination exhibits the cellular substance under the skin filled in some cases with so great an abundance of fat, as to amount to twelve or fourteen inches in depth; while nothing remarkable is sometimes to be perceived in the abdomen and breast, the viscera of which are found free from unusual fat, and sound. But in others the adipose substance is collected in such great quantity about the heart and lungs, and abdominal viscera, that their functions, viz. the vital and natural are, as above hinted, with difficulty or slowly performed. The heart especially, and kidneys, sometimes lie buried in a stupendous mass of fat. The omentum and mesentery, on account of the great abundance of this matter, far exceed their usual thickness. The cellular substance attached to the peritoneum, pleura and mediastinum are full of the same, &c. From hence we learn, why the viscera too much oppressed, give way, and the blood in perpetual motion or flowing through them, by the impeded oscillation of its vessels, rolls itself along with diminished force, and often suffers stagnation.

A suitable regimen prevents this morbid disposition of the body, in which indeed consists *the principal cure*: For instance, let the sick eat but sparingly, let them use vinegar with their food, and let their condiments be anise and fennel, cinnamon and other aromatics. Let them abstain from very nutritious food, let fruits and vegetables be preferred to flesh, let them not indulge long in sleep, nor remain inactive. On the contrary, let them use severe labour, until they sweat again. As to *medical help*, let them avoid blood-letting, unless great necessity urge. Preparations of soap merit praise, but the *vinegar of squills* is equal to them all; and is not undeservedly celebrated by judicious physicians, in this case. Some extol the seawater, but besides the taste so ungrateful to the palate, and nauseous to the greater part of the sick; I have believed that it cannot be exhibited without danger.

External remedies also possess their virtues: For instance, frictions with rough cloths are advantageously practised, by which the pores of the skin are opened. Vessels with hot water, or stoves effect this sooner, which force out very plentiful rivulets of sweat; not to mention other modes by which perspiration is usually promoted. The smoke of tobacco through a suitable pipe, is used with good effect: nor do other stimulant sialagogues deserve small praise, namely, tobacco, pellitory, angelica and master wort; mustard seed, staves acre rocket, &c. which being well chewed, the salivary fluid breaks

out in a full stream. Moreover a ptyalism, excited by mercury is said to have been useful in some cases: But I think there are few that would venture to try this remedy; unless they undertook it, for the cure of another disease.

ATROPHIA. FALLING AWAY OF FLESH.

IT is universally known that by this title is denominated the extreme grade of emaciation, which is also called *Tabes* and *Marasmus*. But all are not acquainted with the difference which occurs between *primary*, or *essential* atrophy, and *symptomatic*, or that which attends various chronic diseases. Nor is there perhaps a more just distinction between the *tabes* of young persons, and the *marasmus* of the aged; although in respect of the cause, the two affections differ very much one from the other: for the atrophy of juvenile years, is familiar to the *English* and *Batavians*, from the ardour of genius, or intense studies, and sometimes from premature venery; or it takes its rise from the immoderate expenditure of semen* while the *marasmus* of old persons depends on another cause, namely, the dryness of the vessels, which very often contract a bony hardness in advanced age, unless as it often happens, it be brought on by a disease of the viscera. *Primary atrophy* not unfrequently occurs, which is brought on by venery, bitter anxieties of mind, or oppressive cares, or other violent mental affections. It is contracted by excessive labour, long continued fasting, by the imprudent use of ardent liquors, by the indulging in hot meats, or dainties, &c.

Severe diseases, both acute and chronic, bring on the most common *symptomatic* atrophy; but internal suppurations or ulcerations especially *bring it on*; as also schirrous obstructions, or other injuries of the viscera. It arises from immoderate flows of blood, from very obstinate dysentery, and from inveterate diarrhæa; from long protracted ptyalism, obstinate diabetes, chronic sweats, and other discharges which exceed the natural order. Some poisons produce it, which secretly lay their snares for life. Moreover, hypochondriacs, scorbutics, scrophulous patients, &c. are thought *liable* to atrophy. Not to mention various affections, to be treated of elsewhere, which may occasion the very worst emaciation. We add nothing concerning

* Especially from the abominable, and worse than brutish practice of *Onanism*.
A vice not yet banished from *civilized* society. T.

the atrophy of children, as it appeared best to treat of it separately, in order.

A *hectic* or slow fever usually attends both species, when of long standing which is very often mistaken by the inexperienced and careless, for an essential disease; although it is only the principal or more conspicuous symptom in very intricate diseases: and they see nothing further. Alas! indeed, for the miserable patients. In others an error prevails, about the slow fever, which they falsely persuade themselves, never contracts this type, before the fortieth or sixtieth day from the first commencement of any fever. It does not however escape those skilled in the art, that a fever of this character often occurs, especially in the melancholic, which not only comes on sooner, but also ceases before the said term, so that slow fever is often to be expunged from the order of chronic diseases. But no attention ought to be paid to the empty controversy about a *nomenclature*, since it is of greater moment in the medical art, that a proper name should be assigned to each affection, lest by assuming a false or fortuitous one, the incautious should treat an imaginary disease, or persist in an incongruous method of cure.

The *essential* atrophy is often with difficulty distinguished from the *symptomatic*, since they progress almost in a similar manner, and put on the same appearance. Nor do the more judicious steer clear of error, unless an accurate history of the preceeding disease come to their aid, and all the signs, as well present as past, be subject to accurate examination. Notwithstanding, the primary mostly has some intermissions, which are wanting in the symptomatic. In essential atrophy, now under consideration, the progressions are slower, nor does fever show itself until the disease have acquired age, which is somewhat exasperated towards night. The appetite also continues longer unimpaired in this species; and respiration is carried on more freely, which nevertheless, in time becomes more difficult, especially in any exertion of the body. Some of these patients complain of pains, or of a certain sensation like the bite of ants, near the back, others suffer grievous pain of the head with tinnitus aurium. In many there is an involuntary emission of semen, both in sleep and while awake, by which the strength is gradually wasted. Meanwhile the appetite fails, and the belly formerly costive, is now preternaturally loose; and this diarrhæa which they call *colliquative*, is mostly attended with sweats of the same kind, by which the strength is ultimately exhausted. Lastly, the face is dry, or of a loathsome and greenish paleness, the nose becomes sharp, the temples hollow, the eyes drawn

back, and vision obscured, from which collection of symptoms arises what they call the *Hippocratic face*.

These symptoms enumerated, seldom proceed from the *marasmus of old persons*, in which, the manner of invasion is scarcely conspicuous: this is also called *essential*; but although it progresses more mildly and slowly, it baffles all the industry of physicians, and gently leads the patients to the grave. Yet some among the aged fall into fatal dropsy; others are tormented with a very great itching over the whole surface of the body, which can be allayed by no art. Besides, even the most exquisite food becomes insipid, and the other sensations are exercised with difficulty, or altogether deficient; which list of misfortunes is often closed with gangrene, not only attacking the viscera, but also transmitted to the external parts, and thereby becoming evident: until worn out by age and emaciation, and unable to bear so much; the pitiable patient bids the world a last farewell.

Primary or essential Atrophy at any age is *not thought incurable*, as it is not contracted from any organic injury of the viscera, provided it have not become deeply rooted. It is said that the *tabes of young persons* never lasts beyond seven years, which we have found to vary little from the truth in the greater part: provided the breast be not affected in this stage of the disease. Tabid young persons also incur another danger; for it sometimes happens, before the disease has reached the desired goal, that a serous fluid is collected both in the head, and in the breast, or abdomen: what must be the issue of this complicated injury, any one may understand. *Exacerbations of slow fever* as atrophy advances, are thought *fatal*, nor is *acute fever* less dangerous; which by the bye, is more frequent in symptomatic *marasmus* than in the essential. Colliquative diarrhæa and sweats excite no unfounded terror: oily urine also portends an unhappy termination; lastly, exhausted strength, with Hippocratic face, threaten speedy death.

Anatomical histories are very numerous, which almost all respect symptomatic atrophy; so that even from this abundant source, we can gather but little: observations therefore of my own must come in to their aid. In examining the viscera of the breast, I have found the heart dry and contracted, and sometimes eaten by little ulcers in its surface. In its ventricles, and the vessels attached to them, are found what are called polypous concretions, and of a nature resembling leather, by which these principal receptacles of the blood seemed to be obstructed. Besides there are discovered schirri in this muscle, lungs, liver, and

other viscera, which also are found affected with livor, emaciated and wrinkled. The veins, turgid with flatus; collections of serum here and there, which spares not even the spinal marrow, lastly, the primæ viæ are not seldom full of worms. It is indeed wonderful, in some who have died of marasmus, what a plentiful quantity of *fat* is found in the mesentery, in the omentum, or about the other abdominal viscera. Nor are there wanting remarkable appearances in old patients, namely, the cartilages, tendons, ligaments, arteries, valvulæ of the heart, and processes of the dura mater, as hard as bones: not to mention various other injuries not pertaining to the present subject, or which ought to be considered as the morbid product of atrophy. I may add by way of conclusion, that I have seen the body of one that died of tabes, who had laboured under schirrus of the stomach and pancreas, whose limbs, although very cold, preserved the usual and entire flexibility.

To come now to *the cure*: Venesection rarely does good; cathartics must be given with the greatest caution, if depraved sordes lodging in the first passages should demand them: which being premised, the attention of physicians ought to be turned to restoring the strength of the stomach, otherwise they may set about the cure in vain, if this viscus, as it often happens, contain the cause of the disease. The bitter stomachics and roborants have this effect, the best of which are citron, Peruvian bark, wormwood, gentian, preparations of iron and mineral waters of the same nature. After these, humectants, demulcents, and temperants taken from the dietetics, are given with advantage; of this kind are barley and rice waters, sago, jelly, chicken broth, as also that of river crabs, snails, and tortoises; milk, whey, emulsions, &c. all which, if the stomach will bear them, are of great service. Then the sedatives, such as camphor, mineral anodyne liquor, temperant powder, &c. which are beneficial in almost all cases; but we must deal cautiously with narcotics. Both often succeed well: frictions are useful in some cases, stomachic epithems also do their part, if the digestion be poor. Lastly, a mind composed to cheerfulness, change of air, agreeable exercises, riding on horseback, &c. do good in most cases. Nor ought these remedies to be thought useless in the Atrophia of old persons, since it is stopped by their means, or advances more slowly: but analeptics especially, agree in those cases, the best of which is generous wine; than which frequently nothing can be thought of better.

HÆMORRHAGE. PROFUSE DISCHARGE OF BLOOD.

ALTHOUGH concerning the peculiar Hæmorrhages which frequently occur in practice we have treated here and there under so many distinct heads ; yet, to collect a few general observations, which may relate to all *morbid discharges of blood*, seemed to me not unadvisable ; both to avoid needless repetition, and to notice various circumstances which it would be too tedious to annex to the foregoing chapters. It is known to all, that blood very frequently breaks out from the nostrils, bronchia, stomach and intestines, from the genitals of both sexes, from the hæmorrhoidal vessels, and other varicous veins, from the gums, from recent wounds, and ulcers, and that by these outlets there is often suffered a very great loss of blood. The vessels supplying the eyes, nose, lips, and other parts of the mouth also, afford exit to this fluid. Lastly, sometimes blood issues from the breasts, navel, groins, arm-pits, and joints, not to mention bloody sweats. Add to these, that men are not rarely found, who at stated times suffer a menstrual discharge, altogether innocent, by the hæmorrhoids or urethra.

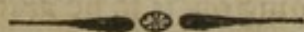
The young, and of a sanguine or bilious temperament, the robust, passionate, and scorbutic, are thought prone to large discharges of blood. Drunkards and high-livers are also obnoxious to Hæmorrhages. Lastly, hot and moist air bring on sanguineous discharges, so do intense studies, excessive labour, &c. Hæmorrhages of the lungs, stomach, kidneys, bladder, and uterus, are thought *dangerous* ; discharges of blood from the nostrils and hæmorrhoidal vessels, and sometimes from the genitals of women, excite little alarm, but are not seldom considered beneficial, especially if they come on periodically. It is known to practitioners that various acute diseases are terminated by bleeding at the nose ; so that blood bursting from its bounds at such times, ought to be considered as a genuine crisis, *which* is announced by a full and hard pulse, a certain sense of weight about the eyes, shedding of tears, sneezing, itching of the nose, flame colour of the face, &c. Hæmorrhage from a stroke, a fall from a height, or other manifest cause, is rarely thought dangerous : but that which is in the room of catamenia, although it proceed from the lungs or stomach, is mostly void of danger. As to the rest, if they be long continued, or recur frequently, and the blood gush out plentifully, it brings on an œdematous habit, dropsy, phthisis, marasmus, &c.

No one is ignorant what great danger they incur, who check a Hæmorrhage too soon; but the mark of caution in this respect is not known to all. On account of which difficulty I do not hesitate to assert, that many grievous misfortunes have threatened, both from *the too hasty suppression*, and from *too profuse a discharge of blood*. Nothing certain can be determined in these difficulties, from the vibration of the pulse, and the state of strength; since many even in unimpaired strength, faint from the loss of the smallest quantity of blood; and some, if medical writers may be credited, can safely loose twenty or forty pounds of blood, in a short time: But if by this stupendous flow of blood the sick are not taken off, various affections threaten them, which also Hæmorrhages less in degree bring on. Daily practice teaches that an accidental or periodical flow of blood, mostly ceases spontaneously, and therefore requires no remedy: but when it continues too long, or recurs frequently and irregularly, we must take it in charge. *Infants* who have had frequent Hæmorrhage, are *obnoxious* to diseases of the breast when grown up, but it remains established among physicians, that in advanced age they are liable to hæmorrhoidal flux, spasmodic affections, gout, stone, &c.

Hæmorrhage often coming on, is to be *prevented* by venesection, or the application of leeches. Refrigerants and temperants also with this view have done great service, namely, nitrous preparations, acids and farinaceous substances, whey or milk itself; absorbents also have been advantageously given: but all *prophylactic medicines* are inert, unless a proper regimen be adopted: for instance, let them avoid food that is highly salted and peppered; wine and spirituous liquors, coffee and other warm drinks of that kind, which may excite morbid oscillations of the vessels, and heat of the blood. Nor are baths to be omitted, which are also given with advantage when all other circumstances permit. But a profuse and present *Hæmorrhage* is usually *attacked* with other weapons; for then *venesections* are of service, which nevertheless ought to be kept within certain limits, since they are often of no use, but rather by emptying the vessels too much, exasperate the disease, by bringing on convulsions or more quickly exciting œdema and dropsy. Sedatives and antispasmodics are also mostly given without success, the effects of which, in very dangerous cases ought to be considered too slow.

But *dry cupping* affords *immediate relief*, so do bandages drawn tight about the wrists and ancles; frictions on the more remote parts; immersion of the extremities in cold water, &c. *Topical astringents and styptics* especially suit in this case, if

the seat of the disease admit, namely, cloths soaked in vinegar, oxycrate, or cold water, and applied to the neck, scrotum, &c. nor are *internal* styptics forbidden, where death is imminent; viz: **HELVETIUS's** powder composed of allum and dragon's blood, essence of rabel, and others of that kind: but it is necessary to deal very cautiously with these astringents either internal or external; nor are the inward styptics to be administered, except the sick are in the greatest danger. It is well to remark by way of conclusion, that among the best external astringents, the *sympathetic powder*, well known to all, obtains a place, the efficacy of which is proved by numberless experiments; provided it be applied to the part affected, not to mention its imaginary virtues, which are said to be effectual at a distance: to gull the populace. Lastly *agaric* is not to be omitted, as it is very much celebrated in our day, to which an astringent virtue is falsely ascribed, which notwithstanding has great effect in stopping arterial hæmorrhage, when this wooly, or flocculent and yelding substance is properly applied to the wounded vessel, and confined by suitable pressure.



PHLEGMON OR INFLAMMATION, AND ABSCESS.

NO ONE is ignorant, that a *prominent inflammation* affecting the skin, cellular substance, or muscles underneath and continued with certain limits obtains this name; the character of which is known by heat, redness, pain, resistance to pressure, or hardness associated with a shining, tension, and pulsation. Erysipelas approaches to Phlegmon, when it attacks the skin, thereby becoming less protuberant, and spreading wider. As to other *inflammatory tumors*; the *Bubo*, having its seat in the glands, occurs more elevated. The *furuncle* and *anthrax* or carbuncle are attended with well known signs: *Perniones* or *kibes* chiefly affect the extreme parts; *paronychia*, *whitloe* or *felon* attack the fingers. Other inflammations from *burns*, *bites*, and *punctures of animals*, or other manifest cause, are easily distinguished from genuine Phlegmon. A custom, to say no worse of it, has prevailed, to denominate a less protuberant or depressed inflammation, *phlogoses*, which to say the truth, differs little or none from Phlegmon; this mostly take its rise from a latent cause in the blood and humors, and rarely originates from an external cause. It is mostly attended with fever, followed when violent, by very distressing symptoms, namely, deliri-

um, suffocation, anxiety, &c. On slight examination the Phlegmon has various appearances; for the genuine or pure, is excited by the blood itself, but the spurious partakes of erysipelas, œdema, or schirrus: The legitimate terminates mostly by resolution or suppuration, the other ends in schirrous obstruction, or is seized with gangrene.

Like other inflammations, Phlegmon brings on abscess. This collection of matter threatens, if heat and pulsation encrease to the fourth day, and the top of the tumour which is mostly pointed, become whitish and soft; lastly, a fluctuation proves it beyond a doubt. But pus is elaborated the more slowly, the deeper the inflammation lies, in which case the skin preserves its natural colour, and the fluctuation is more obscure. Yet abscess may be known, (although it be very deeply buried within the texture of the parts and cannot be discovered by the touch) from the cessation of pain, remission of inflammation and the absence of the other symptoms. We have noticed above, that irregular chills and shiverings very often bring on internal abscesses; but these symptoms rarely accompany the external. The fever which arises from both, ought not to be considered dangerous, but rather requisite *for the formation of pus*, that the blood may be carried with a certain impetus, without which suppuration is with difficulty affected, or the tumor puts on the nature of schirrus. The velocity of the blood ought to be suitably restrained, the vehemence of which not only prevents suppuration, but also not unfrequently hastens gangrene.

A Phlegmon which does not originate from depraved blood, or dysury of the humors, is *free from danger*; but it is otherwise, when promoted by cachexy, or scorbutic, scrophulous, or venereal virus. No one is ignorant that the sudden cessation of pain and heat, and sudden sinking of the tumor, threatens the internal parts. If the tumor gradually grow hard, it suppurates with difficulty, or as already observed, verges to schirrus. But gangrene threatens if the Phlegmon contract a lived appearance, and purple spots break out. Prominent and pointed abscesses usually open spontaneously: we have elsewhere noticed that internal ones never dry up; by which phenomenon the pus being again mixed with the blood, falls upon some external part, where it is collected. Almost the same happens with external abscess, the matter of which being absorbed, very often attacks the liver, lungs, or other viscera. Sometimes this translation of matter has a happy exit in both kinds of abscesses; because as it wanders within the mass of blood, it reaches the kidneys, intestines or other strainers, through which it finds itself an outlet by the wonderful efforts of nature. There is

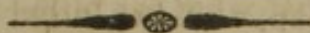
another transit of pus from the external to the internal, or vice versa; for instance, when the pus collected within, by reason of delay, erodes the parts underneath, and sinks deeper; almost in the same way does the purulent matter lurking within the lungs, or other viscus, work its way to the skin, where another collection is formed which keeps up a communication with the former: which happens in the breast, not without caries of the ribs. To the foregoing may be added, that besides purulent matter, sometimes genuine, sometimes depraved, abscesses contain various extraneous substances, viz. Stones, thorns, needles, bones, splinters, leaden bullets, worms, &c. of which there are innumerable examples in authors.

The cure of Phlegmon is in the first place to be attempted by venesection, which must be repeated according to the degree of inflammation and violence of the fever. The belly, through the whole course of the disease is to be kept freely open, and indeed cathartics are to be exhibited if the first passages be stuffed with sordes, or the sick labour under cachexy; they also are of service in preventing *metastasis* or translation of matter, by which the disease might be transmitted to the internal parts, to the greatest damage of the sick. In the mean time humectants (moisteners) refrigerants (coolers) and temperants, namely, of whey, barley or rice water, lemonade, nitrous emulsions, &c. But hypnotics (anodynes) ought to be cautiously prescribed, even when the pains are violent, since they may hinder suppuration, and bring on gangrene. Moreover, vulneraries must be occasionally used, and indeed diaphoretics, but if these remedies should seem to do any good, it is perhaps to be attributed less to the remedy than to time, or the nature of the disease.

But the principal point of cure turns on the suitable administration of *topical* applications, as every one knows; these are usually taken from the classes of emollients and anodynes, resolvents and ripeners. The one or the other are chosen after paying suitable attention to the nature of the tumour, tending either to resolution or suppuration; and indeed sometimes both may be mixed, if the character of the disease do not clearly appear. Cataplasms of bread and milk, of the roots of dock, and althea, of the leaves of sorrel, groundsel, mallows and mullein; of fat figs, mucilages, animal fats, oil, &c. are prepared as emollients. Others are prepared for resolving, of camomile, melilot and elder flowers; of rye meal, cummin, fœnugreck, &c. The common onion and lilly roots, old yeast, basilicon ointment, &c. are ingredients in the maturant or ripening compositions. Sometimes narcotics are mixed with both, or fifteen or twenty grains of opium, when the pains are very severe: but these last ought to be used with caution, as they may bring on

gangrene : Nor are *repercutients* or backeners, less to be feared, which may impart a lentor to the fluid contained therein, as experience testifies ; from the stagnation of which schirrus usually proceeds.

When from close attention to the signs above-mentioned, an *Abscess* is discovered to have come to proper maturity, it ought immediately to be opened by the knife or caustic. We must not indiscriminately choose either mode, but one or the other operation should be determined on, according to the seat of the disease or other circumstances ; on which subject I will add no more, lest I should seem to stick my fork in another man's mess. If the opening of the Abscess should be premature the remainder of the cure is protracted, and the ulcer heals more slowly. If on the contrary it be too long delayed, the pus becoming acrid, sometimes works itself an outlet, and injures the neighbouring parts : which it is well known has often happened in suppurations of the fauces and anus. But the long stagnation of pus excites yet greater fear, if it be collected not far from the ligaments, tendons, periosteum, and sutures. A misfortune of another sort is threatened from the delay of matter about the breast ; namely, its access to the vital organs ; which as above noticed, experience testifies to have often happened. An ulcer arising from the evacuation of pus is cured by maturants and detergents, viz. Basilicon ointment made more cleansing by parsley, diachylon, and numberless others of the same nature. The plasters of Diapalma, Nuremburg, and other drying preparations, if the ulcer be too moist with luxuriant juices. But, to confess the truth, the powers of nature do more to effect this, than the subtlety of art. Concerning the various primary affections, from which plegmon takes its rise, which therefore demand a peculiar, and appropriate remedy ; nor of schirrus and gangrene, which follow it, and are treated of hereafter ; I add nothing.



ULCER AND FISTULA.

WE COME now properly to distinguish *Ulcers* arising from phlegmon, erysipelas, bubo, and schirrus, from those which proceed from a wound, contusion, burn, application of caustic, and gangrene, &c. But there is another investigation of even greater moment ; namely, rightly to find out whether there be a certain taint lurking in the blood and humours, which very frequent-

ly, as is well known, is contaminated by the virus of scurvy, schrofula, venereal disease and cancer. It is evident that *Fistula* is nothing else than a sinuous and deep ulcer, the opening of which is mostly narrower than the bottom, on account of the cavities which the pus forms, having become very acrid by detention. The *Fistula* of the anus, and of the lachrymal sac are very common and well known; concerning which we shall treat separately in order; but this, notwithstanding does not hinder us making a few general and brief observations on the subject, in this chapter.

The edges of recent ulcers arising from phlegmon are very easily brought into contact, especially in the young and vigorous; or those who enjoy a florid habit of body: but the case is otherwise in advanced age, or in a cachectic constitution. Ulcers are *more troublesome* when they proceed from erysipelas, ædema, or schirrus. How great difficulty is found in healing scorbutic, venereal, scrophulous or cancerous Ulcers, is universally known. Besides Ulcers of the nostrils, mouth, breasts, and genitals are difficult of cure. Putrid, foul and wormy Ulcers can scarcely be healed, as they throw out a fetid, glutinous, bloody, ichorous, and greenish pus, or sometimes mere blood, in great abundance; the lips of which are inverted, luxuriant with flesh, fungous, livid, greenish or blackish. Phagedenic (eating) or fistulous Ulcers baffle all cure, which are occasioned by caries of the bones or ligaments, and are wet with an oily and blackish sanies. Pus mixed with the blood excites no little fear unless it find its way through the lungs, kidneys, or intestinal sink; a happy event indeed: but sometimes these strainers receive from it a fatal taint. Old Ulcers often bring on marasmus and slow fever; which nevertheless are salutary in old age, at which time, woe be to them that attempt to dry them up, or heal them; since from this ill-timed method, the pus usually excreted through this passage, falls upon the viscera, and imparts to them a fatal injury: which the examinations of bodies exhibit.

It must be obvious that what has hitherto been said of Ulcers, respects *Fistulæ* also, since, as above noticed, *Fistulæ* are nothing else than sinuous and cavernous Ulcers, the cure of which is also difficult; nor is it often effected without the aid of surgery, since medicines applied to them, if we except injections, are not able to reach to their ultimate recesses. *Fistulæ* affecting the tendons, ligaments, cartilages, and naked bones which thereby become carious, are very *obstinate* and hard to cure, or altogether without remedy. Lastly, *Fistulæ* opening into the cavity of the breast or abdomen, soon put an end to life; their edges, if imprudently healed by art, ought without delay to be

broken open, lest from their ill-timed approximation, *the Wolf should be shut up in the Sheep fold.*

The intention should be, in the *cure of Ulcers*, to keep them discharging a suitable and pure pus; which may be soon healed, if this fluid be excreted of the best kind. For by the sordes with which they are contaminated, the cure is procrastinated or altogether hindered. Therefore we must endeavour to clear out these, that afterwards by the help of nature, or the due administration of *sarcotics* (or restorers of flesh) their lips may be brought into mutual contact, and unite. On the efficacy of remedies prepared for this purpose, there has been great controversy among physicians: but I will leave the dispute to be settled by those who have more leisure than myself, since the only duty incumbent on me is, to exhibit those which have been selected and proved by long and successful practice. In this class *maturants* or *digestives* claim the first place, viz. oil of St. John's wort, of lillies, and of eggs; storax, turpentine, natural balsams, balsamum *Lucatelli* vel *commendatoris*, ointment of basilicon, plaster of diachylon, of mucilages, &c. all which when timely applied, seem to promote suppuration. Emollients and anodynes prevent the pains, itching and too great dryness; these are decoctions of mullein and water-lilly, night shade, and the heads of white poppy, mucilages, butter and cream, oil of linseed, and of camomile, poultices, (cataplasms) of crumb of bread, or such like, ointment of althea, *Album Rhasis*, white tutty, poplar leaves; *Galen's* cerate, and plaster of spermaceti, which besides the virtues mentioned, remarkably favour the formation of pus. Among the *detergents* are numbered the decoction of barley, of vulnerary herbs, the roots of birth-wort, the leaves of walnut, &c. *Unguentum Apostolorum*, and ointment of parsley, green balsam, and balsam of *Arceus*, and such like, to which we may add the various mineral waters; which perhaps take the palm from other detergents.

These are followed by medicines of different sorts, which prevent the too plentiful flow of humors, and are hence called *exsiccants*, or drying applications; as ceruss, chalk, litharge, tutty, calcined allum, birth-wort, gentian, florentine orris, tincture of myrrh and of aloes, ointment of poplar leaves, Nuremburgh plaster, &c. *Cathartics* or cleansers, prevent the growth of proud and fungous flesh, namely, savin, lime-water, mercurial precipitates, Egyptian ointment, green balsam, phagedenic water; *Lanfranc's* collyrium, camphorated oil, butter of antimony, lapis causticus, sigillum scaroticum, &c. There remain *astringents* which have the power of contracting the mouths of the little pores secreting pus, or pouring out blood;

which virtues belong to red roses, pomegranates, horsetail fern, dragons blood, bole, alum, vitriol; styptic water, and *rabel*; cerate of calamine, &c. Lastly, as more safe remedies against hæmorrhage, the ligature and compression are proposed. The *Agaric* also so celebrated at this day, confers its share, which by its soft and flexile texture, is easily applied to the gaping mouths of the vessels; and in this alone, as already hinted, consist its celebrated virtues.

These are the *topicals* which are in use among experienced surgeons for the cure of Ulcers; but they ought not to be applied nor renewed too frequently: for the best surgeons, after MAGNATUS, who has written an entire book on this subject, recommend dressing wounds but seldom; not only to prevent as much as possible the very injurious access of air, but also that the incipient suppuration, may not at all be disturbed, and that the salutary work of nature, far excelling art, may not be turned from its proper order. When all the remedies of pharmacy have been exhausted, it has sometimes been useful in the treatment of obstinate ulcers, to apply a caustic on the opposite part; for this diversion of the pus lessens the flow to the old ulcer, the lips of which, gradually acceding towards mutual contact, at length unite, provided the subjacent bones, tendons and ligaments be sound, the caries of which would hinder the cicatrix. But many doubt whether it is better to make a new Ulcer, than to keep open the old; which doubt the seat of the artificial Ulcer, (which may be fixed at pleasure) will solve. Moreover, this last can be confined within certain limits, while the other spreads far and wide.

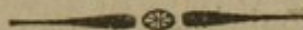
The art of surgery supplies other helps, for the cure of callos and fistulous ulcers, implicated with caries, or tainted with gangrene. In like manner as luxuriant flesh, the callosities are taken off by escharotics, until the subjacent granulations are found of a better appearance. Sinuous Ulcers are usually treated with detergent injections, but this method rarely does good, wherefore it is necessary to recur to the knife, by which means the bottom of the Ulcer, from which the cure ought to proceed, is brought to view, and can receive the remedies suitable to dilate and keep it open; otherwise there is no benefit from even the very best remedies. But on this subject I shall treat more largely, when on fistula ani and lacrymalis. But caries ought to be attacked by *spurge*; the bone removed by the abrasion with a suitable instrument, the actual cautery, and other helps, to be mentioned in their places. Gangrene is overcome by very deep scarifications, by camphorated spirit of wine, and other topicals to be mentioned hereafter. If all others fail, there remains a

last remedy against cancerous Ulcer, with caries and gangrene, namely, the extirpation of the affected part, or amputation of the whole limb, this is the sacred anchor, to which nevertheless, it is not ~~un~~lawful to flee, until every other hope of cure fail.

But these auxiliaries, of what kind soever, are vain, if the blood and humours be contaminated by any *congenital* or *adventitious* fault, under a suspicion of which, no pains must be spared to extricate the character of the virus of any kind, which is often immersed in great obscurity: this being well marked, we must immediately commence *another method of cure*. But besides the scrophulous, venereal, and scorbutic virus, there are numberless other taints, both in the mass of humours, and in the *primæ viæ*, or there occur implications of other diseases, often hard to evolve, which hinder the cure of the Ulcer; from the neglect of which, physicians labour in vain. My work would swell to an immense size, were I to dwell on the numberless internal remedies to be reckoned up; it is necessary only to exhibit those that are most approved: these in the first place consist of venesections, emetics, purgatives, and other *general* means. Bloodletting truly agrees with plethoric patients, or those who are deficient in the usual flow of blood, and is otherwise employed against inflammation often invading the lips of the Ulcer, or its surface. What good effect follows emetico-cathartics, if the *primæ viæ* be filled with sordes, sooner or later to be mixed with the blood, must be obvious to every one.

These being premised, diluents and *temperants* are often given with advantage, to wit, whey, succory and borage, river-crabs, acidulated mineral waters, &c. Demulcents also are serviceable in many cases, namely, barley and rice gruels, or preparations of milk. *Depurants*, or cleansers, not seldom do good, to wit, dock, fumitory, nasturtian, &c. Nor are the *internal vulneraries* and detergents to be omitted, which assist those of the same nature externally applied: of this kind are St. John's wort, agrimony, bugle, heal all, misletoe, alchymilla, honey, lime water, natural and officinal balsams, turpentine, &c. to which it is proper to annex the warm and balsamic mineral waters. There is wonderful advantage also from medicines which promote insensible perspiration and sweats; as China-root, sarsaparilla, vipers, diaphoretic antimony, POTTER's antihectic, &c. Absorbents are of use in some cases: in others roborants are useful. In most cases aperients do good, and indeed sometimes incidents are profitably administered. The *Cicuta* celebrated by the illustrious STORK, seems to possess these virtues, which indeed, from the testimony of multiplied experiment, may be of the greatest benefit, if the Ulcer partake of the nature of cancer. Those who

are skilled in the art, know very well, the cases which *require* all these remedies: wherefore we have thought it would not be necessary to make an exposition of it. Lastly, it is well known that old Ulcers of the legs, or other parts, in old age, require only a palliative cure, so that when they seem to approach a cicatrix, they ought by all means to be renewed by gentian, florentine orris, cantharides, &c.



BUBO.

BY THIS name is designated that inflammatory, elevated tumour, often equalling or exceeding the size of a fist, attended with pain, heat, and pulsation, and affecting the glands of the groins, axillæ, neck, &c. The Bubo appears under different species, which are called *simple*, *venereal*, and *pestilential*, to which we may add the scorbutic and scrophulous, which rarely affect the groins. The *simple* grows to the size of a hen's egg, having its most common seat in the inguinal gland, and rarely affecting the axillæ. This species of Bubo is mostly associated with fever, and often terminates in a short time by spontaneous resolution: yet it sometimes becomes more obstinate, and tends more slowly to resolution or suppuration, and indeed the abscess which proceeds from it, is brought with difficulty to cicatrize, and not seldom runs into a fistula scarcely to be healed. The simple Bubo oftener invades children and young persons, but spares no age.

The *venereal Bubo*, often originating from impure coition, appears of various size and duration, it affects the inguinal glands alone, one or more of which it fixes on: from one or both sides it grows to the bulk of about a fist. It is the more easily cured, the more it approaches to phlegmon: but the case is different if it partake of œdema or schirrus, under which complication it often ends in fistula, and even by preposterous treatment, puts on the character of cancer. This species of tumor is commonly considered by surgeons as the pathognomonic sign of lues venerea; which opinion we think ought to be received, *cum grano salis*. It is true that this mark of lues is not fallacious, if it appear not till after many months and years from an impure coition; but when it immediately follows lustful embraces, it argues nothing certain, whatever authors may adduce to the contrary, especially if it have been subdued by a speedy cure. It will not be unsuitable to remark that it

frequently happens that *the inguinal glands swell* from strangury, or some pain of the urethra, which daily experience proves to subside in a short time after the irritation is abated, or the pain ceases. In like manner the cervical or axillary glands use to swell, from pain of the mouth or of the arms; but these slight tumors always vanish with the cessation of the pain. Hence we collect that this obstruction of the inguinal glands is often rashly taken for venereal Bubo by the unskilful, who foolishly refer the very easy cure of it, to their topical applications. Besides *crural hernia* sometimes has the appearance of Bubo, by which the incautious are also deceived; nor are there wanting some who, to the greatest damage of their patients, attempt the imprudent opening of this tumor. Yet there is the greatest difference between these two, for the hernia, the base of which is narrower, very accurately resembles a sphere; moreover, it yields to the touch, or by a well known art, the tumor is altogether obliterated, when the protruded intestine is replaced as before: by which mark every doubt is removed.

The *pestilential Bubo*, besides the groins and axillæ, which it very often affects, breaks out from the neck, breast, neighbourhood of the ears, &c. This does not shew itself until the plague has made some progress, whence its character is evident. Yet it is distinguished from the rest by peculiar signs; namely, the skin is seized with inflammation, which the simple and venereal Bubo spare; the heat is more intense, the surface of the tumour is observed to be unequal, or rough, with black and gangrenous pustules, and a variegated circle surrounds its base. When it encreases very rapidly, and runs into suppuration in a short time, it is thought critical, whence, by this eruption, the more violent symptoms are abated: otherwise it gives no relief, but threatens death if it suffer a retrograde motion. From strict attention to these marks, the character of each of these species becomes clear as day: But the type of scrophulous and scorbutic Buboes is less easily distinguished, which puts on the appearance of both, unless an accurate diagnosis of scurvy or scrophula come to our aid.

The cure of *Buboes* differs little from that which suits in Phlegmon, the *simple* terminates spontaneously, or mostly yields to accidental remedies; but some obstinate ones occur, which scarcely yield to the best maturants, or even to cupping itself. The cure of *venereal Bubo* is commenced with venesection, together with the other general remedies against phlegmon. Better than all is a cataplasm of bread and milk, which surprisingly assists any effort of nature: Its place may sometimes be supplied by the Basilicon ointment with the gums, if the sick are

forced to be from home ; the use of which ought to be continued even when the abscess is open. But these local applications are useless, if the tumour be indolent, and not disposed to suppuration. In this case we must try another method. For instance, apply dry cups, blisters, or the caustic itself ; by the help of which, the juices impacted there, being set in motion, and the oscillations of the vessels excited, favour the formation of pus. But when the tumour yielding to these remedies, runs into suppuration, we must endeavour to protract the purulence to the thirtieth or fortieth day. By this method a threatening lues venerea may be kept off ; with this view also the use of mercury is proper, both external and internal ; for through the whole course of the cure, frictions are recommended about the surface of the tumour, with mercurial ointment in small portions ; or let the plaster *de Vigo* be applied, let panacea, calomel, and other mercurials prepared for this purpose be given internally. There is advantage under this method of cure, in the cautious use of the mild cathartics, especially if ptyalism threaten. But all these remedies are prescribed in vain, if the ulcer end in a fistula, or contract the nature of schirrus, which misfortune ought to be considered as no uncertain sign of lues venerea ; so that it is necessary to fly to the usual treatment with mercury ; which the schirrous Bubo, approaching to cancer, even sometimes baffles. Then indeed, the hope of health depends on extirpation alone ; provided the seat of the disease admit, otherwise we must persevere in the palliative method only.

A suppuration while treating the *pestilential Bubo*, is no less advantageous ; and it is necessary that the whole gland be destroyed. Emollient cataplasms, and the common maturants promote the suppuration of Buboes, merely inflammatory ; the diachylon plaster is better adapted to the others : they are opened with the lancet, or the caustic is applied to them when they have attained a due maturity. In the same manner as in the venereal Bubo, suppuration ought to be kept up for a long time, to assist which, we may with advantage apply Basilicon, ointment of althea, balsam of *Arceus*, &c. We add nothing concerning other remedies, above treated of, to avoid useless repetition. As to *scorbutic* and *scrophulous* Buboes, there is no doubt that their external cure is to be submitted to the general and common method ; but internal remedies are of special benefit, concerning which we have said more than enough when treating of scurvy and scrophula : for to no purpose do surgeons set about the cure, unless the morbid virus lurking in the mass of blood, be first subdued by timely and specific remedies.

CARBUNCLE, OR ANTHRAX.

BY either name, taken from *carbo*, a *coal*, is at pleasure designated an *inflammatory and gangrenoid tumour*, very red and shining, with a very troublesome intense heat and pain, more or less prominent, but mostly depressed: fiery, and very burning pustules preceed or accompany it, and are often very numerous, and in a very short time grow black, or put on the appearance of *sphacelus*. An areola surrounds the base of the tumour, sometimes flaming and shining, sometimes livid and blackish, from which some *phlyctenæ* break out. *Sphacelus* which gives the character of this tumour, in a short time takes an amazing increase, unless checked by the well known art. Sometimes nothing presents to view but inflamed pustules, burning and blistered, scarcely adhering to their prominent base, which very soon become mortified. It is necessary to remark as we go along, that of the same nature perhaps are those gangrenous exanthemata, which often attend small-pox and malignant fevers.

From the foregoing it is plain, that Carbuncle never suppurates, but runs into *sphacelus*, in which, as already remarked, consists the character of this tumour. From the falling off of this *eschar* or mortified crust, proceeds an ulcer, as if from the application of a caustic, and with difficulty tending to suppuration. No one is ignorant that the Carbuncle is reckoned among the signs of *plague* and *malignant fever*. This eruption mostly excites a very high fever, and brings on distressing symptoms, under which circumstances it is thought dangerous, especially if it attack the face, neck, or breast: nor does it excite less terror, if it fall upon glandular, aponeurotic, or membranous parts. Lastly, it is thought mortal when seated in the ear, or pharynx. Moreover, *dissections* prove that the viscera are not free from this disease, for Carbuncles are found in the stomach, intestinal tube, kidneys, bladder, &c.

There is a certain species of *furuncle*, called in our vernacular tongue, *charbon provençal*, which encreases very rapidly, and is taken for Carbuncle; the apex of which in a short time becoming black, ends in an *eschar*. In *Narbonne* this Carbuncle is as it were, endemic, and is mostly attended with no fever, and sometimes occurs depressed, or shows nothing else than a *phlyctæna* breaking out from the centre of the inflamed and shining areola. This tumour does not alarm the inhabitants of that country, although it is not without danger, since examples are not wanting of mortality from the severity of this eruption alone. The *provincial Carbuncle* ought especially to be considered dan-

gerous, if it recede; which circumstance, in other species of anthrax, especially during the plague, is considered altogether fatal.

The principal indication of cure is, *that gangrene be immediately checked*, and that the lobes of burnt eschar be cut out from the sound flesh. With this view are practised cutting with a lancet, or scarifying to the quick, on which are put cataplasms of crumb of bread, or other emollient: sometimes those little wounds must be repeated, during which the caustic may be applied with advantage, that this work of nature endeavouring to throw off the eschar may be the sooner effected. The maturant and antiputrid cataplasms are proper here, the composition of which usually contains theriac, Basilicon or Egyptian ointment, pepper, &c. Some mix with them the powder of caustic, nor is this method unsuitable; the butter of antimony also has an excellent effect in promoting the separation of the eschar; unless it be taken off with the scalpel. The ulcer left after the falling off of the mortified crust, is treated with Egyptian ointment, or the mundificative of parsley, green balsam, and others of that kind, either digestives or detergents, with which antiseptics, are usually mixed, if gangrene threaten. This effect is brought about also by camphorated spirit of wine, tincture of myrrh, and of aloes, phagedenic water, balsam of *Arceus*, ointment of storax, and others of similar nature, approved in the best practice. The *actual cautery*, formerly so very common, has become altogether disused, and neglected, I know not why, although it is reckoned by very celebrated practitioners among the best remedies against gangrene. But internal remedies, concerning which we have spoken more than sufficiently on plague and malignant fever, we have purposely omitted.

The cure of the Gallo-provencialis is performed by simple means. Sometimes bleeding is of service, and the other general remedies are of no small benefit. Cordials are not to be despised, which daily experience proves to be advantageous in many cases. The above-mentioned topicals also deserve praise. But in the greater part of the sick, cataplasms of bread and milk, with yolk of egg, or other emollient and maturant, do almost the whole business, if the tumour tend to suppuration. But when it does not yield to topical emollients and digestives, we must try more effectual means, such as scarifications, butter of antimony, or the other cathæretics above-mentioned, by the timely use of which, even against nature, suppuration is usually promoted.

FURUNCLE AND EPINYCTIS,

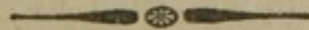
WE include both tumours, *that we may whitewash several walls out of one and the same pot.* Every one knows the Furuncle, (*le Clou*) the size of which is various. This tumour which attacks the adipose substance is commonly attended with heat and pain; sometimes solitary, and often exceeding the size of a hen's egg; sometimes appearing with a troop in attendance; again, after one is cured, another breaks out. The sick are sometimes tormented by their severity, and pass sleepless nights. The Furuncle sometimes proceeds slowly to suppuration, and the abscess is hard to break, since in most cases the pus concretes, and becomes a thick and sticky matter, which being pressed out under the appearance of filaments or lamp-wicks, the remaining ulcer is in a short time filled up, while the Furuncle is referred to what are called *benign*. But another not unfrequently occurs of a *bad kind*, which is attended with fever, and sometimes brings on very distressing symptoms. *Scorbutic and venereal Furuncles* get this type, being much more troublesome, and are in some cases so severe, as to occasion convulsions.

Epinyctis is a red or livid tubercle, exceedingly painful, growing to an inflamed base, and not seldom exceeding the size of a bean. The maturation of the spurious *Epinyctis* is slower, and rarely affords a genuine pus, but often an ichorous or merely sanious fluid. These pustules often break out in clusters, and smaller in size, which I remember to have observed like variolous papulæ, about the clavicles. In this consists the character of the tumour, that it invades the patients when lying down, and is particularly severe and prevalent at night; at other times it effects a spurious suppuration, although like the Furuncle, it is mostly *void of danger*. Another tubercle occurs in practice, approaching to *Epinyctis*, which is called by writers *Terminthus*, a name taken from the fruit of the *Terebinthus*, the form, and blackish green colour of which it seems to resemble. The *terminthus* usually attacks swelled ancles, and like *Epinyctis*, shews a character somewhat like phlegmon; and when spontaneously matured, it produces nothing after the scaly crust is fallen off, besides an ichorous pus. These tubercles which are not very unfrequent, are called by the unskilful, after the very ample title of *Furuncle*. They portend nothing bad, if they run their proper course, but their retrocession ought to excite no little terror.

The *Furuncle* requires few remedies; emollients and digestives taken from the officinal preparations, answer all purposes;

namely, unguentum fuscum, emplastrum diachylon cum gummis, emplastrum de spermate ceti, *Abbatis de grace*, and numberless others of that kind, the use of which is continued till the cure be completed. If a fever should arise from the severe pains, blood is to be let, and diluents and temperants to be prescribed; to which may be added, the common emollient cataplasms mentioned above. Although, as already hinted, the supuration of the Furuncle is slow, the abscess mostly opens spontaneously, on which account the lancet or caustic is rarely necessary. But another duty is incumbent on physicians, namely, to prevent the very frequent return: with this view, refrigerants and depurants are prescribed. Sometimes also diaphoretics are of service, or the use of mild cathartics. Moreover, preparations of milk, and mineral waters, &c. are of service. Nor are baths to be omitted: to say nothing of antiscorbutic and anti-venereal remedies, which may fulfil the wishes of all.

Epinectis and *Terminthus* may be cured with the same topicals, yet they are rarely prescribed against *Epinectis*, because the pustules in most cases being very numerous, scatter themselves wider: on which account they are usually treated by another method, namely, pomatums, or demulcent ointments, like liniment, are applied, or pure cream is used, by the help of which the pains are quieted, until by the spontaneous movement of nature, the disease have completed its course. But another duty rests upon physicians, namely, to set about remedies against the internal cause, since this species of tubercles, by confession of all, mostly arises from a taint of the blood and humours. Wherefore they must diligently enquire whether a scorbutic, venereal, or other virus be lurking in the mass of blood, that they may attack it with appropriate remedies.



ŒDEMA AND EMPHYSEMA.

ŒDEMA is a tumor mostly very broad, soft, and yielding to the pressure of the fingers, retaining their impression for some time, and free from pain: but there occurs another species of Œdema, more rare; like the common species, without redness of the skin, resisting pressure, and painful, and leaving no print of the fingers from pressure. The Œdema is sometimes circumscribed, that is, it invades some particular part, say the face, the eyelids, hands, arms, feet, legs, &c. sometimes the whole habit of body takes the name of *leucophelgmasia*. A

morbid and profuse discharge of blood brings on a kind of œdematous affection; so do obstinate intermittent fevers, and various other diseases, both acute and chronic. Œdematous swellings are promoted by ligature and compression: for the face often swells from obstruction of the parotids; the legs of pregnant women also swell from the increase of the uterus. Obstructed or enlarged viscera have the same effect, by hindering the free circulation of the blood returning from the lower parts.

Œdema from a slight cause, is without danger, and ceases of itself; but the case is otherwise, if it derive its origin from any chronic disease, or an injury of the viscera; under which circumstances, there is danger of dropsy of the breast or abdomen. *An œdematous swelling of the legs*, may continue a long time almost in the same state, without inconvenience, especially if it vanish on lying down, or with the heat of the bed; otherwise the legs contract so great enlargement from the increased obstruction, that they are sometimes seized with erysipelatous inflammation, *which if phlyctenæ* come on, threatens gangrene. Œdema is observed to participate sometimes of erysipelas and schirrus. What is to be feared from these complications, no one is ignorant.

Emphysema is a tumor of the same colour with the skin, flatulent, which from its peculiar elasticity, does not yield to the fingers pressed on it, or if depressed, instantly recovers itself. This is seen in some degree transparent in some parts, covered with very thin membranes, such as is found in the eyelids, and frequently in the prepuce, and labia pudendi of women; whence this tumor of the genitals is called among us, *crystalline*, which also sometimes becomes red, and shews signs of inflammation. Emphysema is sometime diffused through the whole habit of body, to wit, from a deeply inflicted wound of the breast, or malignant fever, or other oppressive disease, nor is this swelling under these circumstances void of danger, which otherwise excites little fear. But other flatulent tumors occur, differing from Emphysema, namely, the *hydatids* and *phlyctenæ* which are observed in erysipelas; those from threatening gangrene; after burning, or the application of cantharides; repeated compression, &c. It is true that these vesicles often break out from Emphysema of the eyelids and of the genitals of both sexes, in which air alone is contained: therefore rightly distinguished from Emphysema, which is nothing else than a *flatulent obstruction*.

Œdema arising from a slight or accidental cause, requires no remedies, but it is otherwise if it originate from a bad state of

the blood and humors, or from any fault of the viscera, which must then be attended to without delay. In these cases stomachics and roborants are of service; the hydragogue purges do good, diuretics, sudorifics, and other medicines above treated of, which are given internally in cases of watery collections. The *topical* resolvents and tonics also afford their share of advantage; such as the vinous decoction of wormwood, sage, rosemary, elder flowers, and juniper berries, spirit of wine, ley made of the ashes of twigs; spirit of sal ammoniac, lime-water, or other fomentations, composed of red roses, pomegranate, alum, globulus martialis, &c. The leaves of dwarf elder, and the common elder, bruised with spirit of wine, and applied like a poultice, deserve great praise. Against œdematous swellings of the legs, stockings made of dog skin have been useful in some cases, or bandaging conducted with a skilful hand, by which the feet and legs are subjected to equal pressure. Lastly, if the swelling of the legs be so great as to threaten gangrene, scarifications are practised which give outlet to the stagnant fluid: these little wounds are usually dressed with vulnerary water and camphorated spirit of wine, if there appear any signs of gangrene, to which the siphylitic, scorbutic, and scrophulous are very liable. But when Œdema is observed to partake of erysipelatous inflammation or schirrus; no one even of the least experience is ignorant that attention must be paid to this complication.

The method of *curing Emphysema*, differs little from that just mentioned, to wit, aromatic resolvents and discutients are exhibited externally, the best of which are sage, rosemary, and lavender; flowers of camomile and elder, simple lime water, or impregnated with sal ammoniac; camphorated spirit of wine, plaster of bay berries, &c. Astringents also belong here, namely, red roses, and pomegranate, sumach, alum, &c. When Emphysema is complicated with a wound, the stagnant air may be expelled by due pressure, or timely friction. With this view scarifications may be practised: yet these means do not succeed in all cases. But we must recur to internal remedies, which cannot be omitted, such as cathartics, diuretics, diaphoretics, tonics, and others above-mentioned.

SCHIRRUS AND CANCER.

BY THIS name is designated a tumor, advancing slowly, hard, resisting, and indolent, which sometimes acquires the hardness of cartilage or stone. It very frequently attacks the glands, at other times its seat is uncertain. For besides the breasts which are liable to this affection, the tumor very often invades the eyelids, mouth, neck, arm-pits, groins, and testes; and also occupies the back, abdomen, hips, &c. to say nothing of the most common internal schirri, which do not belong here. We have above noticed that phlegmon, bubo, œdema, and various other tumors, do not rarely put on the nature of schirrus. This is considered among the most *obstinate* diseases especially if of long standing; and in old age it baffles all cure: but there is greater hope of health, in young persons and boys. This obstruction very often originates from venereal, scorbutic and scrophulous virus; and usually invades melancholics, or persons affected with grief and anxious cares; it is also sometimes produced by contusion. It occasions slight inconvenience, where it partakes of no pain, and the skin preserves its natural colour; unless it become troublesome by its size or situation. But if inflammation, itching and pain come on, it usually ends in cancer, which unhappy change is very often brought on by the imprudent use of stimulant maturants and topicals.

The character of *cancerous tumor* called *occult*, is known by a blue, or blackish livid colour, by an unusual and very speedy increase of the protuberance, with an unequal surface; the veins meandering about its sides are more conspicuous, varicous, and turgid with black blood, which sometimes from their peculiar situation seem to resemble *crabs' claws*: an itching and pain mostly of the pulsative kind, closes the list of these signs. There is another species of Cancer, the origin of which is in the form of a tubercle, scarcely exceeding the size of a pea or bean, which very small and indolent tumor continues in the same state a long time, or encreases very slowly; so that the patients are very little solicitous about the event; nor do inexperienced physicians care more about it: until in the midst of these fallacious appearances, the tumor changes its pristine form, and by the sudden encrease, pain, and other signs above-mentioned, coming on, a *genuine Cancer* is brought to view.

Meanwhile the tumor suffused with a livid colour, gaps in various fissures, and discharges a very acrid ichorous humour, which eats and destroys the neighbouring parts: hence pro-

ceeds an ulcer, which is called *manifest Cancer*, before *occult*. This ulcer spreads far and wide, its lips gradually becoming callous are inverted in a loathsome manner, and in time very severe pains are felt. Lastly, this *sordid ulcer* emits a cadaverous fœtor, the ichor flowing from which is endued with such virulence, that it even eats through the cloth applied to it. The cancerous ulcer is now propagated more slowly or otherwise, the bottom of which affords luxuriant and fungous flesh; and the parti-coloured margins, terrible to behold, swell and are inverted. Moreover, by penetrating the neighbouring parts it erodes the vessels which it meets with, hence arise hæmorrhages sometimes not to be stopped by art, and therefore fatal. How much the face is disfigured by the cancerous ulcer, called, *noli me tangere*, is well known. Every one is also acquainted with that phagædenic ulcer of the legs, designated by the name of *lupus* or *wolf*, on account of the voracity with which it feeds on the neighbouring flesh. Meanwhile the *slow fever* which attends this ulcer when attaining a certain grade, undergoes very troublesome exacerbations; this is followed by marasmus or dropsy, which melancholy symptoms put an end to the miserable life of the patient. Besides phlegmonoid, schirrous, and scrophulous obstructions, there are other lesions observable, at first view but slight, which put on the nature of Cancer, namely, the very simple tubercles, mentioned above; warts, anomalous tumours and the most common ulcers, &c. Cancerous ulcer may last for years without exciting much inconvenience, but when it becomes deeply rooted, it exerts such severity, that the sick worn out with excruciating pains, or unable to bear them longer, most earnestly long for death.

It is plain from the foregoing that it would be better sometimes to abstain from all cure, especially if an inveterate schirrus get deep root, or be complicated with cachexy or old age, otherwise it does not seem amiss to try some remedies, although for the most part the best are of little avail. Wherefore having premised general means, temperants and depurants are usually prescribed; viz. whey, succory, lettuce, borage, agrimony, fumitory, nasturtian and dock. Aperients also deserve commendation, namely, wood-lice, broom, asparagus, eryngo, and madder; nitre, Glauber's salt, vitriolated tartar, martial tartar: these are followed by diaphoretics and incidents, as preparations of soap, diaphoretic antimony, cinnabar of antimony, æthiop's mineral, calomel, the remedy called *rotrou*, and others of that kind, which notwithstanding are to be prescribed in such manner, that the blood and humors may first be impregnated by the long use of diluents; and wonted flexibility restored to

the texture of the solids; otherwise by these stimulants the *wasps may be irritated*. Moreover, absorbents are useful in some cases; the cautious use of cathartics is recommended: namely, of senna leaves, manna, Epsom and Rupelle salts, magnesia, powder of cornachini, or compound powder of scammony, &c.

Perhaps a *milk diet* takes the palm from all these remedies, if we except the various mineral waters, which may answer an excellent purpose; whether exhibited internally or applied in the form of bath, fomentation, or soaking. Nor ought we to despise the *mud* of these applied like a poultice, especially that of the *Amandine* waters, celebrated by many as very efficacious. Domestic baths, also contribute their share. We add nothing concerning the internal medicines, for lues venerea, scrophula, and other primary diseases, from which schirrus often takes its rise; because we have said more than enough on that subject elsewhere.

External medicines ought to be called to the aid of internal. Resolvents take the lead, with which emollients may be advantageously associated, that by their means they may penetrate more deeply. With this view poultices of bread and milk are usually applied; also those prepared of emollient and farinaceous herbs, plaster of mucilages, saponaceous plaster, diachylon with the gums, plaster of *cicuta*, and *de vigo*, mercurial ointment, &c. If pain and itching come on, the unguentum nutritum, and pompholyx, or *white tutty*, to which some add opium, with this however, we must deal cautiously, lest the powers of the vessels especially necessary for resolution, be broken, and the impacted juices become more tenacious. Some relief may be obtained from slight frictions, the vapour of warm water, or the steam of vinegar, the vapour of sulphur, cinnabar, &c. care being taken lest the fumes of these last injure the lungs. But maturants must be avoided as worse than a serpent, by the action of which, schirrous tumours very often become cancerous, as experience proves. If, lastly, the remedies mentioned be found inert, nothing forbids having recourse to *extirpation*, if the seat of the disease allow, and the strength admit.

The *internal remedies* against Cancer, both occult and manifest differ little from those already mentioned, as used in the cure of schirrus; which consist of diluents and temperants, diaphoretics and aperients, incidents, cathartics and absorbents; to which may be added demulcents, namely, milk, whey, ptisans of the roots of althea, strawberry and water lilly, chicken and veal broths, gruels of barley, rice and oats, spermaceti, &c. nor can narcotics be disapproved of when the pains are very severe;

namely, laudanum, diacodium, SYDENHAM'S anodyne drops, &c. But all these remedies are futile if the Cancer be not attacked from without. "*Hoc opus, hic labor est;*" for all authors, beginning from HIPPOCRATES dread every external cure, if we except the *palliative*: And not without reason, since it is proved by daily experience that these attempts have most frequently terminated unhappily. For it is universally known that by applying emollients, resolvents and maturants, so highly serviceable in other species of tumour, the cancer becomes oftener exacerbated. Nevertheless, whether a remedy may not occur in the nature of things, which in a skilful hand may overcome this dreadful disease, does not yet appear: the search however, ought not at all to be despised, nor ought cautious experiments to be forbidden, especially if no other way of healing it, be apparent. Wherefore when there remains any hope of health, nothing ought to be omitted of those that seem likely to do good, against a disease which sooner or later proves mortal; since it is better, in difficulties like this, to try a doubtful remedy than none; provided however, as just hinted, there be any hope of cure. The *arcana* of empirics and mountebanks which are sometimes prosperous, teach us this: *That temerity often effects what prudence could not.*

These things ought especially to be understood of *exulcerated Cancer*: but as to the *occult*, we may justly doubt, whether it be best to abstain from all cure; since this tumour is very often carried for a long time without inconvenience, which by the application of remedies is mostly excited, and in a short time runs into a most loathsome ulcer: in which state it seems not improper to try various remedies, as there are many examples of cure: For I well remember to have seen a cancerous ulcer of the nose cured by a certain empiric, whose arcanum was nothing else than the *powder of savin*, with which he sprinkled the ulcer. Various indeed are the medicines, which, if we can believe writers, may, be used with the most happy success: namely, savin, jack-by-the-hedge, knot-grass, wormwood, herb Robert, &c. to which may be added hedge-mustard, applied outwardly, and given inwardly, which has been highly recommended by many writers of credit. Some have very highly extolled the infusion of *Plumbago* applied to the affected part. Lastly, it is said that arsenic, and other escharotics have sometimes been used with success. But perhaps the *actual cautery* excels them all, the use of which in this disease was very familiar to the ancients, and I know not by what fatality *this very excellent remedy* has become obsolete; whether from terror of the timid patients, or from the imprudent commiseration of physicians?

There remains a cure altogether surgical, and safer, namely, the *extirpation* of the tumour, if its situation permit; by which it often happens that it is freed from its connection with the neighbouring parts, although not without danger; or the *amputation* of a member, to wit, the arm, leg, breasts, lips, penis, &c. unless old age, loss of strength, or cachexy, or other bad state of the blood and humours hinder; for every external cure ought to be considered futile or hurtful, if the mass of humours be in any way contaminated; from the neglect of which it is little wonder, if it be of no account: for when the cancerous tumour is taken off, another in a short time starts up, which misfortune is sometimes prevented by an *issue*; and I have proved by experience that this *prophylactic* has been of great service in many cases.

These are the remedies most approved and in use among the best practitioners, by which sometimes this very terrible disease is overcome: but for reasons already given, we cannot always persist with them; wherefore we must take another method, namely, the *palliative*, which consists of demulcents and *anodynes*. For this purpose fomentations with milk or *aqua sperniolæ* are beneficial; the pulps of rotten apples, nightshade, saccharum saturni, calcined lead in oil of eggs, sheet lead, columba, a *pup or other animal cut open alive*; a slice of beef, veal, mutton, &c. to which may be added opium if the sick complain of very severe pains. Nor, as above hinted, ought we to forbid the internal use of narcotics, when the pains exercise such tyranny, that the miserable patients are altogether unable to bear them, for whom only remains the much longed for death.

By way of over-measure, we ought not to omit mentioning the famous invention by STORCK, of a certain specific remedy, which has very lately been made public; namely, the *cicuta*, justly considered as a poison, but as used by the skilful hand of this author, it has been changed into a most salutary internal medicine; so that no internal resolvent or incident has hitherto been found more efficacious against this most unmerciful disease. The *cicuta* is indeed prescribed with the greatest caution: that is, at first it is given in a very sparing dose, which is gradually increased. It is proved by the experience of this celebrated author, that schirrous tumours in the breasts, parotids, neck, arm-pits, groins, and testes, have yielded to this remedy. The *cicuta* has subdued depraved ulcers, and fistulæ, which no other medicine could cure, and has even removed manifest Cancers both of the face and breast: which stupendous cures the said author testifies to have been proved by the very celebrated and most noble VAN SWIETEN. The juice of the said plant, inspissated by

evaporation, is prescribed at the commencement of the cure, in not more than four grains for a double dose per day. The dose is daily and gradually increased until it amount to half a drachm, or a whole drachm and more, as occasion requires. The very learned author of the *MEDICAL DIARY*, for June, 1760, has elucidated all these circumstances; but whether this celebrated remedy has the same effect in our country, is not yet proved.

ANEURISM, AND VARIX.

THAT tumour of the same colour with the skin, pulsating and mostly yielding to the fingers, arising from a *dilated artery*, or from a *wound of it*, through which the blood is effused into the cellular texture; obtains the name of *Aneurism*. Whence arises a double Aneurism, namely, *genuine* or cystic, and *spurious* or extravasated. The true Aneurism, at the commencement is contained within narrower limits, is soft and yields to the pressure of the fingers; but when the tumour has been of long standing, it has more resistance, and gradually rises to an immense size, with scarce any pulsation. The progress of this tumour commonly continues for years, but sometimes nevertheless, it encreases rapidly. The skin undergoes no injury in the first stage of the disease, but as this advances it becomes red and is seized with inflammation: sometimes indeed, it bursts this barrier, which being overcome, the artery expanded beyond measure, is torn, and a hæmorrhage follows, which brings on instant death. Both the species of Aneurism are distinguished from other tumours by a manifest pulsation, provided these last are not seated over arteries, whence proceeds an error by which the incautious are often deceived. From tracing the part affected, *in dead bodies*, it is conjectured that this stupendous dilatation of the artery in the *true* Aneurism, arises from an erosion or laceration of the inner coat. Various strata of concrete blood fill the cyst formed by the expansion of the other coats, and are disposed in layers, from the number of which, the size of the tumour increases, which having attained a certain grade, the pulsation becomes more obscure. Indeed, Aneurisms not unfrequently occur, occupying the neck or upper part of the breast, which contain *four pounds* of blood, both concrete and liquid. The aorta, subclavian, carotid, axillary, brachial, and crural arteries, are liable to this dilatation, which therefore takes place more frequently in the neck, about the sternum and clavicles.

Either kind of Aneurism arises from wounding the *brachial artery* in venesection, unless it be prevented by suitable compression immediately after the wound is inflicted. The *true Aneurism* is produced by wounding the external coats of an artery; but from opening the artery so that blood is emitted through the vessel, and breaks out *by jumps*, proceeds the *spurious Aneurism*, the tumour of which being broader, and situated without the artery, pulsates more generally; and lastly, is distinguished from the *genuine* by a peculiar sort of fluctuation, like *fretting*, (*fremitum*) and conspicuous to the examination of the fingers. The skin, moreover, in this spurious species of Aneurism, from the effusion of the blood between the parts of its texture, contracts a kind of livid appearance, on which account this tumour is often seized with inflammation, and indeed shews marks of gangrene. The reason then is plain why the spurious Aneurism should grow so immense in a short time, while the progress of the true is more slow. *Aneurism of the Aorta*, and its branches is sometimes visible, and sometimes lurks in the breast, which, by degrees affects the neighbouring bones with caries, and brings on violent pains, palpitations, suffocations, anxiety, and fainting, and sudden death from its spontaneous bursting. *Aneurism* is caused by some effort of strength in jumping, wrestling, carrying heavy weights, &c. it is also brought on by vociferation, cough, sneezing, vomiting, parturition, difficult stool, &c. Lastly, it is sometimes occasioned by a fall from a height, contusion, wound, &c. Aneurisms of the great trunks of the arteries, whether conspicuous or not, ought to be considered as altogether incurable: but the others, if their situation do not hinder, may be overcome.

Those soft and blackish livid tubercles, mostly indolent, which yield to the pressure of the finger, and in a short time return, on account of the part affected having a kind of affinity with Aneurism, are called *Varices*. These tumours arising from a dilatation of the subcutaneous veins, very frequently affect the legs, and are sometimes observed in the abdomen, scrotum, anus, &c. *Varices so common about the anus* are known under the title of *hæmorrhoids* or *piles*; but those which are seated in the track of the spermatic vessels, have the name of *varicoceles*. It is proved by dissection, that Varices do not spare the internal parts, for they occur in the bladder, lungs, brain, &c. These tubercles arising from stagnation of blood, oftener affect the knotty and valvulous veins; on this account very numerous ones are sometimes observed in the legs, the veins of which, besides these knotty dilatations, swell beyond measure; so that from hence arise very broad and very conspicuous *plexus*, which surround

the whole limbs. Pregnant women are subject to *varices of the legs*, and especially those who bear their children with difficulty ; but when the cause is removed, these tumours vanish in a short time. *Varices* arise from imprudent exertion of the body, falls from a height, tight bandages, or any other kind of compression, to which also, those who labour under obstruction of the abdominal viscera are thought to be liable, or hypochondriacs, who not unfrequently are relieved by the eruption of them. *Varices* when very small, are free from pain, and occasion almost no inconvenience ; but when they attain a certain size, they become very troublesome ; for they are capable of such enlargement, that they exceed the size of a fist, or contain even two pounds of blood. No wonder if the vessels should be dilacerated from this amazing dilatation ; from the rupture of which proceed very dangerous hæmorrhages, followed by bad ulcers, which also are caused by the acrid serum exuded from entire varices.

Respecting the *cure* ; when the *true Aneurism* is recent, every means of art must be used to restrain it by mechanical force : for by strong pressure upon them, compresses, and bandages, incipient Aneurisms vanish, and are cured ; provided the situation be suitable, as in the arms, legs, head, external breast, and other parts, in which the bone underneath favours the pressure. But Aneurism seated in the neck baffles this method, which cannot be compressed without danger of suffocation. And it must be obvious to all who have but just entered the threshold of anatomy, that this compression is not more suited to internal Aneurism of the breast. Topical astringents, if nothing forbid, assist pressure, namely, the white of an egg, alum, dragon's blood, acacia, styptic plaster, &c. There are some who put a sheet of lead under the tight drawn ligature, or contrive some other way of pressure, since in this suitable constriction alone depends the principal cure.

But when from the careless and unhappy *puncture of an artery* in the operation of venesection, an Aneurism threatens, let the surgeon, without being terrified, apply his thumb instantly to the wounded artery, and so compress it as to prevent the exit of the blood, which is better effected by a bandage thrown about it, and twisted with a stick called a *tourniquet*, until a piece of gold or silver money, the half of a bean, a ball of lint, or chewed blotting paper, or piece of *Agaric* so celebrated at this time, or any other similar thing may be carefully laid upon the wound. Afterwards let them apply several compresses, which must be kept firm and steadfast by ligatures, or bandages of various kinds drawn tight round them : by which apparatus, the flow of blood is stopped, and Aneurism prevented. But this bandaging must

not be too tight, lest the inferior part of the arm be seized with œdema, echymosis, or inflammation: from which there is sometimes danger of gangrene, which they must try to avert by spirituous and camphorated embrocations, among which, *cold* properly applied, ought to have a place. But when the Aneurism situated in any part, attains a certain encrease, it is necessary to have recourse to *extirpation*, if the neighbouring parts admit. This operation respects Aneurisms of the limbs almost entirely, by which, having first cast a bandage above the tumour, drawn tight by means of a stick, that the blood may be altogether suppressed, and besides having tightly drawn a ligature over the affected artery; the tumour first loosened from its adhesion to the neighbouring parts, is cut off. The case is not yet out of danger, since it frequently happens that the arm deprived of blood, becomes gangrenous, which misfortune is prevented only by the immediate amputation of the member. But when the seat of the disease, or any other circumstance, hinders these remedies, the attention of physicians ought to be turned to a merely palliative cure, which consists in a suitable regimen, and blood-letting frequently repeated.

As to *Varices*, having emptied the vessels, both by venesection and leeches, diluents, temperants, and deobstruents, are advantageously administered, yet these remedies are of little use, unless the external cure be added, which consists in the due and constant pressure of these tubercles, assisted by astringent plasters, or compresses wet with alum water, white of eggs, vinegar, or other roborant liquor. But these topicals are vain and even hurtful, if the blood stagnating there cannot find its channel, and the tumour do not vanish and become obliterated by this varied pressure: under which circumstances contrary medicines must be applied, namely, emollient and oily, which by imparting flexibility to the parts, restore a free communication between the vessel underneath, and the cyst. Moreover, very large Varices, or of long continuance, do not yield to pressure, and therefore must be attacked with another method, especially if the pains be urgent, or a bursting of the sack should threaten from the very great swelling; this being supposed of a double nature, refers to surgery: for instance, the first is performed by a simple *section* of the tumour; having compressed the vein connected with it; and evacuated the blood, the wound is cured by the common means; the other is the *extirpation* of the tumour, which is done more easily and with less danger than in Aneurism. Lastly, there are not wanting those who usually treat this tumour, and successfully too, with butter of antimony, or other

caustic, and indeed with the actual cautery, which also merits its own praise, if done with a skilful hand.

CYSTIC TUMOURS.

CERTAIN *tunicated Tumours*, or having a peculiar follicle, are thus named; which were called by the ancients, *anomalous*, on account of the much talked of fourfold humour, with which they supposed them to be filled. Of this number are *lupia*, adipose tumours, lymphatic tumours, ganglion, &c. concerning each of which we shall presently treat: To the same class also belong *ranulæ*, *bronchocele*, *strumæ*, *hydrocele*, and some other protuberances of that kind, which affecting peculiar parts, belong to other heads, according to my plan. *Lupia* (*la Loupe*) occurring every where, collects divers matters which in some measure resemble honey, pap, and suet, whence proceed the barbarous names rejected by practitioners, but retained in the schools: namely, from a matter like *honey*, the anomalous tumour is called *melliceris*: from the *pap-like* substance contained in the cyst, it is called *atheroma*: from a kind of *sebaceous* or suet-like matter contained therein, it is named *steatoma*. The *adipose* Tumours contain mere *fat*, sometimes when the sick is affected with consumption: these have their seat on the back and shoulder blades, differing little or none from the genuine *Lupia*. Besides these matters usually observed in cystic Tumours, others occur of diverse sorts, viz. like the sediment of oil, lees of wine, mud, &c. to which may be added concretions of a fleshy, spongy, cartilaginous, horny, bony, stony, or chalky nature. It is quite incredible what authors relate of finger nails, hairs, chips of wood, shells, &c. found in them. Cystic Tumours very commonly affect the back and knees; but there is no part of the habit of the body, which they may not attack. Nor do they spare the internal parts; since I have often observed them within the breast and abdomen. These Tumours mostly owe their rise to contusion or other hurt of a part, and also to an internal cause, namely, the venereal virus, scrophula or other bad state of the blood and humours.

Cystic Tumours encrease but slowly, and create no trouble, unless when in the trachea they hinder respiration, and they mostly stretch the skin in which they are enveloped, which preserves its natural colour, without injury: unless their size become very great, which sometimes amounts to fifty pounds. These

prodigious Tumours are indeed often seized with inflammation, and suppuration; which unfavourable change those lupiæ do not rarely undergo, that are attached to the head, under the silly names of *talpa*, *natta*, and *testudo*, to suit the whims of authors. Sometimes also it happens that on account of the too great elongation, the coats of these protuberances are burst; from which they sometimes put on the nature of cancer, or run into a fistulous ulcer, which is never cured, unless the whole follicle be consumed with pus. To these we may add, that all cystic Tumours, always in the course of time, affect the bones and cartilages over which they lie with caries. These are the misfortunes which the more inveterate lupiæ bring on, and they not rarely presage a fatal event, confirmed by various melancholy circumstances,

There is *another species* of anomalous Tumour, but not frequent, which takes the name of *Lymphatic*: this Tumour swells with a limpid juice, or contains hydatids, the anatomical dissection of which exhibits the lymphatics very conspicuous. Like other follicles, lymphatic Tumours may affect any part of the body, as they arise from mere stagnation of lymph; but yet they are mostly seated in the arms and hands, which, lastly, ought to be considered more obstinate and troublesome than the above-mentioned tunicated Tumours, and not without danger. Respecting *ganglion*, this name is given to a soft and indolent tubercle affecting the ligamentous sheaths of the tendons, which being for the most part very small, scarce equals a filbert, but sometimes gets to the size of an hen's egg. This Tumour, of the same colour with the skin, and very common in the hands and feet, contains a kind of gelatious matter, little differing from the well known synovia of the joints. This tubercle proceeds from compression, puncture and contusion, from a fall or stroke, and is not dangerous; it is commonly supposed that gouty, scorbutic and scrophulous persons are liable to it; whether this be so, I leave for better judges to determine.

Recent lupiæ are very often removed by *topical resolvents*, namely, cataplasms of sorrel and bryony root; plaster of diabolitanum, of cicuta, de vigo, &c. But these topicals are inert against lupiæ of great bulk or of long standing; as in the case of adipose Tumours, which are thought incurable. Whence it is better that the patients abstain altogether from remedies, unless they cannot bear the size of the Tumour, or are ashamed of its peculiar situation: under which circumstances, it is advised to *extirpate* it, or with suitable *cathartics*, to remove the follicle. But either mode of cure has its danger, for instance, whenever the Tumour is attached to sutures, ligaments or tend-

ons. Extirpation seems safer and more expeditious, especially for adipose Tumours, if the entire follicle, loosened by a skilful hand, can be taken away from its adhesion to the neighbouring parts. But there are few surgeons who are able to perform this operation dexterously. The ligature also is used here, if the Tumour have a narrow base, which process, being more secure, and less troublesome, is much preferred by the sick. The administration of caustic has also its difficulties, being much more tedious and troublesome, and never to be used until the Tumour first become soft by the help of topicals possessing these virtues; nor does this cure rightly succeed, unless the whole follicle be exhausted by suppuration; otherwise a fistulous ulcer remains, which occasions great trouble. Moreover, the *internal cure* must not be neglected, when very numerous Cystic Tumours excite a suspicion of some latent taint of the blood and humours; which fault after being submitted to accurate examination, must be treated sometimes with diluents and temperants, sometimes by means of depurants, or deobstruents and incidents, otherwise they labour in vain, who set about the cure of these Tumours.

To a similar cure, namely, surgical, are *lymphatic Tumors* subjected, for they may be removed by *extirpation* and *cathartics*. But either way of cure is not improperly considered much too difficult and dangerous. The above-mentioned topicals are also thought inadequate to effect their resolution; but pouring the mineral waters on them from a height, provided the lymphatic Tumour have not gained deep root, is said sometimes to have been serviceable. The cure of *recent ganglions* is commonly performed with more simple remedies; to wit, friction, and pressure, *made with the thumb*, by which they have mostly been removed. There are some who, not injudiciously, attack them, by repeated strokes of a ferrule, or by strong and continual pressure with a sheet of lead, fortified with a suitable bandage. Which affording no help, let them apply gum ammoniac macerated in vinegar, saponaceous plaster, plaster de vigo, of cicuta, diabolitanum, &c. But these topicals do little good, unless the ganglion be tightly compressed by bandages. Others put a sheet of lead impregnated with mercury, and confined with a tight bandage; and some use mercurial fumigation. But if the remedies prove inefficient, caustics or the knife may be used, by which means suppuration may be promoted, and thus the follicle of the ganglion be exhausted. Nevertheless this tubercle is very seldom submitted to surgical operation, and indeed occasions little or no inconvenience.

SARCOMA, VERRUCÆ, ET CORNUA. WENS, WARTS, AND CORNS.

THE genuine *character of Sarcoma* does not clearly appear from surgical writings; by which name we understand a fleshy tumor, indolent and immoveable, yielding to the touch, proceeding slowly, furnished with no peculiar cyst. The seat of this protuberance is uncertain, since it may appear in any part of the surface of the body, and even as I have observed, does not spare the internal. But *Sarcoma* or *Wen*, mostly invades the eyes, cheeks, back, arms, and legs, obtains various forms, and seems to be confined within no certain limits, since mention is made of a fleshy mass of this kind reaching from the back to the hams. No one is ignorant that these species of *Wens*, are congenital, which, as is supposed, resemble strawberries or blackberries, clusters of grapes, slices of pork, saucages, cakes, and numberless others well known to the good women. *Polypus* of the nose has a place in the class of *Wens*, concerning which, according to our plan, we shall treat elsewhere. The tumour growing on the *testes* or its covering, is called, *sarcocoele*. Those which beset the *anus* are named, *mariscæ*, *condylomata*, &c. *Wens* are produced, under the name of *fungous flesh*, from ulcers of a bad kind, and especially of the *dura mater*, aponeurotic parts, &c. A *Wen* arising from the habit of body, does not often injure the health, yet it sometimes becomes inflamed, and forms an ulcer; and like other tumours is not always safe from gangrene. We have already noticed, that cystic tumours sometimes contain flesh, which notwithstanding, it would be inconsistent to reckon among *Sarcomata*.

Verruca, *Warts*, (*Poireaux*) very commonly infesting the face and hands, may with more propriety be promoted to the grade of *Sarcomata*, unless they differ from them by a peculiar type well known to all. They are called *sessile*, or flat, or broad, when they adhere by a broad base, to the skin; and *pendent* or hanging, when furnished with a kind of pedicle or stalk. *Verruca* or *Warts* occasion little or no inconvenience, and often vanish spontaneously: they portend no danger, unless they partake of cancer; which practitioners know to have happened sometimes in *Warts* of the nose, eyelids, and lips. It is reasonable to suppose that *Corns* approach somewhat to the character of *Warts*, although they seem to differ but little, both in respect of *form*, and firmness of texture, from the *horns of animals*. Sometimes they grow to the skin alone, sometimes

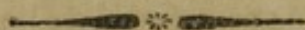
they are implanted into the bones themselves, by which the face and head are often disfigured; they also invade the back, joints, and thighs, &c. They portend little danger, unless from their spontaneous falling off, there arise a cancerous ulcer that baffles all cure. In like manner as Warts, Corns sometimes proceed from an internal cause: and also are not seldom produced by ulcers.

Warts ought not to be submitted to cure, unless from their peculiar situation or great size they become troublesome. Physicians usually treat them with ligature, if the base admit; or like cystic tumors, they are extirpated with the knife, after premising the usual means. It is said that cathæretics have not succeeded to expectation; whether they have been applied in proper time, may be doubted, since it remains a maxim among experienced physicians, that these remedies never suit, where the excrescence is resisting, livid, endowed with an unequal surface, and attended with pain: these remedies also cannot be applied without danger, if the fleshy masses adhere to the joints, or ligamentous parts. Otherwise I can readily believe they might be useful.

The pensile Warts may be amputated with a forceps, or so drawn together by ligature with a waxen thread or horse hair, as soon to fall off. But the *sessile* are usually treated by applying the juices of greater celandine, spurge, figs, wart-root, the leaves of the bell-flowered saxifrage, &c. with which the Warts when frequently wetted, usually vanish. Some recommend blood for the same purpose, in *talpa*. Others give oil of tartar per deliquium with sal ammoniac dissolved in water, vinegar saturated with marine salt, oil of vitriol or camphorated oil, nitrous or muriatic acid, lapis infernalis, &c. The flame of sulphur cautiously applied may also eradicate them; nor are emplastrum de vigo, or other resolvers of that kind, of small benefit. But these remedies would be of little use, unless the Wart were first taken off with a razor or other suitable instrument, that these topicals might penetrate its texture more deeply. Nor are there wanting some who consider the *actual cautery* as a very effectual remedy, but we must take heed lest the membranous, tendinous, and ligamentous parts be injured; whence very serious symptoms might arise. But they who use the hot needle for the purpose, may avoid this danger. Nevertheless these methods of cure are futile and even hurtful, if the Warts have a blackish green appearance, and be attended with any kind of cancerous pain; which character Warts of the nose, eyelids and lips often put on. Lastly, when these tubercles break out in great numbers, we suspect a taint of the humours;

which being duly attended to is treated sometimes with depurants, sometimes with diaphoretics, also with aperients, incisions, &c. premising general remedies.

With respect to *Corns*, these require a similar method. The *ligature* however, takes the palm from the rest, when the tumour can be drawn together by a string: But when this method will not answer, we may use the caustic which is drawn round the base of the tumour. This method, however, is unsuccessful, if these tumours be deeply rooted, which cannot be followed without danger, on account of the parts being endowed with very exquisite feeling, from the irritation of which very grievous symptoms may be excited. For the same reason extirpation ought to be considered dangerous, because the *Corns* very often are attached to the bones, as already observed, or to ligaments; and on this account can never be eradicated with safety.



THE BITE AND PUNCTURE, OR STING, OF ANIMALS.

LAYING aside all hypotheses, which are prated about the nature of poison from the Bite of various irritated or rabid Animals; which quickly reaches the inmost recesses of the body, and there instantly contaminates the consistence of the spirits or mass of humours; we hasten to the method of averting its calamitous effects. Wherefore, as soon as the nature of this disease becomes known, we must spare no pains, without delay to prevent the threatening danger: With this view the *indication* to be fulfilled is, 1st. To remove the poison from the wound, or by *shackles* as it were, of any fat substances, enclose and hinder it, or by some other means to take it off and exhaust it. *Scarifications* answer the first intention, by which the contaminated blood is let out, the more prompt expulsion of which is favoured by cups, or suction, if nothing forbid; by which means the virus is drawn out. Fat or oily substances are also applied with advantage, by which the poisonous miasmata may be entangled, which is also evidently subdued by the actual cautery with red-hot iron, or by gun-powder fired upon it, provided it have not penetrated deep. 2d. As soon as possible to hinder this poison from reaching the interior parts, which end is safely answered by the immediate *amputation* of the wounded part, if the timidity of the patients will allow; or by a ban-

dage tightly drawn above the wound; by which the blood returning to the heart is altogether stopped. 3d. When from long delay it is conjectured, that a certain portion of the poison has already reached the mass of blood, it must be treated with the celebrated *Alexiterials*, viz. Theriac, orvietan, mithridate, salts, volatile Animal spirits, namely, of viper, hartshorn, urine, simple or succinated sal ammoniac, and others of that kind, which may fulfil our wishes. Diaphoretics also, diuretics, and other evacnants, may contribute their share. This is the general method of cure, and most in use against the virus of Animals whether poisonous or rabid; it also suits against the Sting of some insects, having regard notwithstanding to the degree of danger, and various circumstances: all which I have thought it useful to treat of rather more diffusely.

No one is ignorant that man, the dog, the wolf, cat, horse, and mule, are obnoxious to *rabies* or madness. That most distressing disease which is brought on by the Bite of Animals, is called *Hydrophobia*, concerning which hereafter, but at present we will only treat of the *method of treating the wound*. The actual cautery therefore answers the best purpose for extinguishing the hydrophobic virus, in the wound left after a Bite, provided it be instantly and deeply thrust in. If those who were Bitten by the rabid Animal be very much afraid of fire, the hot iron must not be applied immediately, but let it be brought to it as gradually as may be, and held there sometime, that the particles of fire may exert their action with less violence and longer. Some try the same effect with gun-powder fired upon the wound itself, but whether this temporary flash can reach to the virus sometimes deeply immersed, is very doubtful. The other method is perhaps no less efficacious, which is performed by very deep *scarifications*, upon which are usually fixed, cups, if the affected part admit; by which means the infected blood is altogether exhausted: also by repeated and suitable pressure, the flow of the tainted blood is promoted, so that the neighbouring vessels are quite emptied; for suction by the mouth would not be prudent. Which being done, another duty is incumbent on the physician; that is to keep the wound open for months, and on this turns the principal hinge of cure, so that if the lips of the wound heal too soon, they ought to be made sore again without delay. Concerning the duration of this cure there has been much controversy among authors, many of whom pronounce that it is not absolutely necessary after the fortieth day, but others think it ought to be continued for four or six months, which without controversy would certainly be safer. Concerning friction about the wounded part with mercurial ointment,

we add nothing, since the wound is of less consequence, than the threatening *Hydrophobia*, of which elsewhere.

The *Bite of a Viper* excites the greatest terror, and in proportion to the country and season, as also the degree of anger of the reptile, is more or less to be dreaded: to which may be added the fear of being bitten, which may encrease the severity of the poison to such a degree as to carry off the unhappy patient in a few hours: at other times the poison of a viper kills after one or two days, and indeed later. Terrible symptoms follow close at the heels of this bite, for besides the inflammation with which the parts around the wound are seized, and the very violent pain widely extending itself, the whole surface of the body swells, the mouth becomes dry, bilious vomitings break out, respiration is injured, anxiety prevails, hiccough takes place, palpitations come on, with intermittent pulse, vertigo assails the head, the strength fails; lastly, the parts are seized with numbness, or trembling, until convulsions, cold sweats, and faintings close the list, and death is accelerated. It appears from hence, that the poison of a viper, when it has crept into the blood, is much more fatal than the rabid virus, which never brings on sudden death.

A wound inflicted by a viper ought to be treated in a similar manner; above which, if nothing forbid, a bandage must be tightly drawn, that the blood being stopped cannot seek its usual channel. Meanwhile let the *actual cautery* be applied, or *scarifications* be used, over which cups are to be put, that the vessels may be the sooner emptied. Even sucking would be safe in this case, because of the peculiar nature of the poison, which when in the stomach becomes altogether inert and dead: while on the contrary, the poison of rabid animals is no less to be dreaded in the *primæ viæ*, than in the sanguiferous vessels, as experience proves. Moreover, *the fat of the Viper* is much extolled as an application to the wound; perhaps olive oil possesses the same virtues, which is said to have been successful in many cases. Some put the *bruised head of the Viper* on the wound, others apply a cataplasm of garlick, theriac, and sal ammoniac; to say nothing of various other remedies, which have their share of praise, when immediately used. But these topicals, or *euporista*, are not always at hand, on which account some husbandmen, affrighted by threatening death, have without delay submitted to the amputation of the wounded part, with the first instrument they could meet with: which remedy, much dreaded by the timorous, is perhaps the only safe one. But the officinal and incidental *alexiterials* must be given internally, namely, theriac, and orvietan, powder of vipers, succinated sal ammoniac,

commonly called *Eau de Luce*, and other alkalines of that nature, which may also with advantage be applied to the wounded part. Moreover, the bite of the *Asp* and other poisonous snakes, is to be treated in a similar manner, but it must be remarked, by the bye, that these poisonous reptiles, if we except the *Viper*, are seldom to be met with in our country.

The bite of a *Toad*, although it has no teeth, is not without danger, since its very penetrating salivary fluid, reaching the blood through the pores of the skin, may occasion the greatest mischief. Nor is the urine of this animal to be less feared, with which pot-herbs are sometimes sprinkled. For from the evidence of experience, there can be no doubt, that each humour when swallowed with the aliments, or entering the vessels through the open pores of the skin, possesses noxious qualities, from which proceed swelling of the whole body, or a loathsome paleness approaching to jaundice, vertigoes, faintings, convulsions, &c. The tongue and lips from the aliment infected with this virus, become black, vomiting breaks out, heart-burn rages, &c. which bad effects of the bite are safely prevented by washing out the infected humour sticking in the skin, with suitable and extemporaneous means, such as water, urine, wine, &c. But if there should be any suspicion of poison swallowed, emetics and cathartics afford present help; lastly, when the virus is mixed with the blood by any means, it is usually treated with diaphoretics, diuretics, cardiacs, and alexiterials: but, to say the truth, this injury is rarely discovered, which therefore secretly undermines the constitution. *Scorpion*

The puncture of the *Scorpion* is thought void of danger, in temperate climates, but it is otherwise in very hot regions, and especially during the dog-days. For this poison actuated by the heat of the air may excite distressing symptoms; which nevertheless seldom occasion any fear of death. The injured part is seized with inflammation, the sick are distressed with universal pains, the stomach is subverted, occasioning vomiting and hic-cough, in the mean time torpor of the members comes on, tremors, &c. Among the celebrated local applications, the oil of *Scorpions* is recommended, but when this cannot be had, let olive oil, which is mostly at hand, be administered, and perhaps it is not less efficacious. But when the case seems dangerous, which nevertheless rarely happens, scarifications, the actual cautery, and other remedies above mentioned must be resorted to. Some put the bruised *Scorpion* on the part, which is said to have been successful in many cases; therefore nothing hinders the customary use of this local remedy; especially when

others are deficient, nor when the case demands, ought cardiacs and alexiterials approved of in daily practice, to be omitted.

There occur some *poisonous spiders*, besides *Tarantula*, concerning which hereafter, the sting of which portend some danger, especially if the injured part be affected with inflammation, and put on a leaden colour, with an eruption of purple spots: usually followed by nausea, vomiting, torpor of the limbs, drowsiness, or delirium, tremors, convulsions, &c. to prevent which, ought to be the chief care of the physician. This end is answered by a cataplasm made of garlic and theriac, so very much celebrated among effectual prophylactics. Some recommend the milky juice of figs, with which the affected part is to be fomented, to this we may add the above-mentioned topicals, which also are useful to this species of puncture. The same may be said of the antidotes, volatile salts, and other internal medicines just mentioned. It is a matter of doubt whether a spider if swallowed, will occasion any bad consequences, but in this case it seems safest to have recourse to an emetic. The other prophylactics also, although for the most part superfluous, may not improperly be used.

* The *sting of bees and wasps*, is attended with no danger, nevertheless it occasions a large phlegmonoid tumor, marked with a whitish pustule in the centre, which after two or three days, vanishes. But when there happen to be many stings, the oppressive symptoms may be removed in general by low diet, and one or two bleedings. As to the external cure, care must be taken to extract from the wound, the sting which these insects usually leave therein; afterwards let the tumor be fomented with warm urine, or anointed with oil; some highly recommend bruised plantain. Also let theriac reduced with spirit of wine be applied, or other emollient cataplasms; by which remedies the pain is quieted and inflammation reduced, or altogether prevented. As to the sting of *mosquitoes*, commonly called *cousins*, on account of the itching pain, often very troublesome, let saliva, oil, vinegar, lime juice, &c. be applied to it, but all these remedies are unnecessary unless these insects attack the body in a swarm.

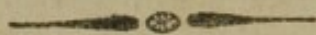
* I once saw an effect, almost instantaneous, from the sting of a bee, which excited terrible symptoms: namely, a universal sensation of burning, violent inflammation, or rather convulsive efforts of the arterial system, livid appearance of the whole body, and delirium. All these alarming symptoms very soon subsided, after copious venesection, a brisk cathartic, and the constant application of Lead Water, to the affected part. T.

TARANTISMUS.

THUS is denominated that astonishing disease which is caused by the *sting* of a certain *venemous spider*, called the *Tarantula*, found not only about *Tarentum* in *Apulia*, but also in other parts of the kingdom of *Naples*, as also in *Italy*, *Cor-sica*, and among the *Persians*. This insect crawling in fields among the corn, in a very fervid season, attacks reapers and travellers with its most dangerous sting. The puncture excites slight inflammation, but sometimes the affected part contracts a livid appearance, approaching to blackness, and is seized with pain and a kind of numbness. Meanwhile the sick *are oppressed with anxiety*, the limbs tremble, the strength is prostrated, heart burn comes on, tightness of the breast is urgent, and brings on difficulty of breathing, the vision is beclouded, and the sick are overcome with grief and sadness. These are followed by *wanderings of the mind*, in which they speak incoherently and deliriously, and do disagreeable things. In the greater number of patients this disease is protracted for many days, and mostly borders on death. Some fall as if struck with lightning, and die like apoplectics. But let those who recover from Tarantism, beware of its return on the following season, and when "the dog-star rages." There are not wanting those who carry the remains of this disease through the whole course of their lives.

The *external cure* of the *Tarantula* differs little from that already described, as suited to the punctures of other animals: this virus also when mixed with the blood is usually treated with the same internal *prophylactics*, namely, *cardiacs* and *alexiterials*. But these had rarely been effectual, until by good luck a *genuine specific* was found out, which is nothing else than *dancing to the sound* of the viol or pipe. It is now proved by numerous experiments that this *musical exercise* is continued for four or eight hours and longer every day, and repeated four or six times. The patients are not excited to dancing by all musical instruments, or by every tune, but the true and efficacious modulation is found out after various trials: which being discovered, the countenance of the patients brighten with hilarity; they leap out of bed, and *keep time* with feet and hands, so long as their strength will admit; which being exhausted, they indulge in rest, and afterwards becoming more agile and strong, they are set in motion by the same art. It is wonderful that the insane patients should be so affected by *discordant* sounds, that they immediately leave off dancing, unless the musician hired for the purpose,

should be able to draw their attention more agreeably. This is the surprizing method of cure, than which nothing *has hitherto* been found more safe. We may add that not only musical instruments, but even the view of lively and bright colours, seem to mitigate this mournful scene.*



HYDROPHOBIA. CANINE MADNESS.

THIS disease is very manifest after the invasion, but its *forerunners* are doubtful and fallacious, which notwithstanding it is very necessary to know. Nor are we always sure concerning the misfortune threatening Hydrophobia; which also it is of the greatest moment to be acquainted with, lest through imprudent security the prophylactic remedies should be neglected, which very seldom fail when timely administered, or happily prevent this terrible disease, that otherwise when it gets the upper hand, scarcely ever suffers itself to be vanquished. The bite of a dog, or any other animal ought indeed to excite the greatest alarm, if any suspicion of *madness* should arise: wherefore in this case nothing must be left undone, to dissolve this distressing doubt, which is sometimes very intricate. Forasmuch as this very often derives its origin from the dog, so very familiar to us, and (as every one knows,) so obnoxious to this disease, we think it not unadvisable to make some observations, on the *diagnosis of his madness*.

Dogs, when seized with this raging madness, do not bark, but utter a hoarse voice, by which other animals of the same kind are terrified. With tail and ears hanging down, they become sad, or seek their accustomed kennels or dens. Meanwhile, they are averse from drink, refuse their usual aliment, and draw breath with difficulty. From the mouth gaping, or covered with froth, they thrust out the tongue, snap at the dogs they meet with, and attack men, sparing only those with whom they are acquainted, in this grade of madness: but in a short time forgetting every thing, and seized with fury, they know them not: until at last their strength fails, and they are seized with con-

* If this account be true, and I am inclined, notwithstanding what has been advanced to the contrary, to believe it; this remedy against Tarantism, may in time become one of the most grateful and efficacious, in the various species of *Mania*. I hope that the spirit of unprejudiced enquiry, so characteristic of *American physicians*, may e'er long *give this conjecture the stability of fact*. Our Hospitals and Alms-houses afford abundant opportunities for the experiment. T.

vulsions, if not killed. It is well known that in this last stage of this disease *the bite is far more dangerous*; but it is seldom that any one, in this state, is openly attacked, whence all may betake themselves to flight.

The rabious poison possesses such tenuity, that it may be communicated by the simple contact of the salivary fluid, when no wound exists; and indeed this humour when dry and old, adhering to linen or woollen clothes, may bring on the same disease, if we may place confidence in various observations. This virus when admitted into the vessels, is hid for some time; but it mostly shews itself before the fortieth day: and in some rare instances the seed of this terrible disease is not excited for months or years. This *raging virus* shews itself commonly by frequent yawnings, spontaneous shuffling of the body; sleep disturbed by frights and screams, pains sometimes very severe, which not only affect the part first wounded, but also wander through the whole body. These are followed by grief and sadness, from the fear of a threatening invasion, or a kind of lowness of spirits, in which the sick are afraid to go into public, and indeed fly their relatives and acquaintances.

These are common *preludes of hydrophobia*, which are immediately followed by a fear or dread of water or other fluid, although the sick are tormented with thirst, or heat of the intestines; vomiting and hiccough; tightness of the breast or suffocation from a kind of constriction of the larynx, as in angina, with a weak and unequal pulse. Meantime the mouth is loathsome with froth, and in some cases, the wound bleeds afresh: the glaring eyes threaten delirium, in which they cry out and howl, with a horrid countenance. They are urged with a desire of biting, and become furious: until they are carried off by convulsions, from which even the genitals are not free, or fall into fatal syncope, by which about the fourth day of the disease, they are numbered with the dead. The hydrophobia in the greater part has its paroxysms, which are subject to no order; in the lucid intervals of mind, the sensible patients advise the by standers to take care of themselves, or submit to be bound with cords.

There are some who suppose that they have seen mad persons altogether free from the fear of water: it may be doubted if these have laboured under the genuine hydrophobia. Others have made mention of a *spontaneous rabies*, that is without any previous bite, or contact with mad animals. Whether the authors of these observations, deceived by the affinity of diseases, have erred from the mark, we leave for the determination of the judicious, who know very well that dread of drink

is enumerated among the symptoms of malignant fever, hysteria, and some other diseases of a bad kind : besides it may happen that the sick may have altogether forgotten an old bite, or might have unconsciously worn shirts or other cloathing infected with the virus, or touched it with their mouth. No wonder then, if some having not the least suspicion of their imminent danger, should fall into hydrophobia, which might rashly be considered spontaneous ; but we freely leave these doubts for further and more accurate observations.

From the *dissections* of those who die of this disease, the viscera appear wasted, dry, and as if burnt. The organs of speech and deglutition are often found inflamed, and contaminated with very loathsome mucous froth. Inflammatory obstructions are observed here and there in the intestines, which often bear the marks of sphacelus in the stomach : and the gall bladder is filled with this blackish green fluid, as also the other receptacles of this liquid. From attention to these circumstances, it is reasonable to believe, that the bile while this terrible disorder rages, is let loose in the abdomen, and that from its heat the principal symptoms arise.

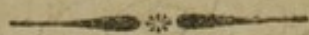
When the nature of the threatening danger, is ascertained, we must without delay commence the *prophylactic* cure. The principal duty of the physician is first to treat the wound by the method above mentioned, namely, endeavours must be used to extract the rabid virus from the wound ; and instantly by every means to prevent its ingress into the mass of blood. Besides we must advise those that are bit, forthwith to strip themselves of the cloathing likely to be infected with the salivary mucus. Which having been premised, the practice has been to immerse the wounded person *in sea or river water*, often every day for nine days, and about half a minute at a time. I know from experience that this remedy has done good in many cases, which nevertheless some novices have made light of ; concerning which it is well to remark that its efficacy depends not so much on the bath, as on the art by which they are precipitated unawares into the sea, and in this terror, which expert seamen commonly have the management of, consists the principal efficacy of this prophylactic cure, as is reasonable to believe. Hence appears the reason why the remedy should be inert with Dogs, which are altogether void of this fear.

Nor are *other prophylactics* wanting ; namely, *Palmarius's powder*, and *Ray's* ash-coloured ground *liver wort* ; to which we may add cardiacs, alexiterials and the common diaphoretics, which, as above noticed, have their own share of praise. But no remedy has hitherto been discovered more safe and efficaci-

ous than mercury itself, concerning which the above-mentioned PALMARIUS has treated; our cotemporaries have drawn it out from the darkness as it were, in which it had been for a long time immersed; and by very numerous and accurate observations have beyond all doubt proved, that mercury is the true specific for Hydrophobia as well as for lues venerea, in whatever way it be used. Internally let the turpeth mineral be exhibited in the usual doses, calomel, panacea, and cinnabar, which after an interval of some days, may be repeated five or six times; to which mercurials some very judiciously add camphor. Also as in the cure of lues venerea, frictions are repeated with Neapolitan ointment say, two or three drachms at each time, to be repeated eight or twelve times, with the usual intervals. Mercury is also successfully used to prevent madness in dogs that are bitten: For instance, let eight or ten grains of turpeth mineral be given every day for about six days, afterwards let this remedy be continued at first every other day, then every fourth day, in such a way that the entire cure may take up from twenty to thirty days. Thus the madness is safely prevented, which, even if it had already come on, ought to be attacked with the same remedy, provided the same dose be doubled, and repeated four or six times, whence for the most part proceeds a harmless ptyalism. A mercurial treatment is not less suitable in men already affected with madness; the dose of which must also be double; but to confess the truth, the event is doubtful.

Lastly, there are mentioned other remedies against the attack of this most ferocious disease; namely, blood-letting *ad deliquium animi*, baths as often as may be, at the same time pouring water on the head and face; and there is no room to doubt that by this remedy alone some have escaped. In the mean time let acidulous and cooling drink be given with a liberal hand, even though the patients refuse it. Clysters of the same nature are injected: nor ought we to omit internal anodynes prepared of nitre and camphor. Emetics are sometimes given with advantage, among which there is none better than turpeth mineral. Antispasmodics may do some good: the succinated spirit of sal ammoniac, commonly called eau de luce, is also used with advantage; and other volatile alkalies, which perhaps possess no less virtue against the rabid virus, than against the poison of the viper; since it is allowable to conjecture, that there is some affinity between both miasmata. It is said that musk has also been happily administered, concerning which see the MEDICAL DIARY for the year 1761, page 199. These are the remedies most celebrated and approved by experience, which we ought espe-

cially to know, since in this disease, as in others, it is proper, as circumstances vary, to try different ones.



CONTUSION AND WOUND.

CONTUSIONS or bruises, occasion *ecchymosis*, or effusion of blood, and *inflammation*. They are the more dangerous, *ceteris paribus*, the more the part is endowed with sensibility: it is plain therefore how alarming must be a bruise of the eyes, breasts, testes, ends of the fingers, &c. It is known also that strokes on the head, breast, and abdomen are *dangerous*, if they exert their action on the subjacent viscera. Contusions mostly end by resolution; sometimes suppuration is excited, and not rarely gangrene threatens; not to mention luxations and fractures arising from the same cause, concerning which elsewhere. A suspicion is excited of depression and fracture of the cranium, or concussion of the brain, from a weighty contusion of the head; these misfortunes are indicated by hæmorrhages of the nose or ears, nausea, fever, drowsiness, and delirium, &c. The lungs are injured, the ribs broken and removed from their seat by a heavy contusion of the breast: hence cough, spitting of blood, difficulty of breathing, &c. Nor are contusions of the abdomen thought less alarming, when affecting the viscera, which often happens although the skin be in no wise discoloured with redness or blueness: hence the functions of the vital organs are injured, and inflammation of the intestines takes place, which is known by fever, pain and resistance of the abdomen, or a stagnation of the blood follows from the ruptured vessels, which brings on putridity and gangrene. These things we learn from dissection.

From *wounds* inflicted by a blunt or sharp body, there follows a greater or less flow of blood, which when stopped by art or nature is succeeded by a crust, serving the purpose of a barrier, from the falling off of which there takes place a dropping or oozing of bloody or sanious serum. The lips of severe wounds swell and become inflamed, and suppurate on the third or fourth day. *Gunshot wounds* afford a sparing flow of blood, because of a certain eschar by which the wounded vessel is closed. But after some days this falling off, threatens hæmorrhage: pus is with difficulty formed in gunshot wounds, which therefore are dug into very troublesome ulcers. Very large wounds as well as great bruises are usually attended with pain, inflammation,

and fever. Every one must see what is to be dreaded from the complication of these accidents, nor can we be ignorant what terror is excited by gangrene arising from this two-fold cause, which is usually considered a token of death. Not to mention poisoned wounds, mostly fatal, which among us are very rare.

But nothing can be fixed concerning the event, unless we first attend to the use and structure of the injured part; as also the form of the cutting, piercing, or bruising instrument. *An artery cut transversely* occasions hæmorrhage scarcely to be restrained; when slightly wounded it threatens Aneurism. From *the division of nerves* proceed stupor, palsy, and atrophy of the part connected with them; but when they are slightly wounded and punctured, very grievous symptoms follow, namely, most acute pains extending widely, inflammatory obstruction, very hot and not disposed to suppuration; vivid fever, delirium, convulsions, &c. *Wounds of the joints* are wet with the luxuriant synovia which hinders the uniting of their edges, and run into sordid and putrid ulcers. We have above spoken of puncture of a tendon, by bleeding. What is to be dreaded from wounds reaching the interior of the head, breast, or abdomen. must be obvious to all. Yet in this case we must not *prognosticate*, without first carefully examining them with a suitable probe, and moreover, accurately attending to the pristine situation of the wounded person, that is, when he suffered the misfortune, by which marks we are enabled to form a prognosis of the part injured, from its functions.

Wounds of the head, as well as contusions from a stroke, or fall from a height, may depress or fracture the bones of the cranium; whence very dangerous concussions of the brain, to be treated of below. A fatal event is presaged from hæmorrhage of the nose and ears, drowsiness, and other symptoms already mentioned. As it respects the breast; if the *heart* be wounded, we may send for the mourners. There is less danger from a wound of the lungs, whence proceed cough, bloody spittle, and difficulty of breathing, which nevertheless, are symptoms exciting no small terror; the parts surrounding the wound are seized with *emphysema*, from which the air proceeds together with frothy blood; whence the nature of the disease plainly appears. *Wounds of the diaphragm* excite oppressive symptoms, viz. very vehement pains and suffocations, acute fever and delirium, hic-cough, faintings, convulsions, risus sardonicus, &c. Wounds of the *stomach and small intestines* are to be considered of a dangerous nature; as to other wounded *abdominal viscera*, they portend greater or less danger in proportion to their functions.

We may think of the funeral rites, if blood rush in a full stream from a deep wound ; since there is no doubt of the immedicable wound of a great vessel.

Very great Contusions and extensive Wounds require frequent *blood-letting*, and there is no better remedy. After depleting the vessels, we must attend to the organs of digestion, lest the depraved humours lodging there should in time exasperate the disease. *Repercutients* have an excellent effect against Contusions, these are, eggs, vinegar, red roses, dragon's blood, and others of that kind, which if timely applied, usually avert a threatening defluxion of humours, or inflammation ; lest they ought to be considered inert and hurtful, if the part injured have already swelled ; we must then have recourse to resolvents and roborants : of this kind are red and generous wine, simple and camphorated spirit of wine. Hungary and vulnerary waters, water impregnated with iron, turpentine, balsam of Peru, Fioraventi, and commendatoris. Sea salt put in a bag which has first been immersed in warm urine or water ; parsly bruised with vulnerary water, theriac, cataplasms of briony root, greater comfrey, &c. But I know of nothing better against general Contusions, both from strokes and falls from a height ; than sheep skin while of the natural warmth, in which the sick are to be wrapped ; this is to be often repeated as occasion requires. Lastly, a poultice of bread and milk, which is also useful, when the tumour verges to suppuration, has an excellent effect. Moreover, let the common maturants be applied, until the pus formed make itself an outlet, or be discharged by the lancet. Cutting also is necessary in stagnation of blood, by which this fluid is evacuated, lest it occasion injury to the adjoining and neighbouring parts. But a hæmorrhage often breaking out from this wound, may be restrained by the usual remedies. Of *luxations* and *fractures* of the bones, arising from contusions, we shall treat separately in order.

Internal remedies contribute their share in the cure of serious Contusions, namely, vulneraries and resolvents, which nevertheless have rashly been considered by some recent practioners as inert and trifling, it is wonderful indeed that remedies celebrated by the encomiums of skilful physicians, and approved by long practice, should possess no virtues, as they imagine, but we leave this dispute to be settled by those who have more leisure, since it is only incumbent on us to exhibit those most in use for this purpose, and most approved by the experienced : Which are infusions of vulnerary herbs, hysop, ground-ivy, &c. the juice of the carduus benedictus, chervil, parsley, &c. turpentine, and the natural balsams, spermaceti, prepared stag's blood, amber

as elaborated in the shops, volatile salt of hartshorn, and others of that kind; diaphoretic antimony, balsam of *Lucatellus*, Theriac, &c. which generally promote diaphoresis, in this case very salutary. Absorbents are also recommended by some, namely, prepared hartshorn, coral, crabs' claws, &c. which also may be of some service.

The healing of Wounds is performed by the powers of the animal æconomy alone, which notwithstanding it is proper sometimes to assist, by bringing together the distant edges of the wound, or by taking away whatever hinders their coalition. Wherefore that the cure of a simple wound may be promoted, without loss of substance, and may be more easily perfected, it is necessary that the divided vessels be well emptied of their blood, and having carefully taken out all extraneous substances, let the lips of the wound be brought close together, and confined by a suitable bandage: The surgeon has nothing else to do for some days, unless now and then to moisten this dressing with spirit of wine, or other vulnerary: for recent Wounds require to be seldom dressed: nor ought liniments, tents, pledgits or powders to be put into them: which very hurtful practice some unskilful surgeons are even at this time found in, who do nothing else than *make wounds*. Moreover, the vulnerary plants are not forbidden, spirituous and balsamic liquors, SAMARITAN'S *balsam*, water impregnated with iron, sympathetic powder, and numberless others which may contribute their share in very large wounds. When from the cutting of the larger vessels, the blood gushes out rapidly or too fast, the sanguiferous vessel must be taken up with a ligature, if the injured part will admit; otherwise let styptics be applied, namely, the martial solution above-mentioned, burnt allum, sympathetic powder, &c. Agaric also has a wonderful effect, which by its fleecy texture may completely stop the gaping vessels, provided it be confined with a suitable bandage.

In some wounds, especially contused and torn, suppuration takes place about the fourth day, which ought to be favoured by suitable local applications: with this view *digestives* are recommended, prepared of yolk of egg, oil of St. John's wort, unguentum fuscum, &c; to which may be added occasionally detergents, and *antiputrids*; viz. honey, gum elemi, Peruvian balsam, myrrh and aloes, elixir proprietatis, and others of that kind directed in the treatment of ulcers. *Astringents* and *Exsiccants* agree with Wounds of the *joints*. When *nerves*, *tendons*, and *ligaments* are wounded, they are treated with oil of turpentine, and St. John's wort, balsam of Peru, elixir proprietatis, &c. When tendons of some thickness are deeply cut,

their extremities being approximated, ought to be joined by suture, that they may unite like bones.* As to wounds inflicted by *gunshot*, care must be taken to extract the foreign substances, and stop the hæmorrhage, which being done, let simple lint be applied, that the next day we may use digestives, emollients, &c. Although the first indication to be fulfilled in the treatment of a wound respects the promoting of a cicatrix, yet sometimes it is best to procrastinate this, namely, where the well know bad flesh is luxuriant, and the ultimate recesses of the ulcer are concealed. It is not rarely proper to sew the lips of large wounds together, that mutual contact may be induced, especially if the intestines, omentum and other viscera protrude.† Lastly, when the intestinal tube is cut transversely, it may also be subjected to *suture*, if the surgeon that is called, understands his business well: otherwise, let the lips of the superior intestine be brought to the margin of the wound, and there united, and let the bowels be evacuated of their contents, though this artificial anus.

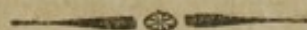
The internal cure of severe Wounds differs little from that which respects Contusions. Blood is to be drawn with a liberal hand, and the strictest diet to be observed, while attention is paid to the proper evacuation of the first passages, lest the fever rage, and other grievous symptoms be excited. Meantime diluents are of great service, as also vulneraries and diaphoretics, and other remedies of diverse kinds, which may prevent the former depraved state of the humors. Here, also the preparations of milk are applicable, where the more obstinate wounds do not yield to the above-mentioned remedies; or it is expedient to fly to the mineral waters as to a sacred anchor.

It remains that we briefly treat of that very slight and familiar Wound, which is sometimes called *intertrigo*, or *excoriation*, which very often arises from chafing, friction, or compression, from riding on horseback, &c. Slovenliness and filthiness also promote it. Excoriations often occasion very great trouble, in diseases both acute and chronic, arising from long continued lying on the same part; wherefore when eruptions, and effusion from stagnant blood threaten these, let the solution of continuity to be apprehended, be guarded against by repeated washings with warm wine. But when these marks contract a kind of livid appearance, they are successfully fomented with camphorated spirit of wine, exsiccants are also applied to excoriations, namely, powder of rotten wood, ceruss, lapis calaminaris, &c. The ointments of white tutty, Nuremburgh plaster, plaster of ceruss,

* Modern surgery has judiciously discarded the suture. T.

† At present, adhesive plasters generally supercede the suture in this case. T.

&c. are in very familiar use, but especial care must be directed to cleanness, and no pains spared to keep the injured part from all compression.



BURNS.

NO ONE is ignorant that burning is of various grades, not only in respect of the violence and kind of fire, but also of the structure of the injured part. Experience proves that burning is more to be feared in the face, eyes and neck. For the broader the part burned, and the deeper the fire has penetrated, the more dangerous the case is considered. Burning coals, red hot or melted metals, the flame of gun-powder, hot water, boiling oil, &c. occasion extreme injury, but a stroke of lightning is considered far more violent. Besides the very severe pain which common burning inflicts, blisters break out, and various symptoms arise, according to the different circumstances, as already hinted, connected with the use of the part, and nature of the burning body, the longer or shorter time of application. It is known that an ulcer proceeding from it becomes very troublesome, especially if kept up by a depraved state of the humours, to wit, cachectic, scorbutic, syphilitic, &c. I should transgress the bounds were I to annex all the varieties of Burns, and their numberless modes: wherefore, I thought it would be more suitable and clearer to collect them all into a three-fold class.

Burning therefore is *slight* (levis) *moderate* (media) or *grievous* (gravis) according to the degree. The *first* does not exert its action beyond the skin; or affects only its surface; it is attended sometimes with little, sometimes with severe pain, some vesicular pustules break out from the part, which is red and as if stung with nettles, and the epidermis mostly falls off. The *second* reaches the cellular texture and beyond it, which excites more severe pain, and greater inflammation; in this species the parched skin becomes dry and hard, and pus is afterwards formed. The *third* species of burning penetrates deepest, even to the bones themselves; in which the skin becomes livid and blackish, is altogether deprived of sense, or forms an eschar, from the falling off of which proceeds a deep and putrid ulcer. Meanwhile a fever rises, and very alarming symptoms take place, especially if the nerves, tendons and ligaments be injured. A stroke of lightning, as above hinted is more violent and severe, which brings on gangrene of the parts affected; and the

persons struck by it are seized with fainting, or altogether suffocated and hurried away with sudden death.

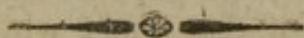
Repercutients seem suited to every species of burning, as also demulcents, resolvents and digestives; but these must be selected according to the degree and time; if we except warm wine, and spirit of wine, both simple and camphorated, which may be indiscriminately used with advantage; but it is necessary to exhibit these separately as required. Wherefore in the *first* or *slight* species of burning, let the part injured be immediately plunged in cold water, which as it were, hinders the defluxion of humours; the same effect is obtained from mud, white of egg, vinegar, ink, &c. There is no doubt that these cold repercutients succeed very well. But it is truly wonderful that remedies which have contrary virtues, are no less efficacious; for the injured part is exposed to *fire as vehement* as the sick can bear; or it is successfully immersed in very *hot* water. Camphorated spirit of wine, or Hungary water, cataplasms of bruised onions, to which some add salt and soap, &c. are applied with advantage; and these remedies are approved by multiplied experience, although they seem to clash. Nevertheless, both are omitted by some, who are better pleased with *demulcents*, namely, ointment of white tutty, nutritive, and poplar ointment, GALEN's cerate, and numberless others of that kind; which are also suited for subduing the fiery particles.

Respecting Burns of the *middle* or *second order*, repercutients and resolvents do little or no good, and are therefore discarded by the more experienced and judicious; but *emollients*, demulcents, and *digestives* are more esteemed, among which are the most common emulsion, poultice of bread and milk, or other emollient, oil of roses, lillies or eggs, nutritive or Basilicon ointment, Galen's cerate, &c. to which opium is added, if the pains be severe; nor are venesections to be omitted, against this species of burning, as well as the last, repeated more or less, according to the fever or degree of inflammation. Internal diluents and demulcents also contribute their share; and the other common remedies which are thought of a suitable nature to allay the heat of the blood and spirits.

In the *last species* of burning, the above-mentioned topicals are also used, to wit, emollients, digestives and anodynes; to which sometimes may be advantageously joined, storax, camphorated spirit of wine, and other *antiputrids* of that kind. Moreover, the mortified part is usually treated with scarifications; but the ulcer arising from the falling off of the scar, requires the usual and common method. Yet when the burning reaches to the bones, and sphacelus is widely propagated, there is

almost no hope of recovery, unless the surgeon immediately set about the amputation of the part; otherwise the wide-spreading gangrene, in a short time attacks the viscera, and hurries the patients to the grave.

Burning of the eyes requires a peculiar remedy, for besides repeated venesections, the topical demulcents are of very great use, namely, women's milk, warm pidgeon's blood, waters of *Sperniola*, roses, and plantain, mucilages of flaxseed and branching plantain, the pulps of boiled apples, &c. all which are equally useful in other burns of the face: but if this injury of the face proceed from the conflagration of gun-powder, we must take care to extract every grain, by means of a needle, otherwise if this caution be neglected, there remain indelible spots, unless by applying blisters, the wound be renewed, and this extraction completed. Lastly, *the stroke of lightning* is treated with the most exquisite anti-putrid topicals; faintings are obviated by the strongest cordials, and the prostrated strength thereby restored: after which the sick very often complain of pain of the intestines, which may be quieted by lemonade and the other refrigerants and demulcents above mentioned.



GANGRENE.

THIS *disposition to mortification of the solids* in which the natural heat is almost exhausted, is well known to all, the marks of which are usually taken from the brown, blackish livid, or black colour of the part. Sphacelus, or mortification, is that state of the part affected, from which there is no return to its pristine situation, so that it is altogether deprived of heat and sensation, and mostly emits a very offensive smell, which misfortune threatens, if gangrene be attended with considerable pain and heat. Gangrene is either *dry* or *humid*; in the first which is much the more dangerous, the part without odour becomes parched and contracts the hardness of horn. The humid, being less dangerous is distinguished by the discharge of humours; by blisters turgid with yellow serum, and fætid. Nevertheless, sometimes Gangrene occurs participating of the nature of both, or putting on either by turns: and that affecting one leg is often observed to be dry, while that of the other is moist. Hence it is rightly inferred that these species differ very little in respect to their nature. Gangrene sometimes arises from an internal cause, or from some infection of the blood and humours; sometimes its

cause is external. Deficient vital heat in advanced age, atrophy, palsy, &c. produce the first; some poisons also promote it, among which is to be numbered *that most deadly grain called luxuriant rye*, namely, that which is *degenerated* and *black*, and acquires an unusual thickness. Lastly, the scurvy, lues venerea, pestilential and malignant fevers, small-pox, inflammation, erysipelas, œdema, &c. The *external cause* of Gangrene is also various, viz. The bite and puncture of poisonous animals, wounds, contusions, burns, cold of winter, bandages tightly drawn, long continued pressure, luxations, fractures, &c.

The part seized with Gangrene contracts a livid or black appearance, is sometimes, as already hinted, rigid, sometimes without any rough prominences; again, it is of a soft consistence, and *phlyctenæ*, or blisters break out on it. Meanwhile the sick complain of pain and heat in the part affected, which is followed by loss of sense, or entire mortification, in which the skin deprived of its heat and life spontaneously separates and falls from the subjacent parts, whence proceeds a sanious, sordid and fetid ulcer. Gangrene arising from *cold*, to which the extremities are liable, namely, the hands, feet, nose, lobes of the ears, &c. increases prodigiously in a short time; the affected part becomes alternately pale and red, with very great itching, or very acute pain; it then puts on a violet or black colour, in which grade there is danger of the mortified part falling off. This species of gangrene sometimes reaches and separates the ligaments of the joints, whence it happens not unfrequently that the foot and leg itself, a horrid spectacle indeed, fall off by their own weight as if chopped off. Nor does *extreme cold* spare even other parts, but rather at times suddenly invades the whole body, which in consequence becomes rigid; so that some have been found, if histories may be credited, who died in this way, preserving their former situation, namely, soldiers armed, and as it were fighting, and still holding their horses by the reins, &c.

Gangrene proceeding from *depraved diathesis of the humours* portends the greatest danger, as it rarely spares the internal parts, in which state even the amputation of a member profits nothing, since even after this is taken off, the Gangrene usually attacks another place. Vehement fevers, and most acute pains generally precede this. Its first ravages are in the toes, then creeping higher, it is propagated to other parts, the pulse at that time is found obscure and intermittent, anxieties, heartburns, and faintings come on. Gangrene affecting the mouth and genitals excite the greatest terror: it is thought fatal in the legs of hypochondriacs; lastly, that which affects the muscles, ligaments, periosteum, and bones themselves is considered mortal. It is

not to be omitted that it sometimes exerts its first severity on the bones, while the internal parts are untouched, an example of which phenomenon is afforded by lues venerea, spina ventosa, &c.

We must labour as speedily as possible, to confine incipient Gangrene within its own limits, for which purpose various topicals are usually prescribed; namely, Jack-by-the-hedge, and water-germander, decoction of southernwood in salt-water, camphorated spirit of wine, either simple or mixed with lime-water, tincture of myrrh, and aloes, to which we may add spirit of sal ammoniac, storax, Egyptian ointment, theriac, &c. all which, without contradiction, are considered excellent antiputrids. Moreover, care must be taken to separate the mortified part, which is very much promoted by scarifications; these also favour the formation of pus which is very desirable. But Gangrene contracted from *horrid frost* demands another method of cure: namely, the part must be covered with snow, or clothes dipped in the coldest water, must be wrapped about them, and let them be immersed in it, otherwise let them be gently rubbed with these materials, then let the parts affected be well rubbed with hot cloths, that they may gradually become warm, which afterwards may be fomented with warm water, or immersed in it. Lastly, fomentations prepared of some aromatic wine, to which we may add camphorated spirits of wine.

Nor must we omit internal medicines in any species of gangrene, which being various and even contrary must be prescribed as necessity requires. For in many cases, cardiacs and sudorifics are exhibited with advantage, namely, China root, and sarsaparilla, volatile salts, liliu of *Paracelsus*, elixir proprietatis, theriac, and others of the like sort; which nevertheless ought to be banished, if fever encrease and the pain of the intestines be severe, under which circumstances, lemonade and other refrigerant acids are of service. But of all internal antiputrids, *Peruvian bark* is certainly the best, especially if Gangrene be derived from an internal cause: this remedy is exhibited in the dose of half a drachm every fourth hour, which is often injected in an appropriate dose, in the form of glyster, as in the cure of intermittent fever. Nor is this *antiputrid* forbidden in small-pox itself, when gangrenous eruptions appear, unless a high fever, and some disease of the breast forbid. We will add no more, since on this subject, the illustrious QUESNAI, a highly esteemed physician and surgeon, has written a very accurate history, well known to all.

1812

THE

REPORT

OF THE

COMMISSIONERS OF THE

LAND OFFICE

FOR THE YEAR 1812

IN ANSWER TO A RESOLUTION OF THE HOUSE OF COMMONS, PASSED IN MAY 1811

BY

JOHN GUTHRIE, ESQ.

OF THE HOUSE OF COMMONS

PRINTED BY

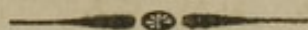
JOHN GUTHRIE, ESQ.

OF THE HOUSE OF COMMONS

IN THE YEAR 1812

SECTION THE SECOND.

OF EXTERNAL DISEASES OF THE HEAD.



CEPHALALGIA. HEADACH.

FROM the evidence of dissection, it is plain, that pains of the head may be traced to so many causes, that it is little wonder if their character be various; for besides their different *grades* and *seats*, they are considered according to the complaints of the sick, as pungent, shooting, pulsating, pounding, pressing, heavy, boring, burning, cold, &c. For as much as these are with difficulty distinguished in practice, for instance, whether the pain be *internal*, namely, in the brain or its coverings, or *external*, to wit, in the pericranium and teguments, frontal and sphænoeidal sinuses; we have thought that it would not be unsuitable to treat of both in this place. Among these distinctions the *idiopathic* pain of the head is to be discovered, the cause of which for instance remains there, originating from a *sympathic* affection of the stomach, or some other viscus; or from a *symptomatic* origin, namely, fever, hypochondriacal or hysterical affections, lues venerea, scurvy, gout, &c. For no one can be ignorant of how much moment all these are to be extricated, immersed as they often are in thick darkness. Moreover, this pain, when affecting the whole head is called Cephalalgia; when but half of the head is diseased, it is called *Hemicrania*; but when the pain is confined to a very narrow space, it is known by the name of *Clavus Hystericus*, although it very often happens to be thus limited without any suspicion of hysteria, which practitioners very well know. Concerning *gravedo*, or a dull pain in the Forehead, which is a principal symptom of Coryza, and some other affections, we have already treated. To this general view we may add that pains in the head are multifarious, sometimes *continued*, but with some remissions; again *intermittent*, which recur at stated times, or irregularly.

Suppressed evacuations, repelled eruptions, imprudent exercise of mind and body, violent passions of the mind, contusions of the head by a stroke or fall from a height, insolation, drunkenness, immoderate venery, the vapor of charcoal, of vaults, &c. are so many causes usually inducing pain of the head. Some-

times very violent symptoms accompany Cephalalgia, namely, high fever, comatous fits, faintings, delirium, convulsions, &c. *Hemicrania* usually turns the stomach, but sometimes, although seldom, brings on worse symptoms. Pain of the head sometimes announces the eruption of the catamenia or other hæmorrhage, and is also reckoned among the forerunners of intermittent and malignant fevers, apoplexy, epilepsy, deafness and blindness. Sometimes a flow of blood, from the nose, ears, and mouth removes obstinate Head-aches. Many have also experienced this happy effect from a multitude of worms issuing from the nostrils. There is no cure except a palliative one, from Cephalalgia arising from any organic viscera; but the symptomatic, after the primary disease is removed, ceases for the most part spontaneously. The periodical, although often very obstinate, portends for the most part nothing bad. Lastly, experience teaches that pain of the head is more difficult to be subdued in old age, and in the weaker sex.

The dissected bodies exhibit a very close connection of the bones of the cranium, or an obliteration of the sutures; stupendous thickness, depression or fracture, exostosis and caries of the whole skull; the bones, or their fragments removed from their seat, &c. The vessels running over the meninges and cerebrum, are sometimes swelled with blood, sometimes distended with flatus; the plexus choroides, pallid and emptied, or distended and varicous; the dura mater very thick and wrinkled, or adhering very tightly to the cranium. The involucra of the brain grown together, and the pia mater appears sometimes as if tumid with flatus. The cerebellum defended by a bony partition, is not seldom hid in its cavity: the greater trunks of the arteries also contract the same hardness, and the falx, and other processes of the dura mater, or little bones are found here and there growing to these membranes. The cerebrum is found depressed, or sunk in, obstructed with serous colluvies, or thick, dry, and almost brittle: there occur inflammations and most fetid suppurations, both in the substance of the brain, and in its involucra; pus also is collected in the frontal and sphænodial sinuses. Hydatids are found here and there, tumours, tubercles, or stony concretions. There appear stagnations of serum, sometimes limpid, sometimes gelatinous; of blood and pus, both in the ventricles, windings, and recesses of the brain, and about the meninges. Various examples of worms are found nestling, of various forms, not only in the little bony cavities, but also in all parts of the cerebrum. There are discovered gangrene and putridity in all parts of the brain, cerebellum, and their capsules; which are not rarely altogether consumed. Lastly, anatomists

have recorded instances of mercury stagnating in the ventricles and in other inferior recesses of the brain, to the amount of many ounces; not only in those who had before been under a mercurial treatment, but who had worked in various factories in which this mineral is used.

From the above it is collected, that the cure of pain in the head is often difficult, from the various causes mostly incurable, from which they originate, which being sometimes immersed in very great obscurity, are withdrawn from the search of the most skilful physicians, unless they follow them with mere conjecture, and do not clearly appear until after death, or the dissection of the bodies. In these difficulties we will adhere to the general method alone, to be directed towards a different end, according to opportunity and circumstances. Among the best medicines therefore, *blood-letting* from the arm, foot, or neck, takes the lead; this ought without delay to be practised, if the pain originate from insolation, (a stroke of the sun,) a fall from a height, or any contusion or other misfortune. Arteriotomy is useful here, which is not undeservedly recommended against the most obstinate Cephalalgia: nor do leeches deserve less praise applied both to the anus, forehead, and behind the ears. Lastly, I have found by repeated experience, that the cutting of the jugular vein is very efficacious in febrile and violent pain of the head. Having depleted the blood vessels, we must attend to the organs of digestion, not only by the customary evacuants, but also by the other means commonly used for this purpose.

We must next endeavour to lessen the heat of the blood, and to obtain the acrimony of its particles. Diluents, demulcents, and temperants answer both purposes; namely, draughts of water, chicken or veal broth, whey and emulsions, &c. Pure water largely drank, or taken for aliment altogether, may remove hemicrania or other obstinate pains of the head in a short time. Sometimes aperients are exhibited with advantage against obstinate pains of the head; namely, preparations of iron, (martial) wood-lice, and others of that kind, usually given to remove obstructions. Diaphoretics also are useful in some cases, not to mention antivenereals, antiscorbutics, and other specifics indicated for primary disease. *Anodynes*, and indeed narcotics are not forbidden, namely, nitre, camphor, diascordium, syrup of karab, &c. although they afford but temporary ease. Cephalics and antispasmodics are of great use, among the best are flowers of the lime tree, balm, betony, valerian, and piony, amber, castor, pulvis de gutteta, volatile salts, cinnabar, &c. In some cases even a draught of tea or coffee is beneficial. Lastly, Peruvian bark is much esteemed against periodical pains of the head:

but if all these fail, physicians usually betake themselves to preparations of milk, or mineral waters, both acidulated and martial.

External remedies must be called in to our aid, which not rarely give present relief. Among the best are vesicatories applied to the head, back, and legs; nor ought we to omit sinapisms to the same parts; but better than these are the seton drawn through the skin of the occiput, and the cautery to the neck, back or legs; by which not only very obstinate pains of the head are quieted, but are often also entirely removed. Sometimes Cephalalgia has had this termination from an accidental burn, as is well known. Hence appear the virtues of the *Chinese moxa*, which when conflagrated, serves the purpose of the actual cautery. Moreover baths and pediluvia give some ease, frictions kept up on the legs, pouring water on the head from a height, and cold fomentations themselves to the part, if insolation be the cause. Besides sternutatories are of use in some cases, the vapor of camphor dissolved in cephalic spirit, and the steam of karab (*amber.*) In some cases the application of vervain, greater house-leek, a bag filled with salt and crumb of bread, cotton soaked in vitriolic æther, &c.* We say nothing concerning the operation of trepanning, which to be sure would be useful in some cases, since the above related injuries of the head are mostly involved in dark obscurity, in which this remedy might be very beneficial.

INSOLATION.

BY THIS name is designated that very grievous affection of the head, which is contracted by the intense heat of the Solar rays: (*Coup de Soleil,*) which cause although very evident, does not rarely escape physicians, who think it a trouble to interrogate the sick in hospitals. Those who are affected with Insolation complain of a very severe, pulsating, or heavy pain of the head, often accompanied with violent fever, and insatiable thirst, and even think they can perceive the brain within to be shaken

* In addition to this long list, I will mention an external remedy which I have frequently directed with advantage, namely,

Oil of Horse mint, (Menth. Sylvestr.) one ounce.

Camphorated Spirit of Wine, three ounces.

Thebaic Tincture, half an ounce, mixed.

Let the head be bathed with this occasionally. T.

violently and torn. Their dry and flaming eyes seem to flash fire, are very painful, and cannot bear the light, and are sometimes quite closed by the swelled and inflamed eye-lids. In some the head jumps involuntarily: many fall into comatous affections, and start up greatly terrified. Others spend sleepless nights, and are tormented with perpetual wakefulness; this is followed by delirium, with fever, rage and terror; at other times being free from fever, and forgetful of every thing, they talk at random. Lastly, convulsive affections, or tremors of the joints seize some. Meanwhile the skin of the cranium and face is found as if parched and dry by the intense heat of the sun. Tumours not unfrequently arise about the ears and in the neck. Moreover the strength is prostrated, especially after sweats break out: the urine is discharged of a flame colour, or highly red; anxieties come on, loathing of food takes place, or vomiting: lastly some, as in hydrophobia, refuse drink.

Nevertheless it is well known that all these respect the extreme grade of Insolation: for from the milder grade arise coryza, continued dull pain of the head, or pain void of danger, angina, and other catarrhal fluxions treated of elsewhere. But the disease now under consideration is a terrible and *fatal* one; for when it attacks, it sometimes kills instantly, especially drunkards, who are exposed while asleep, to the ardent sun with their naked heads, and such an attack differs little or none from the strongest apoplexy: in others the disease is protracted for many days, say ten, or longer. From Insolation carried to the extreme degree, there remain pains of the head, very tedious and difficult of cure: the vision in some is disturbed, or altogether lost: lastly, some who recover, continue insane all their lives. Travellers, peasants, house-carpenters, and other workmen who do business in the open air during the dog-days, and are thus subjected for a long time to the beating of the solar rays incur the danger of Insolation. The same misfortune threatens those who are seized with sleep near a very hot fire: an example of which phenomenon is adduced by the illustrious TISSOT, a man well skilled in medical science.

In examining the head of those that die of Insolation, we discover inflammations both of the coverings of the brain and of the substance of this viscus. The vessels supplying one of the meninges, filled with black and torrid blood, and sometimes torn; so that the purple fluid is poured out which at the time of making the orbicular section of the cranium with the saw, flows out in greater abundance. Having torn off the covering of the brain, we discover inflamed tumours, exulcerations and suppurations, having different seats: the pus sometimes is en-

closed in a proper follicle, at other times being effused without its receptacle, contaminates the neighbouring parts, and occasions the greatest harm. There are found very offensive putrid collections and mortifications, more frequent about the surface of the brain. The ventricles are filled with bloody serum or with blood itself, and at times contain a feculent matter. Lastly, we meet with bones in the basis of the cranium, affected with caries from the corroding matter, which had thus found an exit through the nose or ears, as is often observed in practice.

Our business is, to assuage the heat of the blood, and this is the principal point of cure, which is also performed with the more simple remedies. Venesections indeed, and refrigerants taken inwardly ought to fill every void. Therefore, let a vein be immediately opened, and let this evacuation be often repeated according to the violence of the symptoms, by which means the sensorium commune is relieved, and the more urgent symptoms moderated. Having well emptied the vessels it is necessary to have immediate recourse to pediluvia, semicupia, and baths of water scarcely warm. Emollient and cooling clysters also contribute their share. Meanwhile let the sick drink plentifully of water impregnated with vinegar or lemon juice; whey, emulsions, &c. Decoction of tamarinds is serviceable in some cases, especially when there is any suspicion of remains of depraved digestion. Moreover, fomentations of cold water with which a very little vinegar is mixed, are advantageously applied to the head, forehead and temples, the juices of parsley, lettuce, and vervain are used in the same manner, and really deserve praise. Lastly, cold baths have been very beneficial to many who had even been given up; and perhaps in a very urgent case, this remedy has not its equal, which notwithstanding ought never to be used, until the vessels are well depleted.

CONCUSSION OF THE BRAIN.

BY A FALL from a height, and other severe strokes on the head, *the mass of the brain* is shaken and *almost inverted* within its bony case; hence the disease which is called *commotion* or *Concussion*, very much to be dreaded on account of the alarming symptoms it brings on. The bones of the cranium are very often broken, sometimes under the bruised part itself, sometimes in the opposite part, or elsewhere, or depressed only, if they preserve a certain flexibility, as in youth and in a peculiar

disposition of the body. At other times neither fracture nor depression is discovered, which, *cæteris paribus*, is justly considered more dangerous.

Concussion of the brain discovers itself *by various signs*, namely, vomiting, bleeding at the nose, mouth, and ears; inflammation of the eyes, or dimness of sight, tinnitus aurium, or ringing of the ears, loss of voice, fainting, lethargic drowsiness or apoplexy, palsy or torpor of parts, incontinence of urine, or involuntary looseness of the bowels, fever and delirium, convulsions, &c. But these signs or symptoms do not shew themselves immediately, and often do not come on until the fourth or seventh day of the disease, or later; from a view of which, it is justly conjectured that blood from the ruptured vessels in various parts of the brain, has stagnated; that this viscus is seized with inflammation, or tainted with purulency, and putrefaction; and lastly, that its coverings are torn with the fragments of bone. It is said that a pain arising from the strong adduction of the lower jaw, denotes a *fracture* of the cranium. But this experiment, as I have often observed, does not discover the misfortune, if the fracture be far from the origin of the temporal muscles, which is then only known by laying bare the bone, and the usual examinations with the probe. It is necessary to remark, concerning this examination, that the *Wormian* sutures occurring here and there, have sometimes been mistaken by the incautious for fracture, and HIPPOCRATES confesses that he was not free from this error. Respecting *depression* of the cranium, it is easily known by the touch and sight. Ecchymosis, inflammation or wound itself, proves nothing certain concerning Concussion and fracture, since it very often happens, that the cranium is defended by its sutures from fracture, even with the greatest tearing of the integuments; or that the bones may be fractured while the skin is secure. Fracture of the cranium and Concussion of the Brain usually bring on suppuration, sooner or later; concerning which it is necessary to remark that pus is sometimes formed on the third day after a fall from a height, which circumstances, perhaps unheard of, I remember to have observed not rarely in examining bodies.

Anatomical examination exhibits the diversified destruction, which had often been concealed, namely, multiform fractures and depressions of bones, their connections separated, and lastly the stagnation of a certain gelatinous matter, lurking under the contused skin. A fracture, as already observed, does not always occur in the injured parts, but often in the opposite, or some other. Nor are the bones free that are situated in the base of the skull, namely, the sphenoid, petrosum, &c. The internal

table of the bones is sometimes observed to be fractured, while the external is sound, and vice versa. The blood vessels are found usually full, and the plexus choroides filled with reddish corpuscles. The dura mater is found of a blackish red, and torn, with a furrow impressed in the cerebrum. This viscus appears covered with a gelatinous lymph, now soft and like pap, now firmer, as though it had been boiled. Stagnation of blood frequently occurs, not only within the cranium and meninges, but also in the ventricles and other recesses of the brain, which also contain a serous colluvies, for the most part somewhat bloody, like the washings of flesh. Moreover, there are here and there inflammations, gangrenes, and putridities, both in the brain itself, and in its coverings, lastly, the bones are often affected with *caries*. It is wonderful indeed that these injuries have been observed so frequently, although the entire skin shew no mark of disease. It is well to add by way of conclusion, that abscesses have sometimes been found in the liver; which it is reasonable to suppose have arisen from metastasis.

From the foregoing it is gathered that *contusions of the head* portend *great danger*. The signs enumerated usually shew themselves within the space of forty days; or the alarming symptoms come on which denote the violence of the disease, and rarely are later. The reason cannot escape any physician, why contusion of the head with depression of the bones, and fracture, should be less *ominous* than if the bones, *ceteris paribus*, be found unhurt. It is not to be omitted that the brain often suffers Concussion from the stroke of a *soft body*, namely, of a woollen cushion, a bundle of straw, and other things of that kind falling from a height, and indeed mention is made of Concussion of the brain by a blow with the fist, by the shaking of the body alone, &c.

Let blood be drawn largely from the arm, foot or neck; afterwards attention must be paid to the evacuation of the first passages, if other circumstances permit; and let the belly be kept open. Meanwhile diaphoretics and vulneraries ought to be prescribed, among which the juice of chervil and pimpinell in white wine, are highly recommended. Nor are external remedies to be omitted, among which is parsly bruised and applied to the injured part. Let the head be fomented with decoction of sage, horehound, lavender, and red roses in white wine: of which herbs, as well as other aromatics and cephalics, are prepared little bags, or cataplasms to be put to the head. But vesicatories are successfully applied when there is urgent comatous affection; the seton, cautery, and other helps usually prescribed against apoplexy and palsy, contribute their share.

When the cranium is laid bare, and found to be entire, its exfoliation ought to be promoted, namely, by slightly perforating the bone with a little trephine suited to this purpose, in many places. But if a fracture occur, it is necessary to uncover the dura mater, by taking away a certain portion of the skull with the trephine, furnished with a circular saw, in order to give outlet to the blood stagnating there; and let the fragments or points of bones be carefully taken out, which by wounding the dura mater may bring on inflammation and suppuration, or excite very alarming symptoms. After having restored the bone to its natural strength, care must be taken to bring the periosteum, completely over it, the new formation of which is said to be promoted by a solution of mastick in spirit of wine. Lastly, by common consent it is allowed that wounds of the head are rarely to be laid bare unless uncommonly abundant purulent, or sanious matter should force it. Not only the contact of air is to be dreaded, but also moist and oily applications are considered hurtful. We add no more on a subject merely surgical, lest we should interfere with the province of another.

PAROTIS.

AN obstruction of the gland bearing the same name, or a tumour which obtains a different character, is designated by this appellation. Whence arises a two-fold kind of Parotids. The first are reckoned among the symptoms of acute fever, and especially of the pestilential and malignant: the second respects chronic diseases, namely, scrophula, lues venerea, &c. To which we may add a third species, which is subject to neither cause, but is lighter and very temporary; this is a kind of spurious Parotis, vernacularly called *les oreillons*, (*mumps*,) which usually affects young persons, and not only attacks the Parotid, but also the maxillary glands.

Parotids of the first class, or arising in acute diseases, mostly appear inflamed, and tend to suppuration; these are denoted by an inflamed countenance, heavy pain of the head, and deafness. They ought to be considered critical, if remission of symptoms take place; but being often attended with a kind of burning pain, and livid, and indisposed to suppuration, they cause physicians great trouble, or bring on consequences of the disease, lamentable to the patients: but their sudden recession causes great terror. Parotids of the second order, or produced by chronic

affections, mostly partaking of œdema or schirrus, are very troublesome, and seldom yield to even the best maturants. The *third class of Parotids* being slight and altogether free of danger, arising from simple defluxion of the humours, vanish in a short time by resolution, and rarely suppurate, unless they be the consequence of metastasis or contusion of the head. Those are attended with no serious symptoms which usually invade young persons, but sometimes they in some degree hinder deglutition, and hence by many are considered as *spurious quinsey*. This species of Parotid is rarely observed in the northern parts of France, but occurs very frequently among the *Narbonenses* and *provincial Gauls*, the *lighter* kind is known by the name of *galès*, and the more *severe* is called *cournudos*.

The *cure of Parotids* differs little from that of buboes, but every one knows that suppuration of the first is with difficulty promoted. Wherefore when Parotids break out *in fevers of a bad kind*, resolution ought never to be attempted, but rather no pains must be spared to bring them to the usual size, and cause them to suppurate; which having rightly succeeded, we may have recourse to the lancet or caustic, by the help of which suppuration is gradually excited, which ought to be kept up so long as the *acini glandulosi* appear obstructed and very hard. On the contrary *topical resolvents* agree in *chronic Parotids*, which being administered without effect, it is necessary to try emollients and maturants, and even the caustic. But in this species the principal cure depends on internal remedies, indicated for lues venerea, scrophula, or other taint of the blood: but when they have the nature of cancer, they require the peculiar treatment already mentioned. As to the *third species*, or the mild, it mostly cures itself, by attending to proper regimen; nevertheless, sometimes venesection is of use; but it requires no other remedy, unless it tend to suppuration, which it is then necessary to promote by the well known *means*. And lastly, the pus formed ought to be early let out, lest it work itself a cavity and fall upon the breast; which authors of the first rank testify to have sometimes happened.

BRONCHOCELE. GOUËTRE.

THUS is denominated a *tumour* of the same colour with the skin, and *furnished with a peculiar follicle*, moveable and indolent, situated in the anterior part of the neck, and therefore adjacent to the trachea. This swelling is vernacularly called *Gouëtre*, which not unlike congenital tumours, sometimes contains fungous and indolent flesh, sometimes a matter resembling honey, suet, or pap, but rarely water; not to mention cartilaginous, bony, stony, or chalky substances, which are also included in them. It is sometimes extended to the size of a melon, reaching from the right to the left side, mostly in a regular form; but it often grows to an immense magnitude, and indeed reaching even to the navel; it attains a stupendous and prodigious size. Bronchocele is very familiar to the inhabitants of the Alps, and other mountainous countries, concerning which they care very little, and indeed in some places, if we may believe travellers, it is considered a beauty.

Bronchocele, troublesome only on account of its size and weight, is thought to be void of danger, unless seized with inflammation and verging to suppuration, or from preposterous treatment it put on the appearance of cancer. Yet by its great size, the trachea and œsophagus are sometimes compressed; and hence arises a kind of difficulty in breathing and swallowing, of which the sick sometimes complain. Moreover, scrophulous tumours are rightly to be distinguished, (being more resisting, and endued with an unequal surface, attacking the glands of the neck, or the thyroid gland itself, and eroding the subjacent cartilages) from Bronchocele which is soft and of a regular form, and brings on nothing troublesome. Nor ought we to refer to this swelling, the cystic protuberances of various size, which hang from the occiput, or the back of the neck; these differ little or none from those tunicated tumours adhering to the cranium, mostly bringing on caries of the bones, which in *barbarous Latin* they call *talpas topinarias*: concerning which it is proper to observe that there sometimes occur prominences of the head which at first sight appear like cystic tumours, nor is their character known, until by dissection the substance of the brain be presented to view, and with which it is filled. It is known that *this species of hernia* is not unfrequently observed in infants, but seldom in adults.

Respecting the cure of Bronchocele, it is the same with that of genuine lupia, namely, diaphoretics, diuretics, aperients, and

incidents, premising general remedies : but these do little good. Marine sponge is praised by some, and the little spongy substances of the wild rose, calcined : but experience contradicts this. At the commencement of the disease topical resolvents have some virtues, although when advanced they are applied to no purpose. Some attack this tumor with caustics, and not without happy success, provided they be kept within proper limits ; but this remedy ought to be omitted, if the tumour have attained a great size : not to mention a fistulous ulcer which this method of cure often brings on. Nor ought extirpation to be thought less dangerous on account of the neighbouring vessels and adjoining nerves, from a wound of which fatal symptoms may arise. From hence it is collected that it would be better, in these doubtful cases to abstain from all cure ; and almost all the sick will subscribe to this counsel.

GUTTA ROSACEA. ROSE DROP.

THIS absurd name is given to a chronic *efflorescence of the skin of the face*, rough with inflammatory, scaly, or ulcerous pustules. This defecation of the skin often becomes troublesome with heat and shooting pains, which is vernacularly called *visage couperose*. These papulæ often affect the red face in crouds, and become loathsome, and are so prominent as to make the countenance look horrid : add also that the blood sometimes exudes from the veins that are swelled beyond measure, and varicose ; and the nose, rendered horrid by various tubercles, often acquires a prodigious size.

Gutta Rosacea seldom attacks the abstemious ; but frequently invades toppers, yet it sometimes owes its rise to a depraved diathesis of the blood, namely, scorbutic, venereal, &c. This disease is with difficulty overcome, unless it be smothered as it were in the cradle ; but when it has already become rooted, especially in advanced age, it baffles all remedies. It is even attacked in vain, if it partake of any infection of the blood, unless the primary cause be first eradicated. Hence it is evident why this disease when inveterate, should refuse to yield to any weapons, and should admit only of a palliative cure, from whatever cause it originated. Besides, we cannot eradicate it without the greatest danger, since this untimely and spurious cure is in a short time followed by fever, and obstruction of some viscus, which

practitioners who have examined for themselves do testify, and which I remember to have observed.

When therefore in the incipient disease, or not formed, there appears any hope of *cure*, having premised venesections and the milder cathartics, diluents and temperants are to be prescribed, namely, succory, borage, pimpinell, sorrel, capillary herbs, and harts' tongue, emulsions, whey and milk itself, &c. After the due use of these remedies, we recur to depurants, and aperients, of this kind are fumitory, dock, asparagus, and madder, nitre, martials, cremor tartar, wood-lice, and river crabs, to which we may add, remedies taken from the viper, and antimonials; viz. cinnabar of antimony, POTTER's antihectic, &c. In administering which we must take care by the protracted use of temperants, lest the blood become too hot. With the same caution may sometimes be advantageously administered, mercurials themselves, namely, calomel, æthiops minerel, &c. In some cases absorbents are occasionally requisite, nor are mineral waters to be omitted; both cold and hot as may be necessary, which often in this affection, as well as in other chronic diseases, complete the cure.

Demulcents and refrigerant topicals do some good, namely, water of sperniola and water lillies; mucilages, whey, oil of sweet almonds, of the cold seeds and white poppies, lemon juice, cerate of spermaceti, &c. Resolvents and exsiccants also possess their own virtues, namely, elder flower water, salt and oil of tartar, saccharum saturni, *virgin's milk*, as they call it, camphor, litharge, ceruss, alum, sulphur and mercury, of which are prepared washes, liniments, pomatums, &c. which notwithstanding ought never to be used, until the blood be first cooled by the above-mentioned remedies; and its crasis restored and the obstructions removed. Moreover, baths ought to be reckoned among the more efficacious remedies, which powerfully allay the fervour of the blood. Leeches applied to the neighbouring vessels may be of some advantage; sometimes also vesicatories, setons and cauteries are serviceable, both to the occiput and legs, provided the existing cause of the disease be first extirpated. Lastly, if this affection, beyond hope, yield to the above described remedies of any kind; we must use our endeavours to prevent its return, not only by insisting on strict regimen, but also by repeating from time to time the same medicines.

It is proper to remark, before I take pen from paper, that those pustles of the face which usually proceed from depraved digestion, ought not to be referred to *Gutta Rosacea*; the character of those being known by flatulence, acid belchings, heart-

burns or dull pains of the stomach, colic pains, &c. and therefore this eruption is cured by the remedies which operate on the first passages, among which, after premising what is necessary, the vinous infusion of Peruvian Bark has been highly recommended. From the Gutta Rosacea also differ those *tubercles of the face*, forming pus very conspicuous about the apex, which are called *vari*, and among us *saphirs*, to which the youth of both sexes are liable; as well as those who enjoy a sanguineous temperament and florid habit of body; but they arise from a certain virus of the blood, mostly venereal, which being neglected, these tubercles are exasperated and spread far and wide, so that they often resemble a certain species of leprosy. When they proceed from heat of the blood, this is to be assuaged by demulcents, temperants and refrigerants: but if owing to a depraved diathesis of the blood, they ought to be removed by specific remedies.

DISEASES OF THE EYES.

VARIOUS authors have indulged in a vague and *unmeaning nomenclature*, who too much addicted to Greek, have obscured their writings, perhaps for the sake of mere ostentation. But wiser practitioners care little about this method of learning, which rather savours of superfluity and emptiness, than of genuine erudition: these last usually treat every affection of the Eyes that occurs, by attending carefully to the structure of the part, and the character of its various injuries, according to the established laws of nature; and therefore with happiest success. Out of this numerous list of diseases with which books abound, leaving out the various affections of this organ in common with the other parts, it has appeared to me more suitable to treat of those that are more common, and requiring medical aid, which being fully known, the character of the others will more plainly appear. On this account, according to custom, I have comprehended in a few words, what may be said on the subject, beginning with diseases of the eyelids; lest by dwelling on so many futile and absurd differences, my work should encrease to an immense size.

1. GROWING TOGETHER OF THE EYELIDS, ought to be considered of various kinds: *That* occurs most frequently which depends on pifferent inflammations of the eyes, or from a mucous, purulent, sanious and ichorous matter of blear eyes, exuding from the edges of the eyelids; which becomes dry during sleep, or when these parts are at rest: hence that agglutination of the eyelids, or nocturnal adhesion, familiar to sore eyed persons,

which is easily removed, and rarely requires medical aid. But the adhesion of the eyelids together, or with the cornea and adnata, occasions trouble, on account of their mutual exulceration after small-pox, severe inflammations, burns, ulcer of the tunica adnata, &c. Because the lids are so connected with the bulb of the eye itself, that they can scarcely be separated from it, although after premising general remedies, the best emollients are used, so that without dissection, the parts connected and grown together cannot be separated: which operation requires great skill and dexterity in the surgeon,

2. THE FALLING OF THE UPPER EYELID, which causes the Eye to be scarcely opened or continually shut, namely, from too great laxity of the fibres, or from loss of motion of the *attollens muscle*; arises from a cause mostly internal, and very obstinate. This affection is usually treated with topical stimulants and roborants, namely oil of cinamon and cloves, camphorated spirit of wine, Hungary water, lime water, &c. Sometimes the vapour of aromatic wine, soaking and embrocations with mineral waters, &c. have been beneficial. Some cut the skin of the eyelid, and wrinkle and fold it by art, and then sew up the lips of the wound, that by forming a cicatrix, the process may be shortened; nor is this method to be despised, when others have been tried in vain. But internal medicines are of the most use, which consist of cathartics frequently repeated, diuretics and sudorifics; among which decoctions prepared of the exotic roots and woods are the best, as also viper's broth, which perhaps excels the rest.

3. INVERSION OF THE EYELIDS, with us called *œil eraille*, in which their internal surface extends beyond the edge, and these processes can scarcely be shut, seems to depend on a two fold cause, namely, the shortening of the eyelids from a scar after a wound, burn, carbuncle, &c. or a peculiar stuffing of the tunica adnata lining the eyelids, which becoming rough and swelled, projects out like red flesh. Inversion of the eyelids from the first cause is thought altogether incurable, but that which proceeds from the other, may be overcome by suitable and timely remedies. First of all let topical exsiccants be tried, namely, tutty, blood-stone, burnt allum, white vitriol, &c. All which not succeeding, we may try cathæretics, namely, the caustic, even lapis infernalis; with which the luxuriant flesh is to be touched according to custom; but this remedy ought not to be applied without the greatest caution, lest inflammation be excited. Some take off the luxuriant flesh by means of tweezers, and not without success, provided the operation be performed with a skilful hand.

The edges of the eyelids sometimes undergo a *contrary inflexion*, namely, towards the interior parts, in which the ciliary hairs, with their extreme points, puncturing and irritating the parts beneath, create the greatest trouble. Whether this affection proceeds from too great a discharge of humours, or from a peculiar organic fault; for brevity's sake, I will not now enquire. Nor is the method of cure more plain. The astringent decoctions usually applied to the eyelids, do little good: a very tenacious plaster put on the forehead and eyelid to prevent the prolapse of the latter, is more efficacious: but these remedies seldom succeed, nor has the pulling out of the hairs a better effect, unless the bulb be eradicated together with the hair; otherwise growing out in a short time, more stiff, it pricks more severely. There are some who attempt the elevation of the eyelid with an iron stay, which can never be done without pain, intolerable to the patient; others prefer cutting the folded skin of the eyelids, with a wound reaching from the greater to the lesser canthus; in order that the lips being brought close together, the eyelid might be contracted by the scar, just as in the falling of it, as above explained, which operation has often succeeded happily when performed with a skilful hand.

4. **INDOLENT AND TUNICATED TUBERCLES**, often infest the eyelids. These tubercles arising perhaps, from the sebaceous receptacles, and breaking out near the edges of the eyelids, have various appearances, assuming respective names; for instance, that livid or blackish blue tubercle is called *morum*. That which acquires the form and size of a grain of barley, is named *Hordeatum*, with us *Orgeolet*. When it is whitish and round it is called *Grando*, *Grele*, (*Hail*,) On account of the hardness which it contracts, it is also called *Lithiasis*, (*Gravel*.) Lastly, it takes the name of *Hydatid* because of its transparency, arising from Lymph stagnating there. But *Hydatids* ought rightly to be distinguished from the blisters although transparent but slight, which often attack the eyelids, and bear the appearance of blisters arising from scalding water, which differ vastly from the former. There is little or no benefit from the common discutients or resolvents, which at first view seemed better adapted to the removal of these tubercles; but sometimes *fasting spittle* is of service when applied with friction especially if the tubercle be recent. Spirit of wine or vulneraries, balsam of Fioraventi, or commendatoris, and others of the like kind may do good. Raisins stoned, the pulp of boiled apple, and other emollients are preferred by some, by which these tubercles are sometimes caused to suppurate. By others the gum ammoniac dissolved in vinegar, emplastrum diabolitanum, of melilot,

of the Abbey DE GRACE, and numberless others approved of by the unlearned vulgar, which are in little esteem with experienced practitioners, especially if the coats of these tumours have already become callous by age.

There are some who attempt the cure with the common caustics, or with the lunar caustic itself; but these remedies are not safely used, because they may injure the neighbouring parts endowed with very exquisite sensation. There is little or nothing to be feared from simple cutting, by which an effusion of the contained humour takes place, or an extraction of the concrete substance; yet a return of them is to be dreaded: they are indeed more safely extirpated by a suitable instrument which pulls out the follicle entirely. Lastly, the ligature is applied with more safety if the base will allow: otherwise it seems more prudent to abstain from all cure, since mostly these tumours are borne without inconvenience, and moreover, by the spontaneous motions of nature are not rarely seized with inflammation, and run into suppuration, by which if the follicle be consumed, an entire cure is performed; but if any remain, the tubercle is formed again. We add nothing concerning warts, that are very common on the eye-lids, since they differ little from the others, and require a similar treatment.

5. SARCOMA, or fleshy excrescence attacking the eyes, from the tunica adnata, covering the conspicuous part of the bulb, and lining the inner part of the eyelid. This flat and depressed protuberance situated in the greater canthus of the eye, from which it usually extends to the cornea, on account of the peculiar form which it acquires, is called *unguis*, and in our dialect *onglet*. This species of excrescence is sometimes rough with varicose vessels, and has the nature of cancer, hence it is little wonder if it mostly baffle all remedies. Nevertheless the cure is to be attempted with general remedies, namely venesections, cathartics, temperants, and refrigerants. Then the topical resolvers ought to be tried, namely, warm urine, elder flower water, laurel juice, &c. which sometimes have a surprising effect if sarcosis be recent; but they are to be considered futile when the disease has acquired some growth: at this time exsiccants and cathæretics are used with advantage, such as sugar candy, powder of orris, burnt allum, verdigris, lapis divinus *Crollii*, and even the lunar caustic. But extirpation is certainly the best remedy, yet this is not to be trusted to any surgeon we meet with. No one scarcely is ignorant that this operation succeeds well in dogs subject to this disease.

6. LIPPITUDO. *Blear eyes*, in French *la chassie*, is a kind of spurious inflammation affecting the eyelids, from the margin of

which exudes a viscid and glutinous humour, by which they adhere together. This matter of the nature of pus, is supplied by little ulcers buried in the process of the tunica adnata, which lines the inner eyelid. Lippitude attends various diseases of the eyes, but is especially joined with opthalmia to which it nearly approaches, and like it, appears *dry* or *humid*. The disease at present treated of, attended with itching and pain, as if partaking of scabies or tetter, yields a scaly powder perpetually irritating the globe of the eye: and gradually occasions callosity of the margins of the eyelids. This is the *dry blear eye*; but in the *moist*, the edges of the eyelids are wet with a kind of purulent liquid, unless it concrete like glue during the quiet state of these parts. The surface of the bulb is often injured by both kinds of lippitude, and indeed a purulent humour is sometimes collected within the lachrymal sac; hence *fistula lachrymalis*; at other times from the obstruction and swelling of the tunica adnata, the eyelids are inverted. To this the lippitude of children has a tendency, and in process of time, disappears: but it is very obstinate in adult age, and altogether incurable in old age: the scrophulous rejects all cure, unless the primary disease be overcome by suitable remedies.

Both kinds of lippitude require almost the same *cure*, which differs little from that of inflammation. For in most cases venesection is of service; demulcents and temperants are given with advantage, mild cathartics are useful, and especially the mineral waters possessing these virtues: diaphoretics and diuretics also are beneficial occasionally, not to mention various specifics, which often effect an entire cure. As to topicals, emollients ought first to be applied, namely, the vapour of warm water, or decoction of althea; butter and cream, simple pomatums, and cerates; then resolvents are to be used; to wit, the water of fennel and eyebright, wine, cloves, camphor, and sulphur. In the purulent lippitude, exsiccants and detergents are beneficial; the most in use are red roses, sugar candy, tutty, and white vitriol. The lunar caustic is successfully applied to fleshy excrescences and inversions of the eyelids. Lastly, as in various other diseases of the eyes, blisters, the seton, and cautery are recommended.

7. *EPIPHORA*, *involuntary discharge of tears*, of a chronic nature, takes its rise from obstruction of the nasal sac, or of the puncta lachrymalia. A plentiful discharge of tears also promotes it, which often possess such acrimony as to injure the cheeks on which they fall. There are various degrees of this disease, which we can never trace, without first rightly knowing the structure of these organs. If the obstruction be in the infe-

rior part of the nasal sac, the lacrymal humour is collected within this receptacle, and suffers stagnation there; until by the too great turgescence of the sac, or by any pressure, it discharge from the *lacrymal points*. But where the protuberance is wanting, and no humour is pressed out by the fingers, we cannot doubt that the lachrymal points are affected, which refuse admission to the abundant tears: but if these ducts be pervious, we suspect an affection of the secretory organ. Ophthalmia, lippitude, and all external irritating causes, may bring on Epiphora. When of long continuance it is hard to cure, and often runs into genuine fistula lachrymalis to which every one knows that those who shed abundant tears are liable.

When the passages through which the tears go to the nose are obstructed and impeded, after premising generals if necessary, no pains must be spared to overcome the obstruction by a surgical operation. The fistula lachrymalis may be prevented by the unceasing pressure of the nasal sack, but the Epiphora remains, which yields to the *Anelian* method alone; nevertheless we do not meet with surgeons every where that are fully adequate to this operation. But when too great a flow of tears is the cause, we must persists in evacuating remedies, namely, diuretics, sudorifics, sialagogues, and errhines. Mineral waters are not without great use, which by penetrating all parts, emulate and excel the virtues of the former. Various topicals are proposed, namely, lapis calaminaris, vitriol and other astringents and exsiccants, which notwithstanding are in little estimation by the experienced; besides that they cannot be applied to the weeping eyes without danger. But the seton, cautery and vesicatories have succeeded happily with many. Concerning bloody tears, which ought to be reckoned among the very rare phenomena, and of the fabulous stony tears, we add nothing.

8. **FISTULA LACHRYMALIS**, also reckoned among the external diseases of the eyes, is known by a phlegmonoid tumour, yielding pus, and situated below the greater canthus of the eye. But it has a two-fold appearance; in the first species, the pus finds an outlet through the *lachrymal points*, while the skin is entire, and is called among us *Fistule borgne*, to distinguish it from the other in which the pus makes a way to the external parts through the skin, after the manner of other abscesses. But there is another kind of watery tumour having its seat in the same part; although the other sometimes follows this; since the matter of tears stagnating there, becoming more acrid, often brings on inflammation and suppuration. An inflammatory pustule occupying the same angle of the eyelid, is also rashly taken for fistula lachrymalis, for it affects the integuments alone

while the sack remains sound: which nevertheless does not hinder that it might run into fistula lachrymalis, namely, when pus formed there offends the subjacent canal, and draws it into consent. But each case is made known by pressure alone, since the lachrymal points giving out pus, afford no uncertain mark of genuine fistula. If pus breaking from these orifices be found sanious, blackish, green or fetid, we cannot doubt that the neighbouring bones are contaminated with caries: what shews it more clearly is an efflux of pus of the same nature through the nostrils. A certain virus of the blood sometimes promotes fistula, namely, the venereal, scrophulous, &c. Ophthalmia and other obstructions of the eyes also promote it, the small-pox, &c. Lastly, it proceeds from either cause, and may put on the nature of cancer.

Respecting the *cure*, we must endeavour to open the pristine passages of the tears, the pus must be evacuated and the ulcer cleaned. When an inflammatory pustule appears, resolution must be attempted by suitable helps, which not succeeding properly, emollients and maturants ought to be applied. After the pus is formed, compression is next to be tried, by means of which the purulent matter is forced out through the lachrymal points. Injections also come to our aid, by the benefit of which the fistula is cleansed, and sometimes the obstructed passages are opened. But if these remedies have been ineffectual, the abscess ought without delay to be opened, by means of the lancet or caustic, that a way may be made for the pus; afterwards the wound may be treated in the usual manner, not omitting detergent injections. But when the stagnant matter has hollowed out for itself cavities and sinuses, and the bones are tainted with caries, as often happens; it is necessary to recur to a surgical operation, concerning the performance of which we add nothing, as it must be known to every surgeon; and which they never ought to attempt without premising the requisites, namely, venesections, cathartics, temperants, demulcents, &c. Nor ought specifics to be neglected if the blood be contaminated by any virus, namely, venereal, scrophulous, &c.

9. **OPHTHALMIA**, a well known and very familiar disease, has its principal seat in the tunica adnata, not covering the anterior part of the globe alone, but also lining the eyelids. This is seized with redness and inflammation, with different degrees of pain and heat, the vessels of which, before invisible, then become conspicuous. But under this name ought to be designated, that temporary redness or heat of the eye, arising from smoke, powder, or any other external cause. The inflammation

in genuine Ophthalmia, often occupies the lachrymal gland, or interior of the globe, hence very deep, severe and beating pains; the sick cannot bear the light, and can scarce restrain the tears: motes or little clouds are observed in them; the patients cannot sleep, &c. Moreover, ophthalmia is sometimes *dry*, sometimes *moist*: the first in respect of pain and inflammation is the lighter, and mostly spares the eye-lids; in the other the eye is continually moist; the luxuriant, acrid and purulent humour injures the cheeks upon which it falls, and inflammation as if led along, is propagated to the eyelids. In this state of things the tunica adnata is befouled with blisters, purulent pustules and little ulcers; lastly, the pains, with some pulsation, become deeper. This affection sometimes prevails epidemically, but it is rashly by some thought contagious; every one knows that it is very familiar to children and old persons; nor are we ignorant that it often partakes of lues venerea, scrophula, gout, &c. It also arises from catarrhal fluxion, erysipelas of the face, contusion, burns, &c. lastly, it is reckoned among the remains of measles, small-pox, malignant fever, &c.

The *prognosis* of ophthalmia, is derived from strict attention to the injury of the organ, and its cause. This affection is hard to cure, and not without danger, if the thickened tunica adnata project beyond the cornea, which appears depressed: if the lachrymal gland be seized with inflammation, which is known by a very severe pain about the part affected, and unusual swelling of the upper eyelid: if very acute pains reach to the bottom of the orbit, and scatter through the whole head, if fever encrease, watchfulness be troublesome, and other aggravated symptoms arise, among which the sick incur danger of blindness. When ophthalmia is a symptom of scrophula, lues venerea, gout, &c. it admits only of the specific cure, the most troublesome is that from erysipelas; that which arises from contusion or burn is doubtful. It is thought incurable if among the remains of small-pox; lastly, it is considered a fatal symptom after a fall from a height, or grievous contusion of the head. From either species of a bad kind, are produced abscesses and ulcers tainting the tunica adnata and cornea itself. Pus is sometimes effused between the iris and cornea, whence arises what is called *Hyppopyon*, in which the pupil being covered, the sick are altogether deprived of light, unless the collected matter be re-absorbed, or fall to the lower part of the bulb; a happy event to be sure, but very rare. From the scars of the ulcers there proceed spots of the cornea or what are called *Albugines* that are to be removed by no art. Moreover, from erosion the cornea is sometimes rendered so thin, that it is altogether inadequate to contain

the subjacent parts, and is pushed out like a hernia, and this prominence, which requires a mere surgical cure, is called by the ancients *Staphyloma*. Sometimes a very profuse flow of tears is of service to those seized with ophthalmia; looseness of the bowels also not unfrequently benefits them, to say nothing of other salutary efforts of nature, which nevertheless respect simple ophthalmia, namely, when the organ is unhurt.

Ophthalmia requires a cure similar to that of other inflammations. Wherefore at the commencement of the disease venesections more or less repeated, according to the degree of inflammation, and violence of the pain, are most advantageous: and the cutting of the saphena, jugular or temporal artery itself is justly considered preferable to the rest. Indeed in severe ophthalmia, let the blood be drawn from the tumid vessels of the tunica adnata, and its flow promoted by the application of warm water. Scarifications are recommended with the same view, not only on the bulb of the eye, but also in the eyelids; but very delicate persons are averse from this painful remedy. Leeches also applied to the neighbouring parts have their own merits; nor does this method of drawing blood yield to the rest, because by means of it, the vessels of the part itself are depleted. Meanwhile, it is of no small account in this disease, that the belly be preserved loose; namely, by the usual remedies, and especially by mineral waters possessing these virtues. Moreover temperants and demulcents are profitably administered. viz. succory, borage and dock, chicken broth, that of river crabs and tortoises, milk, whey, emulsions, barley and rice gruels, acidulous mineral waters, &c. Also as opportunity offers there is advantage from the use of the depurants taken from the antiscorbutics and sudorifics; namely, nasturtian and water cress, China root and guaicum wood, mineral diaphoretics and other antimonials, the broth of viper and snake, &c. Sometimes aperients and incidents are successfully used; viz. wood-lice, and martials, mercurials; and lastly, sedatives and narcotics are not to be despised; with which nevertheless we must deal cautiously.

Every one knows (to come to *externals*;) the efficacy of baths, but there has been much controversy concerning the genuine virtues of specific topicals: nor does it escape experienced practitioners how difficult it is on this subject to extricate truth from error, notwithstanding what those who are blinded by prejudice, or catching at lucre, adduce to the contrary. But since it is not our province to settle this dispute, we have exhibited, according to our plan, those only which our own experience has enabled us to select, and such as are approved by the best judges. At the

commencement of the disease, therefore, the white of an egg beat up with a piece of allum, has had surprizing effect, and other repercutients, especially if contusion be the cause; but in another state of things, they become hurtful, and therefore ought to be rejected. Emollients and demulcents are always applied with benefit, when the sick complain of pain and heat of the affected part, and the eyelids are glued together; of this kind are warm water, with a very little spirit of wine, water of red roses, and plantain, decoction of althea, pidgeon's or chicken's blood, woman's or other milk, simple emulsion, mucilages of the grains of branching plantain, flaxseed and quinces, the pulp of boiled apples, poultices of crumb of bread, a piece of beef or veal, &c. When the pains have abated and the heat subsided, resolvents are useful, namely, diluted spirit of wine, water of fennel, eye-bright and elder flowers: warm wine mixed with a few drops of balsamum commendatoris. Moreover, numberless collyria are prepared of oriental saffron, rue, sage, hyssop and rosemary, which deserve praise. But the mineral waters perhaps excel these.

When the eyes are disfigured by little ulcers, *detergents* and *exsiccants* ought to be used. These virtues are possessed by sugar candy, florentine orris, cuttlefish-bone, tutty, white vitriol, lapis divinus, white troches of rhasis, emetic wine, &c. But to ulcers of the eye-lids we may apply lunar caustic, the pain of which to the eye, must be mitigated by baths or fomentations of warm water. But some peculiar resolvents are recommended, prepared of the flowers of elder and camomile, fænugreck seed, &c. for phlyctenæ or blisters of the cornea and adnata, which when open, require detergents. When pus lodges under the cornea, or in any follicles growing to the bulb of the eye, we must use all endeavours to evacuate it, lest by its long delay it should hurt the organic parts of vision, since there appears almost no hope of resolution. Nearly in the same manner ought a stagnation of the blood to be treated if it be restrained to a certain flow, otherwise it can be removed by suitable resolvents. Lastly, it is well known what good effects in very obstinate ophthalmies proceed from blisters applied to the *scapulæ*, a seton drawn through the skin of the occiput, as also issues which may be made in various ways. *Redness* and *inflammation* approaching to ophthalmia and attended with very acute pains, are also occasioned by *festuæ* (fescuegrass) *sordes*, *quisquiliæ*, (chaff or dust or such like,) and other extraneous substances implanted in the bulb of the eye, unless by a plentiful flow of tears and winking they be carried out, and the surface of the bulb washed clean; or disengaged by the same motions of the eye immersed

in warm water. Sometimes amber, or common sealing-wax first warmed by friction, brings them away. The magnet has the same effect on pieces of iron; all which failing, we must fly to the surgeon's tweezers.

10. The eyes suffer a kind of **ECCHYMOsis**, which they call *sugillatio*, in which the tunica adnata becomes intensely red without pain, and the most vivid light does not hurt the eyes. Sugillation sometimes takes its rise from an external cause, or without the consciousness of the patient, and it is also promoted by an internal cause. It has been known to follow very obstinate vomiting.* This very familiar stagnation of blood is void of danger, and in a few days mostly ends spontaneously. Nevertheless sometimes venesection is conducive, and topical resolvents or roborants are very useful, the least of which are, pigeon's blood, rose water, fennel and elder flower water, spirit of wine and vulneraries, camphorated spirit of wine, decoctions of the roots of comfrey, Solomon's seal, &c. *A collection of blood between the cornea and uvea* is imprudently referred to sugillation, in which, as in *hypopyon*, the pupil is covered. This affection is not rarely observed after great contusions, which is obviated by the incision of the cornea, that a way may be prepared for the stagnant fluid, unless by a fortunate termination it be re-absorbed.

11. **MACULÆ**, **NUBECULÆ**, and **ALBUGINES**, which obscure the cornea, or dim its transparency, are the consequences of ophthalmia, and other defluxions of humours, and little ulcers of the cornea. In the first case, a certain whitish matter is collected within the texture of the cornea, so as in that place to deprive it altogether of its transparency. In the other occur little scars following ulcers, or certain callosities preventing the entrance of the rays of light. *Maculæ*, or spots of the first sort occupy the surface of the cornea, and are therefore thought more easy of cure; there is greater hope of recovery also in youth; but it is otherwise in old age. Genuine cicatrices, however, at any age, are thought altogether incurable. But defluxions which often attend *Maculæ* are treated by venesections, cathartics, temperants, and baths: *Nubeculæ*, (little clouds) remain to which sometimes resolvents, detergents and exsiccants are applied with advantage; namely, the vapour of hot coffee, or steam impregnated with fennel, and rue, being first chewed when the stomach is empty, the water of fennel and eyebright, the juice of purple star thistle, and greater celandine; the gall of an eel, carp, pike, or partridge, sugar-candy, and cuttlefish bone, tutty, powder of antimony, &c. which being tried without success, it is allowable

* And very difficult parturition. T.

to recur to vesicatories, seton, and issue; which nevertheless refer more to defluxions, not rarely following *Albugo*, or white speck, than these spots that are indelible by no art.

12. CATARACT, or SUFFUSION is nothing else than *opacity of the crystalline lens*. This disease is manifest when far advanced; but its beginning is with difficulty known. Cataract is usually produced by chronic defluxions, severe ophthalmia, obstinate epiphora, tedious headachs, contusions, &c. Certain images, or flying shadows, which the sick mistake for down, flies, &c. threaten this disease; but this mark is mostly fallacious, which appears under numberless other circumstances. That obscure vision more certainly indicates its approach, in which every object seems involved in a spider's web, or as if it were seen through a fog, or thin gauze: then as the disease advances the vision grows dull and is darkened, the pupil is enlarged, and the crystalline lens grows white, which marks denote the disease to be at hand.

To come to the *cure*. In the beginning of this affection, while it progresses slowly, various remedies may be advantageously applied to the temples: diluents also and temperants, with the use of baths, after premising general remedies, are sometimes used with success. Millepedes, martials, and other aperients, contribute their share, nor are sudorifics to be despised, prepared of exotic woods and roots. The smoke of tobacco through the well known pipe, has been serviceable in some cases, as also other sialagogues; the use of the eye-bright has been much recommended, both internal and external. But whether this little plant possesses this celebrated efficacy, may be doubted. Vesicatories also conduce to this end, or rather the seton and cautery, which far excel all the remedies of any kind. Lastly, various topicals taken from the emollients and resolvents are usually applied; among which the most common are decoction of althea, pidgeon's blood, the vapour of coffee, aromatic decoctions or infusions, &c. If these fail it is necessary to recur to a surgical operation, or the *depression of the Cataract*, as to the last resort. But this method of cure is unsuccessful if the Cataract have not attained its proper maturity, as they say; which is known, if in rubbing the eye, the dilated pupil should manifest no motion, from the agitation of the eyelid with the fingers. Wherefore the event ought to be considered doubtful, if the motion of the iris be not altogether lost, and the crystalline lens present a bluish or green appearance, which certainly seems to argue that the opacity is not entire, on which account the thin coverings or ligaments are with more difficulty dissolved, and the cataract is torn into very small shreds: but

this operation succeeds well when the cataract is very conspicuous, and has attained a white or ash colour, like precious stones.

By this *depression of the Cataract*, the vision is not entirely restored, but the blindness is diminished, so that the sick who were before in darkness, then perceive some objects; they distinguish what they meet; they see which way to take in walking; and indeed can read print or writing. This (to mention it by the bye) is effected in a two-fold manner: First, by removing from its place the crystalline lens deprived of its transparency by means of a needle, towards the inferior part, and submerging it below the pupil, keeping the iris back for sometime, lest it return to its pristine situation. Second, by *extracting* this lens by means of a section performed in the declivity of the cornea; concerning this last method, there is an account in the **ACTS OF THE ROYAL ACADEMY OF SCIENCES** for the year 1707 and 1708; which the very sagacious DAVIEL rescued from oblivion and restored, so that without any contradiction, it is allowed to be easier and safer. We ought not to conceal that authors have mentioned another species of cataract, viz. the membranous, which nevertheless I have not happened to see, although I have had an amazing number of affected eyes for anatomical examination. Besides, writings on this subject do not satisfy the mind desirous of truth, the authors moreover, seem to have indulged very little in anatomical research, which only ought to be considered suitable to decide this controversy.

13. **AMAUROSIS**, which the barbarous Latins call *gutta serena*. This is a blindness in which there appears no fault in the organ, except the dilatation of the quiescent pupil. This affection mostly invades both eyes, usually progresses slowly, yet seizes some in a very short time, or suddenly. It is not falsely conjectured that it proceeds from palsy of the optic nerve, and hence is subject to various grades. For the dissected bodies exhibit the blood-vessels of the brain very much filled; serous or bloody stagnations; withering or putridity of the optic nerves, abscesses, lymphatico-cystic tumours, or of another nature, fleshy excrescences, exostoses, &c. pressing upon these medullary processes. Weakness of sight without any manifest cause, shadows or images of different forms, as if flying, or dimness of the eyes, deep seated pains, &c. are so many forerunners of this disease. Suppressed discharges of blood promote it, repelled cutaneous eruptions, malignant fever, apoplexy, a fall from a height, or other contusions of the head; incautiously looking at the sun, by which the sight of the eye is dazzled; inclemency of the air, &c. Moreover, it sometimes invades pregnant women, but very often owes its rise to imprudent exertion of the eyes, in very small or fine things; as also the long continued use of microscopes, spec

tacles, spy-glasses, or other optic glasses. Incipient amaurosis may be cured, and there is the greater hope of recovery, if it come on suddenly or originate from a slight cause, but no good is to be expected if it proceed slowly, especially in old age.

Venesections and emetico-cathartics, at the commencement of the disease, may be profitably employed, but the internal use of eye-bright is especially suited in this case, and is perhaps not undeservedly extolled, since if this remedy, enjoying the title of a specific, does any good, it seems certainly to do so in Amaurosis, rather than in other diseases of the eyes. Moreover, aperients and incidents are exhibited with advantage, namely, millepedes, martials and mercurials, which nevertheless are excelled by the warm and cold mineral waters. Diaphoretics agree here, viz. vipers, lignum guaicum, China root, &c. Nor are antiscorbutics to be defrauded of their virtues; but cephalics and antispasmodics take the palm; such as balm, betony, valerian and piony, cascarilla, musk, orange flower water, volatile spirits indicated for this purpose, pulvis de gutteta, &c. Sometimes sialagogues are useful, as also blisters, setons, cautery. Nor must we reject the pouring of warm mineral waters from a height; which being used in time, have had the happiest success, unless experience deceive me. But the most celebrated topical opthalmics, sold for specifics, are vain, since they are altogether inadequate to overcome the morbid obstruction, yet the vapor of spirit of wine, and balsam of Fioraventi seem to yield some benefit, as also the vapor of boiling coffee, and other well known articles of that kind, the virtues of which nothing hinders to try.

DISEASES OF THE NOSE.

OF THIS class, CORYZA takes the lead, called among us, *enchifrenement*; it is however a very slight disease, which rarely requires medical aid. But when, as it advances, the stillicidium of the nostrils does not rightly go on, a pain of the head is occasioned, sometimes very acute, by which the stomach is mostly turned. Meanwhile frequent sneezing is excited, and tinnitus aurium arises; the smell is injured, the appetite fails, irregular chills or restlessness come on, a fever rises, the strength is deficient, vertigoes take place, drowsiness is troublesome, &c. All these symptoms cease with a plentiful discharge of mucus, which usually comes on by the spontaneous effort of nature. But yet if it be delayed too long, it brings on *ozæna*. Although Coryza excites little fear, it is nevertheless not without danger, because it is sometimes the forerunner of grievous affections

which threaten the fauces, glottis and lungs; and indeed the disease may be considered dangerous of itself, in advanced age, since it not unfrequently brings on comatous affection or apoplexy itself.

Every one knows that slight and common Coryza ceases spontaneously, so long as the sick live regularly, and keep at home during very cold weather: nor is the threatening defluxion of humors upon the fauces, larynx and breast, diverted by any other means. Meanwhile there is some benefit from fumigations with amber, olibanum, sugar, sage, &c. by which the disease is not only checked, but removed sooner than usual. The milder errhines also are of some benefit, namely, sage, betony, lavender, tobacco, &c. which nevertheless ought to be cautiously used, as nature is opposed to them, lest through immoderate sneezing, the pain of the head be exasperated by too great concussion. But when Coryza, and gravedo are longer continued, after premising generals, we may use temperants, diuretics, sudorifics, sialagogues, and other remedies directed for fluxions of any kind; among which vesicatories and issues, if the case require it, must be used.*

2. STERNUTATION, *sneezing*, pertaining little to Coryza, if other things are in a good state, ought not to be reckoned among diseases; and indeed during a fever, it argues nothing bad: although it may accidentally occasion hæmorrhage of the nose, and may irritate the lungs when inflamed, and exasperate their pain. Besides, it assists parturient women, rouses the sleepy, &c. But violent sneezing or continued beyond the natural limits, is numbered with spasmodic affections, and ought not to be thought free of danger, since from the violent concussion of the head grievous diseases of the brain may arise, which sometimes bring on blindness. In this state of things, no pains must be spared to stop the sneezing; which is best effected by snuffing demulcents and mucilages, namely, warm water, decoction of althea, milk, oil of sweet almonds, and others of the like nature, which seldom fail.

3. HÆMORRHAGE OF THE NOSE, arising from plethora, or sanguineous temperament, from immoderate exercise, or arduous labour, from too free use of wine, or gluttony, from very acrid medicines, &c. for the most part portends nothings bad; *but this discharge of blood during a fever*, is doubtful: for instance it is considered critical on the fourth, seventh, ninth and fourteenth days of the disease, provided it be confined to certain limits, and do not flow in undue quantity. For in this condition of

* I once removed very obstinate Coryza, by making the patient snuff up that preparation of mercury called, *Turpeth Mineral*. (Subsulphas Hydrargyri flavus.) T.

things, there is equal fear from too great an expenditure, and too sparing a flow: yet we must prognosticate with caution. Hæmorrhage of the nose is a more dangerous circumstance in fever, if it be followed by weak and intermittent pulse, faintings and cold sweats; and if convulsions follow, all is hurrying to destruction. On the contrary nothing bad is to be expected, when after the flow of blood the fever abates, the pain of the head is moderated, and delirium obviated, &c. Febrile hæmorrhage of the nose is denoted by redness of the face, fiery eyes, vehement pulse, watchfulness, a kind of sleepiness disturbed by red images, pain of the head and neck, noise of the ears, spontaneous tears, itching of the nose, &c. There is no harm to be apprehended from hæmorrhage of the nose, *in youth*, which nevertheless if it occur more frequently than is proper, or continue for many years, although it seem not at the time to effect the health, yet at last threatens debility of the body, hypochondriasis, or other spasmodic affection; and *in old age* the gout and stone. Great danger impends from this discharge of blood *in advanced age*, which is thought more fatal if it invade an old person already cachectic, because of threatening serous stagnation. The cessation of chronic hæmorrhage at the same age is also considered fatal, and mostly brings on death, unless it be speedily prevented. Lastly, no practitioner is unaware, that sometimes there is an enormous hæmorrhage of the nose, which is restrained by the powers of nature alone. It is truly wonderful that from so great an expenditure of blood, there should not arise more serious inconveniences; for it is said that blood issuing in a full stream for five days, to the amount of forty pounds, has taken place without any unhappy consequences. Mention is also made of a certain parturient woman, the hæmorrhage from whose nose, exceeded twenty pounds, followed by a happy delivery.

Hæmorrhage of the nose is to be treated like others: namely, the whole business is to be committed to nature, if there be no fever, and the recent flow be kept within certain limits, but when blood issues in too great quantity, it must by every exertion be checked with *suitable remedies*. The chronic requires a peculiar treatment which nevertheless is often forbidden. In fever, nothing is to be attempted against a critical hæmorrhage of the nose; but the symptomatic requires medical aid, especially if it be long continued, or blood gush out abundantly. Venesection affords present relief, especially from the saphena. After depleting the vessels, let temperants and refrigerants be always at hand, namely, water drank abundantly; acidulous or nitrous ptisans: decoction of barley or rice, the most simple emulsions whey, &c. Mineral anodyne liquor is administered with ad-

vantage, but it is necessary to deal cautiously with laudanum, diacodium, syrup of karab, or any other narcotic. Nor are absorbents and astringents to be less dreaded; which the medical vulgar are in the habit of using indiscriminately; namely, coral, plantain, horse-tail fern, dragon's blood, martials, blood-stone, &c. nevertheless, when given at proper times, they do no little good. But allum, spirit of vitriol, essence of rabel, and such like styptics, ought to be rejected, unless there be imminent danger of death. Sometimes febrile heat follows profuse hæmorrhage which many attempt to reduce by means of the Peruvian bark: whether safely, we leave for the examination of wiser practitioners.

Nor do *external medicines* require less caution, which are in more frequent use than is right among the unskilful, but nevertheless may not imprudently be administered, against a symptomatic and immoderate flow of blood; or as often as a weak and obscure pulse, loathsome paleness of the face, and faintings, shew the case to be dangerous. Then cloths dipped in cold water, simple or nitrous, or in vinegar, are usually applied to the forehead, temples, neck, occiput, scrotum, &c. cataplasms of bole prepared with white of egg and vinegar, are put on the forehead. Hæmorrhage is often checked by the odour of vinegar, or the steam of the same; but tents are more efficacious, impregnated with vinegar, allum water, styptic water, saturated solution of white vitriol, and thrust up the nostrils. The common ink also on cotton has almost the same effect, when introduced in the same manner. The powders of bole, plaster of paris, mastich, dragon's blood, &c. are also with advantage snuffed up. Moreover, refrigerant clysters and baths contribute their share of benefit; frictions of the lower limbs, tight ligatures upon the arms and thighs, dry cups or with scarification, fixed on different parts, &c. It is necessary to remark as we go along, that hæmorrhages of the nose are never to be restrained, which are in the room of piles or catamenia, until this periodical and spontaneous flow of blood be entirely restored. It is well to add, over and above, that the blood suppressed by means of tents, sometimes directs its course towards the fauces, from which it gets to the stomach, or enters the glottis itself: which last misfortune, I remember once to have happened in a certain man of florid age, who a little after checking of the hæmorrhage, while seemingly buried in sleep, yielded to his fate, unknown to the bystanders; on the dissection of whom the bronchia were found stuffed with blood.

4. **ULCER OF THE NOSE**, when recent and indolent, and attending the more common defluxions, partakes of no danger, and

ceases spontaneously, or is easily healed by ceruss, or other drying powder. But great trouble is experienced from that very obstinate ulcer, sordid and attended with pain, which is known by the name of *Ozæna*. It sometimes has the nature of cancer, and emits such a fætor, that the sick themselves can scarcely endure it. This bad ulcer spreads wide, namely, to the pervious cavities of the nose, and affects the neighbouring bones with caries, and sometimes eats off the palate. *Ozæna* often attends polypus, or follows mostly as a symptom of venerea, scurvy or scrophula. Hence it appears why it should mostly be very obstinate, or altogether incurable, unless the exciting cause be eradicated, which cannot be accomplished without a difficult and tedious cure.

Having premised general remedies, temperants are given with advantage, namely, milk, whey, chicken broth, cold mineral waters, &c. to which baths lend a helping hand. These being administered, depurants and diaphoretics are of the greatest benefit, the best of which are broths of river crabs, vipers, &c. But little or nothing is effected by vulneraries, which judicious practitioners esteem but lightly. What specifics may do in removing the primary disease, is obvious to all. Respecting the external cure; the dryness and adhesion of the crusts is prevented by warm water, milk, butter, decoction of althea, oil of eggs, oil of sweet almonds, &c. Nor do these remedies hinder hæmorrhages frequently breaking out, after these crusts fall off, from being restrained by the above-mentioned auxiliaries. Then let vulneraries and detergents be injected, namely, some of the mineral waters, honey and water, decoction of barley, agrimony, wormwood, red roses, St. John's wort, water germander, and savin, with which some mix lime water, sal ammoniac, &c. Moreover, much has been said of the juice of herb *Robert*, elixir proprietatis, tincture of myrrh and aloes, unguentum *Ægyptiacum*, &c. In some cases fumigations prepared of laudanum, myrrh, mastich, storax, &c. are of use. But cinnabar is brought into use with some risk, as it may irritate the lungs. Vesicatories, the seton and issue close the list, and as experience proves, have been most beneficial in many cases, provided the bones be unhurt; the caries of which, not admitting of the usual remedies, altogether resists a cure.

5. **POLYPUS OF THE NOSE**, thus called from a fish of that name, is that fleshy excrescence, diverse coloured, and mostly having many clefts, with various grades of solidity, which sprouting from the pituitary membrane, often fills the nostrils, from which it not unfrequently hangs internally, or reaches even to the fauces, behind the uvula: hence it appears why, when the

mouth is shut, the respiration should not be free ; and indeed it often hinders deglutition not a little. Polypus is sometimes whitish, sometimes red ; again it appears livid, of a leaden or black colour. Besides, one is found soft, another dense or cartilaginous. When tending to ozæna it is by some considered as the common sarcoma ; but whether these differ one from the other, may be doubted. As to the event, a soft, white, and indolent Polypus is thought easy of cure : the case is different if it resist pressure, be red, and attended with pain : but the livid and black is considered incurable, especially if it be owing to a venereal or scorbutic taint, or have the nature of cancer.

The cure of Polypus is altogether performed by *surgery* ; to which notwithstanding it can never contribute, without first attending to the blood, by means of general remedies, temperants, and aperients ; and indeed of some specifics, if the depraved diathesis of the blood and humours require it. When they are of less size, and occupy a suitable or convenient place, they are usually treated with topical astringents and cathæretics ; namely, galls, granate bark, birthwort and savin, burnt allum, calcined vitriol, verdegrise, and red precipitate, Egyptian ointment, FERNELL's aqua divina, butter of antimony, and lunar caustic ; but escharotics must be used with great caution, lest by their acrimony the Polypus be exasperated, or the neighbouring parts injured, which ought first to be anointed with nutritive ointment, or some cerate, to insure their safety. It is agreed among physicians that these remedies often do great good ; but this method is slow and troublesome ; on which account judicious practitioners have thought better of *extirpation*, both by the nose and fauces, if their situation and size permit ; especially with the soft and indolent Polypus, although hæmorrhage often follows this operation, and is to be checked by the usual methods. But the Polypus sprouts again, unless it be radically extirpated, which nevertheless, on account of its hidden situation is often hard to be accomplished. The same misfortune threatens if the bones be injured by caries, which, as above hinted, not rarely happens. Lastly, artificial emunctories so often recommended are of service in some cases.



DISEASES OF THE EARS.

1. THE first in order is OTALGIA, or pain of the ears, which sometimes becomes so severe that the sick can scarcely forbear

filling the whole house with their cries, and indeed it is said that some on account of the violence of the pain, have become deranged, and committed suicide. If it proceed from *inflammation* of the membrane lining the cavities of the *os petrosum*, as sometimes happens, a fever rises, and very terrible symptoms come on, viz. delirium, convulsions, faintings, &c. This species of inflammation runs into suppuration, and from the opening of the abscess the pains remit; but a very troublesome ulcer follows. Besides this sanguineous cause which is familiar, *worms* are produced, as inhabitants of those cavities, which also occasion most violent pains, but not continued, because of the rest which from time to time these animalcula enjoy. Nor do other *external insects* of different kinds, exercise less tyranny, which creeping through the *meatus auditorius* to the cavity of the *tympanum*, get into the cells above-mentioned, unless the membrane adjoining these cavities prevent. Certain *little extraneous substances* occasion various injuries, which are either incautiously put into the ears, or accidentally slip into them.

Pain of the ear arises from insolation, and inclemency of the air, the suppression of customary discharges *promotes* it, as also the recession of cutaneous eruptions, &c. it also invades those who are subject to defluxions of the head. The more deeply the pains are fixed, the greater is the danger; for the life of the sick is often held in suspense, until after the seventh day of the disease, the case is in a fair way. Inflammation rarely terminates by resolution within three or four days; but we cannot doubt that pus is formed, if the pains are exacerbated about the third and fourth day, and the sick complain of a certain pulsation in the affected part. The pains are mitigated by the discharge of pus, and all things gradually return to the halcyon state. But there remains, as above remarked, *a very obstinate ulcer*, troublesome rather on account of tediousness than pain; from which proceeds a sanious discharge, which when inveterate never subsides without great danger, since from the sudden stoppage of this, very grievous diseases of the brain are likely to follow; namely, apoplexy, comatous affection, epilepsy, &c. especially if this weeping of matter proceed from the brain itself, which practitioners know to have sometimes happened from caries of the *os petrosum*, by which the neighbouring parts are drawn into consent; concerning which destruction we may have some suspicion, if very severe headaches have preceeded.

Otalgia arising from inflammation requires *frequent blood-letting*, and indeed in very urgent pains the *temporal artery* is advantageously opened. With the same view also leeches applied to the neighbouring parts, and scarificated cuppings behind the

ears. Besides, the use of diluents and demulcents ^{are} is profitable; among which narcotics are not prohibited, these when given with caution, impart the most desirable relief. Nor are external anodynes, emollients, and maturants of less use, when dropped into the *meatus auditorius*, the best of which are woman's milk, oil of sweet almonds, flaxseed, hogsbean, cataplasms of bread and milk, or other emollient digestive. A grain of camphor put into the *meatus auditorius* at the commencement of the disease has been helpful to some; in like manner also opium is used, anodyne tincture, and other narcotics, if the sick suffer extreme pain, but the external use of these ought to be cautious; lastly, there are some who experience relief from bathing of the feet, or friction of the legs. But after the abscess has broken, the vulnerary and detergent injections are to be employed, urine, the various mineral waters, decoction of agrimony, and birthwort, infusion of red roses, and flowers of St. John's wort, barley water sweetened with honey, and of ash, with which the tincture of myrrh and aloes is mixed, are commonly used for this purpose. Lastly, the balsam of Fioraventi, commendatoris, and numberless others recommended for the cure of ulcers, are dropped into the ears. But as to insects generated in the ears, or received into them from without, they are quieted by injections of milk, or oil of bitter almonds: decoction of colocynth, mercury, &c. attack and kill them, unless because of some obstruction these liquors do not reach to the seat of the disease; not to mention the drawing out of those extraneous bodies or insects, which far excels all other remedies.

2. DEAFNESS, as to its cause mostly lies in obscurity, for besides the filthiness of the organ arising from purulence and caries of the bones there are other faults in the organs of hearing, diligently to be traced: for instance, in many cases the little bones are wanting; the membrane of the tympanum is found sometimes thickened or impeded by a kind of crust; sometimes torn or altogether wanting. The little cavities of the ear often filled with water, mucus, blood, or matter; the eustachian tubes obstructed or choaked. Tumours are seen growing to the brain and its involucra, compressing the acoustic nerves, or a serous collection presents itself, having the same effect. There occur other faults in the *meatus auditorius*, namely, fleshy excrescences filling the bony channel, wax collected and thickened therein, by which this duct is altogether obstructed; peas, nuts, shot, and numberless other things closely pressed against the membrane of the tympanum; or casually fallen into the *meatus*. These are the impediments of hearing, which may be observed and examined in the living body; but others are traced as it

were by mere conjecture. The grades of both are various; whence the difference between Deafness and hard hearing. It may be observed by the bye, that this sense is not always lost by a defect of the membrane of the tympanum, for I know many who hear sufficiently well, who want this altogether. And indeed this vitious disposition, as above hinted, very frequently presents to view, and is also produced by a previous flow of pus, the source of which lurks beyond the meatus auditorius.

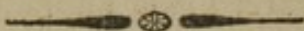
Congenital deafness or partaking of a depraved conformation of the organ is thought to be altogether incurable: nor is it considered more easy of cure in advanced age, since it is mostly caused by palsy or callosity of the acoustic nerves. A slight hope of cure is derived after small-pox, long continued headaches, and inveterate lues venerea; after a certain flow of blood and pus from the ears; after a fall from a height, &c. It is also difficult to cure deafness proceeding from cannons, bells, &c. when gradually coming on with noise. But hardness of hearing is very easily cured, if it take its rise from congestion of wax, or if the meatus auditorius be obstructed by an insect, or any extraneous substance. The cure of sarcosis filling this canal is more difficult. We must not despair from stupor of the nerves, from serous, bloody, or purulent collection filling the organ, &c. Deafness contracted from fevers of a bad kind, mostly vanishes spontaneously: that hardness of hearing which is familiar to hysteric and hypochondriac persons, and partaking of spasms, is not thought difficult of cure; as it is occasioned by a noise or buzzing of the ears. Yet the event is sometimes doubtful, since it denotes epilepsy and other convulsive affections in some, or altogether extinguishes hearing.

Deafness or hardness of hearing may be considered likely to terminate favourably, if it arise from no pre-existing organic fault; from an unusual *rigidity of the membranes* and nerves, or from too great *flaccidity*. It is not difficult to know either cause, if the constitution of the air producing these various effects be attended to: for instance when from the blowing of the north and north-west winds the hearing is better, and when deafness is increased during the prevalence of the south and south-west, it is not falsely conjectured that the nervous membranous, and muscular fibres of the organs are too much relaxed; but when the contrary is observed, we may suspect too great tension of these fibres. Besides, a great noise, hurts those who labour under dryness of the ear, while it is pleasant to others, which shews the difference of both species of deafness, and is worthy of remark.

It is evident from the above *that the method of cure is different*, namely, in proportion to the cause. Therefore when inspissated wax is collected in too great quantity, which happens more frequently than is supposed, it is to be scooped out by the *ear-picker* (*auriscalpium*) or softened by the vapour of warm water, that it may fall out spontaneously. I have seen some who were ignorant of the cause of their deafness, and quite despairing of the recovery of their hearing, cured beyond expectation by this simple method. If the meatus auditorius be obstructed by sarcoma, the whole business is to be committed to surgery. As to extraneous bodies, having premised lubricating injections, they ought to be extracted by suitable instruments. The vapour of warm water, and injections prepared of emollients, remedy the too great dryness of the organ. The morbid and more common flaccidity requires another cure, in which sialagogues and errhines are useful, by the help of which the luxuriant serum is diverted. Sneezing may have other salutary effects, which these last promote, for by this sometimes, through the favour of fortune, the serous, bloody and purulent collection with which the organ was filled, is carried out; or the animalcula and other extraneous bodies introduced into it, are forced out. Besides, the tone of the nerves, membranes and muscles may be restored, by the vapour of burning sulphur, decoction of sage, wormwood, rice, rosemary, anise seed, juniper berries, &c. by means of a little funnel put into the ear. A grain of musk with the same view, or ambergrise is not undeservedly praised, introduced into the ear, on cotton; which remedy is said to have succeeded very well, even in some old persons. Others speak highly of ants bruised with onion juice, or this simple juice diluted with spirit of wine; nor does experience contradict it. For a similar purpose also are employed spirit of wine, tincture of castor, oil of bays, or sweet almonds, oil of cloves or cinnamon, &c. Among the common people, the water distilling from the twigs of ash, heated by the fire, is celebrated: but there is some doubt of the efficacy of this. Moreover, the irrigation of the warm sulphureous waters, or any suitable decoction, poured from a height, may do some good. Lastly, it is said that some deaf persons have been cured by the suction of air through the meatus auditorius.

As it respects *injury of hearing* from *hissing, ringing* and noise of the ears, since it seems merely spasmodic, as already hinted, it requires another method of cure. It is therefore treated with antispasmodics, as well as by cephalics, which emulate the virtues of the former. Cathartics from time to time, during the use of these, are of no little service. Here also belong

medicines which remove obstructions, and other remedies that are prescribed in nauseating abundance. Moreover, topical emollients contribute their share, namely, the vapour of warm water, or decoction of althea, and injections of milk, oil of sweet almonds, or other demulcents. Roborants also may be happily used, viz. the vapour of the decoction of anise seed, or other aromatic plant; oil of peach kernels, reduced spirit of wine, the fume of amber, the fetor of the spirit of sal ammoniac, &c. To which we may add a proper regimen, without which nothing, scarcely can be done to good effect.



DISEASES OF THE MOUTH.

1. **THE LIPS**, as well as other muscular parts are affected with *convulsion* and *palsy*, which diseases, although vastly distant, seem nevertheless to produce the same effect on the mouth, namely, they promote its *twisting*, sometimes from a relaxation of the muscles of one side, sometimes from convulsion of the other. If both corners of the lips be irritated, there arises the *cynic spasm*, or which is called *risus sardonius*. A palsy of either side denotes apoplexy, or attends and follows it: but convulsion is the forerunner of epilepsy, or other similar affection. Each disease has its peculiar *signs*; viz. in palsy of the mouth, the corner receding from the ear is not subservient to the will, but in convulsion this side is moved at the pleasure of the sick. Of how much moment it is, in order rightly to undertake the cure, that these similar diseases should at first view be properly distinguished, must be obvious to every one; for the sternutatories commonly used, and suitable in palsy, become very hurtful in convulsion: concerning other remedies prescribed for both affections, we add nothing, lest we serve up a stale mess. It is well however to say, by the bye, that there are some topicals celebrated by authors in each disease, which are in general use, namely, camphor, oil of mace, and of juniper, spirit of sal ammoniac and Hungary water, nor does it clearly appear from their observations what is to be expected from the administration of the aforesaid remedies, on which account we think that further enquiry on this subject is necessary.

2. **FISSURE** or *chopping* OF THE LIPS, (*gerçure des lèvres*,) claims attention, the cure of which is performed by simples, namely, the various salves prepared for the purpose from oil of olives and sweet almonds, rose ointment, the demul-

cent and most common cerates or pomatums. Nor are these means to be despised; since this disease, although light, sometimes degenerates into a very troublesome ulcer. Besides the lips suffer a kind of *pustules*, in a short time running into ulcers befouled with scabs, which denote approaching health, in intermittent fevers, and therefore require no cure. But there occur other *ulcers* of the lips, arising from cachexy or lues venerea, which besides the specific cure, are usually mitigated or removed by topical exsiccants, namely, nutritive ointment, ointment of ceruss, &c. We say nothing of cancerous ulcer of the lips, little differing from others of the same kind. As to *leporinum*, the *hare-lip*, (*bec de lievre*,) it is altogether left to surgery, by the help of which the unseemly appearance is prevented, but there often remains a dissonant voice, on account of the gap in the *velum palati*, which congenital defect is very often associated with hare-lip, and is thought altogether incurable.

3. No one is ignorant that other parts of the mouth are liable to *TUMOURS* of different sorts. *Excrescences* arise from the *gums*, sometimes indolent, sometimes very troublesome, and are usually ascribed to a depraved state of the blood, scrophulous for instance, or scorbutic. These soft protuberances, and free of pain, unless they acquire an unusual hardness, portend no danger; but when they are resisting and attended with pain they excite greater fear, on account of threatening cancer, the nature of which they sometimes put on. All the topical resolvers and maturants usually administered against both kinds of *sarcosis*, have hitherto been ineffectual and even hurtful; nor have cathæretics been applied with more happy success. Hence all are rejected by the experienced, who think that extirpation alone is to be confided in, which operation is daily performed with success, both by the lancet or other suitable instrument; and by ligature, if the form of the tumour will admit.

An inflammatory swelling of the gums is very common, which mostly arising from decay of the teeth, often draws the lips and cheeks into consent: this obstruction in the gums, often ends in abscess, which being burst or cut, the pains abate and the tumour vanishes in a short time. Some choose to inflict little wounds on the tumid gums, that a passage may be made for the blood lodging there, but no benefit is derived from this method, if the tumour tends to suppuration, in which state emollients are more useful; namely, a rich fig is applied to the tumid part, or warm milk is taken into the mouth, or some emollient decoction, by the help of which, not only the pains are abated, but also suppuration is promoted. *Abscesses* that are elevated break spontaneously or by light pressure; but when they are buried deeply

within the texture of the parts, they ought to be opened with a lancet, lest the stagnant pus work itself a cavity, and injure the periosteum; or give rise to a very troublesome fistula. After the pus is evacuated, the mouth is washed out with warm urine, honey and water, decoction of agrimony, or other detergent. **Gumm Lacc** is very highly extolled for putrid gums. Lastly, when they swell from simple obstruction, without any true inflammation attending, they ought to be made to bleed, from time to time, nor is any other method of cure to be contrived.

RANULA, in French, *Grenouillette*, is a cystic and whitish tumour, growing to the frænum of the tongue, and mostly containing a viscid salivary matter, like the white of an egg. This tumour sometimes gets to the size of a hen's egg, it is therefore little wonder if the tongue should then become unequal to perform its accustomed motions; and thereby speech and deglutition be injured, and indeed respiration impeded in some. This follicle not only contains the salivary fluid thickened by retention, but not rarely matter, gypseous concretions, &c. It is known that infants are more liable to **Ranula**, which often partakes of scrophulous virus, and from preposterous cure, this tumour may put on the nature of cancer. Experience proves that topical astringents, styptics, &c. are futile and hurtful. The tumour is better cut off by a lancet, or removed by a hot iron; after the cyst is well evacuated, we must heat the wound inflicted by means of detergent washes, prepared of decoction of barley and agrimony, honey of roses, tincture of myrrh, &c. Meanwhile nothing is to be unattempted, to consume the follicle of the tumour, by means of the juice of the greater celandine, or other cathæretic, else the tumour recurs, or a fistula takes place that usually baffles all surgical art. Extirpation affords another and perhaps safer method of cure, by means of a suitable instrument or ligature, if the base of the tumour admit; but it is never proper to attempt either operation, until general remedies have been premised, and especially specifics, if the blood and lymph be tainted by any infection. In this class are reckoned diluents, diaphoretics, aperients and incidents, after the vessels and primæ viæ are depleted; and especially the use of hydragogue cathartics, concerning which see the **MEDICAL DIARY** for March, 1759.

The **TONSILS**, besides the inflammation which has reference to *quinsy*, suffer a *chronic obstruction*, which gradually assumes the nature of schirrus: nor is this tumour free from exulceration, if it be kept up by any venereal or scrophulous virus. Tumid Tonsils occasion little inconvenience, while entire and indolent, unless their size become very great; but the sick are very

much troubled with them, when pitted by ulcers, especially in swallowing. Respecting the cure, general medicines coincide here also, particularly those indicated for the primary disease. Blisters to the shoulder blades do some good; but the seton and issue excel them. There are not wanting those who choose to attack them with cathæretics, or with the actual cautery itself; but this method is exploded, although not always to be despised. Besides the swelling of the Tonsils, other *schirrous tumours* arise from the lips, tongue, and other parts of the mouth, which tend to cancer; these at first appear in the form of an indolent pustule, which proceeds slowly, till at length it is attended with pain, and becomes ulcerated. Yet sometimes these *indolent tumours* are of long continuance, if not tampered with by improper medicines. These *cancerous* tumours can be overcome by extirpation alone, having premised the above-mentioned internal remedies, which amend the dyscrasy of the blood and humors; but mostly their situation prevents, so that those almost only which attack the lips can be subjected to this operation.

4. ULCERS OF THE MOUTH, of a bad kind, among which are reckoned those temporary little ulcers of the tongue, lips, and gums, called *apthæ*, which notwithstanding sometimes by spreading wider, are disseminated through the œsophagus, stomach, and intestines; create no less trouble, and excite fever, diarrhæa, or dysentery. Besides, *apthæ* infesting the mouth, enumerated among the symptoms of inflammatory, intermittent, and autumnal remittent fevers; every practitioner knows that infants, especially those troubled with worms, are prone to these little ulcers: old persons are also obnoxious to them, and they often attack pregnant women: but they mostly proceed from depraved digestion. *Apthæ* when pale and white, excite little fear; but when of a blackish livid colour they are dangerous: lastly, both presage a fatal event in confirmed phthisis.

But other *deep and sordid ulcers of the mouth*, which at first sight are distinguished from *apthæ*, affect the uvula, tonsils, tongue, gums, and palate; and are symptoms of lues venerea, scurvy, or scrophula. These ulcers usually follow a tubercle, or other tumour, and are mostly phagedenic, which therefore occasion great destruction in the mouth. The venereal also affecting the palate, bring on caries in a short time, and perforate this fornix; the same infection threatens the other neighbouring bones, and even the lower jaw. From whatsoever cause these ulcers proceed, they often become cancerous, and therefore are thought altogether incurable. This unfortunate termination may also happen to ulcers dug out by sharp fragments of teeth, if the mass of humours be infected by any virus.

Febrile apthæ require no cure, since they are considered by judicious practitioners as a kind of critical eruption, not to be repressed without danger. But *to simple ulcers* may be applied a piece of vitriol, its spirit, or sulphur, essence of *rabel*, &c. with which if they be touched twice or three times, they very soon are subdued and vanish, not requiring any other remedy. As to *other ulcers of the mouth*, nothing is to be omitted in order to evolve the exciting cause, which is often very intricate: namely, we must enquire whether it be venereal, scorbutic, or scrophulous, that it may be treated with suitable remedies; among which the sudorific decoction prepared of the exotic woods and roots, is often given with advantage, as also the broth of vipers, tortoises, &c. but the use of diluents and demulcents is to be premised; such as milk, whey, chicken-broth, not omitting laxatives. A good degree of benefit is derived from emollient, detergent, exsiccant, and antiscorbutic gargarisms; with which are usually mixed honey, tincture of gum-lacc, balsamum commendatoris, &c. Washes for the mouth, prepared of the various mineral waters, are highly esteemed, to which may be added oil of tartar per deliquium, elixir proprietatis and such like, which by means of a probe armed with cotton, may now and then be put upon the ulcer.

Gangrenous Ulcers ought however to be thought different, which are associated with a kind of peculiar angina, and demand another treatment. Having premised generals, the mouth is washed with water strongly saturated with nitre or sal ammoniac, to which we may add a very little vinegar, or citron juice. Honey of roses with muriatic acid is highly praised by many, in the proportion of about forty drops of the acid for every ounce of honey. *Having perforated the palate*, the ulcer and caries of the bones it is to be checked by the well known remedies, which being cured, a gold or silver plate is prepared, to which is attached a little sponge adapted to the form of the foramen; by which means this gap may be stopped, and thus the uncouth voice prevented, and swallowing rendered free. Cancerous ulcers affecting the lips and gums, are extirpated; but those which beset other parts of the mouth can only be mitigated by a palliative cure.

5. **PTYALISM**, salivation, not only commonly takes place in the teething of infants, but also is familiar to hyponchondriacs, scorbutics, and cachectics, who sometimes pour out such abundance of saliva, that this secreted fluid amounts to two pints in the space of twenty-four hours. It is therefore little wonder if marasmus gradually follow this. Ptyalism also commonly takes its rise from the falling of humours upon some part or other of

the head. Aphæ also promote it, and other ulcers of the mouth, as also wounds inflicted on the salivary ducts; lastly, it is promoted by mastication, by any irritating substance, by mercury, &c. They do great mischief who attempt to check with astringents too great a discharge of saliva; since by avoiding *Charybdis* they run upon *Scylla*. Many diseases, much more dangerous than Ptyalism, may be produced by its hasty suppression. They tread the safer path who endeavour to promote a revulsion, by the due administration of cathartics, diuretics, sudorifics, &c. by the use of which, the superfluous serum driven to the other strainers, rushes more sparingly to the salivary glands, until the offices of these organs yield to the constituted law of nature.

6. *Among the various diseases of the teeth, ODONTALGIA, (douleur de dents,) toothach,* obtains the first place. This is a very familiar disease, sparing almost no age; and sometimes very severe; it mostly takes its rise from some defluxion of humours, but is particularly excited by caries of the teeth. This pain is sometimes exacerbated by cold, sometimes by hot drink, which is assuaged by the swelling of the neighbouring parts, and often ceases altogether. A certain congenital constitution of body, wandering gout or rheumatism, pregnancy, insolation, or very intense cold striking the head, air that is marshy, or impregnated with bad exhalations, &c. are so many causes to which toothachs are commonly ascribed.

Where this affection is not too violent, the whole business of cure may be committed to nature; but very urgent pains must be removed by all means. Venesection gives relief in some cases, many are used to allay the pains by making the gums bleed, nor is this mode to be despised; these being in vain, if the sick become unable longer to endure these torments, we may have recourse to arteriotomy. But the common remedies ought first to be tried, such as spirit of wine or Hungary water; vinegar impregnated with pepper, cloves or cinnamon, or boiled with sage or pellitory, which ought separately to be held in the mouth for some time. Besides the oil of cloves, box, and such like; opium or anodyne tincture, spirit of vitriol or sulphur, &c. must be applied to the carious teeth. The actual cautery is rashly recommended to be applied to the pained nerve, since I know from experience that this remedy has occasioned the greatest damage in some cases. Sialagogues possess their own merits, namely, tobacco, pellitory, stavesacre seed, and other stimulants of that sort, which when chewed, promote a flow of saliva. Lastly, for swelling of the gums warm milk is applied, decoction of rich figs, and other emollients and demulcents, which

ought to be held a long time in the mouth, not only to allay the pains, but also to promote suppuration.

Having quieted the pains, the carious tooth being well cleansed from its sordes, ought to be filled with cotton or very thin sheet lead, to prevent the access of air. If the form of the caries should hinder this, the tooth must be taken out of the way of pain: but from this evulsion sometimes proceeds a hæmorrhage to be checked by the well known means; namely, let lint soaked in spirits of vitriol or styptic water, be put into the socket; this effect is also obtained from agaric, soft wax, &c. Nor are there wanting other remedies against pain of the teeth, that are to be used according to the will and pleasure of physicians; namely, a piece of nut burnt and put into the hollow of the tooth, blistering plasters behind the ears, the inner bark of the *Pliant-mealy-tree*, put into the meatus auditorius. Plaster of Tacamahaca, or oil of hen-bane with which opium is usually mixed, applied to the temples: bruised snails applied like a cataplasm to the same parts, &c. Some after SPIGELIUS, highly recommend the actual cautery on the antitragus, nor perhaps without good reason. Lastly, we may add, over and above, that very obstinate tubercles not rarely break out in various parts of the face, ascribed to decayed teeth; which therefore vanish in a short time after the extraction of them.

Other injuries of the teeth, but of less consequence occur, namely, *foulness*, *looseness*, and *numbness*. As to the first, let the teeth be cleansed with burnt crust of bread, and a wash made of wine, not to mention the various arts well known to those who are studious of cleanliness; but the tartareous crust sticking to the teeth, must be taken off by a suitable instrument. When worms lurk under this crust, and induce fetor of the teeth and mouth, it is remedied by a decoction of savin used as a wash. For promoting the firmness of loose teeth, brushes made of the wood of the mastick tree, or frequent washes prepared of the decoction of the same wood, are used. Wine impregnated with gumm lacc, catechu, &c. have the same effect. Lastly, *numbness of the teeth*, (*l'agacement*,) is removed by washing with spirit of wine or Hungary water. Any sciolist knows that this is also quieted in a short time, by chewing parsley, nasturtium, and mustard, almonds, filberts, cheese, &c.

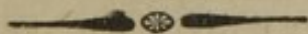
7. **FETOR**, or *bad smell of the MOUTH* is sometimes occasioned by carious teeth, but often owes its rise to lues venerea or scurvy, both of which usually occasion great destruction in the mouth. Sordid exulcerations of the nose also promote it, foulness lodging in the first passages, worms lurking in the same recesses; putrid defæcations of the lungs, &c. Fetor of the

Mouth, however, does not always indicate a morbid cause, since it often arises from a kind of diathesis of the blood, not affecting the health: which occasions the air passing from the lungs, otherwise sound, to be tainted with fetid effluvia; not to mention the fœtor from eating garlic and raw onions, from the smoke of tobacco, &c. A temporary fœtor of the breath without any pre-existent organic fault, excites suspicion of bad digestion. But when in infants it is of an acid nature, we may think of worms. As to symptomatic foulness of the breath, it will yield to no remedies, while the primary disease remains. From the *dissections* of bodies, the thymus, lungs, and abdominal viscera, are seen infected with putridity, the stomach eaten with little ulcers, &c. No wonder then, if the Fœtor of the Mouth in this state of things should admit of no remedy. To sum up all in one: nothing will do good, without first attending to the exciting cause, by attacking it with a suitable mode of treatment: But to confess the truth, it mostly lies in dark obscurity, which is the reason why physicians often labour in vain. Lastly, that ought to be considered altogether incurable, which, while the health is otherwise sound, depends on a peculiar disposition of the blood; for which reason offensive effluvia arise from the bronchia, and are dispersed through the air; this cause is clearly manifest, if similar miasmata find their way through the pores of the skin. This fœtor is obviated by careful attention to cleanliness, by the use of aromatic substances which being held in the mouth, or fixed to the clothing, may, in some degree, repress this inconvenience, so disagreeable to all they meet. Lastly, experience teaches that sorrel has been beneficial in scorbutic cases.

8. INTENSE THIRST, arising from hot aliments, from heat of the air, or unusual exercise of the body, ought to be expunged from the list of diseases: but vehement thirst is to be considered morbid, which is accompanied with fever either inflammatory or of some other order. Nor does thirst excite less fear, which is the consequence of consumption, cachexy, scurvy, dropsy, &c. From whatever cause it proceed, intense thirst often brings on troublesome dryness of the mouth and even hoarseness. Pure water, with which a very little wine is mixed, usually abates thirst arising from an external cause, this is more adapted to febrile thirst, if it be impregnated with nitre, lemon juice, spirit of vitriol, or other acid both vegetable and mineral. Decoction of succory is of great use in quenching the thirst of scorbutic and dropsical persons; lastly, a demulcent drink made of rice, barley, chicken, &c. remedies that saltishness of the saliva, which usually imparts dryness to the mouth, and very

troublesome thirst to the consumptive and some cachectics. I may add by way of conclusion, that nothing bad is to be feared from a want of thirst, since many occur, who, abstaining almost altogether from drink, enjoy good health. But the dread of any potable matter is fatal, which shews the character of hydrophobia: this aversion, however, excites little fear, if it be numbered among the symptoms of malignant fever, by which symptom I have seen some physicians deceived, who were otherwise well skilled in practice.

9. **PROLAPSUS**, or luxation of the **UVULA**, a disease very familiar in countries subject to sudden changes of the air, is mostly very slight, but sometimes becomes troublesome, because it affords a fallacious resemblance of swallowing a bolus, and at times occasions in some patients a fear of suffocation. The whole cure is performed by external remedies, but cathartics and diuretics may nevertheless do some good, as also other remedies indicated for defluxions and catarrhs: But topical astringents and repercutients far exceed these, namely, gargarisms of boiled mastich tree, plantain, heal-all, &c. The uvula is touched with Hungary water, camphorated spirit of wine, spirit of sal ammoniac, &c. or what is more approved, let the powder of allum, pepper, pellitory, ginger, bistort, &c. be applied to the affected part; or let the uvula be immersed in it, by means of an instrument formed like a small tea-spoon. If these be without effect, against the disease already inveterate, the cautery upon the occiput should be tried; and if this remedy also fail, nothing forbids the amputation of the uvula. Not the least danger seems to threaten from taking it off, whatever **HIPPOCRATES** has adduced to the contrary, and various authors who after the blind custom of brutes, tread in his foot-steps: this I do not hesitate to assert from long experience. I shall add nothing of inflammation of the uvula connected with quinsy.



TROUBLESOME SWALLOWING.

THIS affection is subject to almost innumerable causes, sometimes the most trifling, sometimes serious in the extreme. These are external or internal: to the first ought to be referred, that most common and diversified *obstruction of the œsophagus*, which is contracted from a morsel of food, not well masticated, by which some are suffocated to death; from swallowing bones, fins of fishes, and other extraneous substances, which have accidentally slipped into the œsophagus, or have been swallowed in

foolish capriciousness. When the obstructing piece of meat fills the canal, the sick ought to be jogged and shaken in diverse ways, or beaten with the fist upon the back, that the morsel being driven further, may reach the stomach, which mostly succeeds well. In other cases emetics are useful, by which the obstruction is thrown off with vomiting; but lubricants are first to be exhibited, namely, butter, oil, and fat broths, which prepare the way more expeditiously. When these have been tried in vain, it is necessary to recur to extraction if the seat of the disease admit: also the body sticking there may be driven to the stomach by means of a bougie, or whalebone properly adapted. I entirely relieved a person by this last method, when every thing else failed, of a piece of silver money weighing one ounce. But when sharp or hooked bodies, fixed in the flesh, will not suffer themselves to be removed, there remains a hope of suppuration and putridity. I remember, moreover, to have had a difficulty of swallowing from the fin of a fish implanted in the texture of the œsophagus; and to have experienced this happy relief, by swallowing, with a cake, the seed of the wild parsley, which it is well known is very rough with a variety of prickles; nor in both cases are the bougie and whalebone to be omitted, although not without excruciating pain to the sick, which some are unable to bear, especially if this operation be committed to an unskilful hand.

We come now to the internal causes. These consist of inflammation, spasmodic contraction, palsy and tumours growing to the pharynx and œsophagus, or lying upon the neighbouring parts. Inflammation respects quinsey, concerning which it has appeared most suitable to treat separately. The *convulsive constriction* of these organs, increased by cold drink, frequently invades hypochondriac, scorbutic, and hysterical persons: nor is the spasm contained within these limits, but is propagated to the neighbouring parts; namely, the muscles of the neck are seen to be rigid, the stomach and intestinal tube are drawn into consent; hence nausea, flatulence, and rumbling of the bowels: from the distraction of the mesentery arise pains in the back, nor does this affection spare the kidneys; whence proceeds limpid and whitish urine; not to mention tremor, shivering, and other symptoms exhibiting the character of the disease, and treated of elsewhere. But all these are altogether wanting in *palsy of the œsophagus* and pharynx, in which the difficulty of swallowing remains in the same state, which in the other case suffers various intermissions, remissions, and exacerbations. Besides, solid aliments which with difficulty enter the *convulsed* œsophagus, more easily overcome the obstruction in *palsy*: but it happens

otherwise from liquids ; whence appears the difference of the diseases. Lastly, *inflammation*, as we shall say hereafter, is observable, attended with fever and thirst, &c. and differs vastly from the former.

Violent anger during and after eating, aversion from particular aliment or medicine ; the accidental swallowing of an odious insect, or other loathsome substance, poisons, &c. *may bring on spasmodic constriction* of the pharynx and œsophagus, which also sometimes attends malignant fever, or proceeds from worms, or other fault of the *primæ viæ* ; it is well known that a sick stomach draws the parts of the mouth, or the salivary glands themselves into consent, which at that time pour out a greater quantity of saliva : from close examination of the cause of this spasmodic affection, the *prognosis* may be formed, and the *cure* directed, which consists principally in antispasmodic medicines, some of the other remedies contributing their share as occasion requires. Venesection is rarely of service, but emetics and cathartics are useful, as also demulcents, namely, oil of sweet almonds, spermaceti, &c. Hypnotics are rightly considered hurtful, but sedatives may be more safely used, of nitre, camphor, and mineral anodyne. What advantage there is in some cases, from antihysterics, vermifuge antidotes, &c. is plain from the foregoing. Stimulant and carminative clysters also contribute their share, warm bathing, bladders half filled with warm water, as also fomentations, and emollient cataplasms applied to the neck. As to palsy of the pharynx and œsophagus, which usually follows apoplexy or other comatous disease of the brain, it ought to be treated with the remedies prescribed in other species of palsy. But this affection rarely yields to these helps, even the best, unless the spontaneous powers of the animal economy come to their aid.

To proceed to *the organic obstruction of the œsophagus*. This is produced by *tumours* breaking out of the canal itself, or infesting the neighbouring parts ; for the *dissected bodies* exhibit tubercles and sarcoses projecting into the cavity of the œsophagus ; this duct is hardened by callous, or cartilaginous schirrous rings, conspicuous for thickness, situated about the pharynx or stomach, differing none from those which often invade the pylorus ; phlegmonoid ulcers every where occurring in this canal ; stupendous collections of fat, by which the trachea and œsophagus are overwhelmed, tumours proceeding from the aspera arteria ; the thymus obstructed, the thyroid swelled, as well as other glands of the neck ; aneurisms of the aorta ; various disease of the lungs, to which may be added the great size of the liver, by which the superior orifice of the stomach is compressed,

and this viscus not rarely pushed toward the umbilicus; not to mention various other faults usually discovered after long fasting.

These are so many *internal causes*, mostly *wrapped in darkness*, which usually promote obstruction of the œsophagus, and hinder swallowing, for the overcoming of which medical aid is mostly inadequate; wherefore judicious practitioners adhere to the *palliative cure*, which consists in demulcents, namely, decoction of flaxseed, or flowers of mallows, oil of sweet almonds, whey, &c. by means of which the way being lubricated affords some passage to the food; if these prove ineffectual, and all hope of cure abortive, there remains one solace to the wretched patients, that they may protract a tedious life for sometime, by means of clysters of milk or broths, a small part of which reaches the blood through the lacteal vessels opening into the large intestines. I remember to have rescued from death a certain woman committed to my care, by this art for eight or ten whole months. I am aware that there are various histories of fasting for many years, concerning the truth of which there has, not undeservedly, been much controversy among authors. Indeed HERMOLAUS BARBARUS relates that a certain woman lived on *respiring air* alone, forty years. "*Credat Judæus Appella.*" I know by experience, that relicts of digestion have been found (not without the admiration of the bye-standers,) in the body of a certain old woman, much famed for her long continued fasting, even for years, concerning whose honesty it was not lawful to doubt: So easy is it to give credit to a lie, by those who are gaping after lucre.

ANGINA.

WE travel the same road when speaking of Angina, since it assumes no other seat than that of the disease just treated of. The barbarous nomenclature of successive Greek authors, so very acceptable to the schools, which savours more of the work of luxuriant wit *at leisure*, than of genuine learning; I have dismissed: nor do physicians care about it. They know that Angina is *inflammatory*, *catarrhal*, *gangrænous*, or *spasmodic*; and that it affects the pharynx, larynx, and parts near the mouth: that it is subject to various grades and attended with different symptoms. To begin with *inflammatory* or violent *Angina*, called by the French, *esquinancie*, quincy, and by the Gallo-Provinceals,

ankoues, after the Greek word. This species of inflammation is justly reckoned among the severe and very acute diseases. Shivering and chill, vehement fever, pain of the head, flushed countenance, a conspicuous inflammatory obstruction of the fauces and surrounding parts, impeded deglutition and respiration; manifest this disease. This species of Angina affects the pharynx, tonsils, uvula, tongue, larynx and the neighbouring parts, during which, the burning face is swelled in some cases, the anterior part of the neck protuberates, and the tongue sometimes acquires such thickness, that the sick are forced to thrust it out of the mouth, not without the greatest inconvenience.

The inflammatory Angina is contracted, at times, from the access of cold air, while the body is heated, especially in youth. Besides it is sometimes promoted by the recess of erysipelas, anomalous gout, suppression of the menses or piles, &c. Lastly, poisons inflict it, as also the bites of poisoned animals, &c. All are aware that this affection is reckoned among the more dangerous diseases: for some patients are carried off within the first day of the disease, others about the fifth, unless by timely remedy or the powers of nature, they escape death. As the disease advances, an inflamed tongue, froth at the mouth, acute and shrill voice, depressed and intermitting pulse, convulsions, anxieties, &c. excite fear of death. Sometimes is observed a translation of morbid matter, as it is called, which, seceding from the larynx and pharynx, invades the external parts of the neck, or rushes to the lungs; what is to be expected from either metastasis, must be obvious.

It is known also that inflammation of the larynx is far more dangerous, although it sometimes happens that from a large abscess of the tonsils, the sick are in jeopardy of their lives. But inflammatory Angina, as other species of inflammation, terminates by resolution, suppuration, schirrus and gangrene, and also sometimes vanishes with the flow of the menses or piles. It is well to add over and above, that a return of this disease threatens those who are once seized with it, unless by strict regimen, an issue or other prophylactic remedies, it be prevented.

The cure of inflammatory Angina is commenced by venesections, to be performed without delay: namely, blood is taken from the arms, feet, neck, and tongue. Leeches are applied to the neighbouring parts, cups with scarification are fixed on the neck, occiput, scapulæ, &c. Meanwhile whey is to be drank abundantly, nitrous water, and other diluents and demulcents. Moreover, the belly is to be kept free by means of mild purgatives, or stimulating injections prepared for this purpose. An emetic when

it is very urgent, has been long held in estimation. I have indeed seen many plucked from the grave by this remedy; and therefore in these difficult cases, nothing forbids us flying to it, as to a sacred anchor, due regard being had to other circumstances. Narcotics cannot be given without danger. Lastly, diaphoretics are serviceable in some cases, after depleting the vessels, and the due use of diluents, lest the blood be too much heated.

Repercutients (to come to *externals*;) may do great good at the commencement of the disease; namely, bistort, plantain, nettle, oxycrate, syrup of black-berries, catechu, allum, &c. from which gargarisms are prepared: But when this first stage is elapsed, emollients and demulcents are usually prescribed, prepared of milk, althea roots, flowers of mallows, flax-seed, rich figs, gum arabic, &c. Sialagogues are useful in some cases, but hurtful in most. Meanwhile let anodyne and emollient cataplasms be applied, of the roots of althea and lillies, of the leaves of *Hyosciamus*, and herb Robert, of camomile flowers, and saffron, of flax-seed, oil of olives and camomile, which are not only recommended for relieving pain, but also for promoting the external discharge of the humours. A *swallow's nest* is celebrated by the vulgar, which on account of its resolvent quality is considered a specific: nor does experience contradict this. Blisters to the occiput may effect a happy revulsion; sometimes also scarifications do good, inflicted on the tumid parts of the mouth. If lastly, from the closing of the larynx, death seems instantly to threaten, nothing forbids the operation of *bronchotomy*. Besides, in whatever part of the mouth the abscess shews itself, it ought to be opened without delay. When the pus is evacuated, we must prescribe detergent gargarisms prepared of birthwort, agrimony, heal-all and bramble, flowers of St. John's wort and red roses, catechu, wine, honey, spirit of vitriol, and others of that sort. We have already noticed that inflammatory Angina sometimes brings on a schirrous obstruction of the tonsils: wherefore in this respect we add no more, lest we be guilty of needless repetition.

Catarrhal or *spurious Angina*, vernacularly *mal de gorge*, which is contracted from cold variously taken from intense hallooing, from a rainy constitution of the air, &c. excites little or no fever. The fauces, and especially the tonsils, are seized with slight inflammation, from which proceed pustules, whitish with pus, which in a short time vanish spontaneously: in this disposition a difficulty of swallowing takes place, which occasions for the most part little inconvenience. It is well to remark that some have mistaken for spurious Angina that inflammatory obstruction of the parotids, maxillary and other salivary glands,

familiar to children under the name of *oreillons*, concerning which we treated when on the subject of parotids. Moreover, scrophulous and siphylitic persons are subject to a certain species of spurious Angina, which although it put on almost the same appearance, yet differs much from the catarrhal. Of another nature also is that species of Angina, which usually accompanies small-pox, measles, and some malignant fevers, as also that which is occasioned by mercury. These differences are easily perceived, by attending to the antecedents.

The catarrhal Angina is almost void of danger, and its cure is performed by the more simple remedies, unless it be committed to the powers of nature alone, together with a suitable regimen. Venesection is of service to some who are of a sanguineous temperament, and of florid age: and the bland cathartics are not seldom beneficial, in the progress or decline of the disease; provided that large draughts of diluents have not been omitted. The neck is beneficially covered with moist wool: nothing suits the vulgar better than a woolen stocking put round the neck. Others use for the same purpose, hot ashes, pidgeon's dung, the leaves of henbane baked under the ashes, and numberless other resolvents or anodynes of different sorts. While these are using, we ought not to neglect gargarisms of milk, decoction of rich figs, St. John's wort, greater comfrey, &c. which although they may be lightly esteemed by many, are nevertheless, according to my judgment, of no little use.

The *gangrenous Angina*, first described by ARETEUS, if I mistake not, is *epidemic* and *contagious*, and spares no age; but mostly invades boys and children. The commencement of this disease is very obscure and doubtful, on which account the incautious are deceived in its first stage. This *terrible affection* usually commences with pain of the salivary glands of the tonsils, and swelling, rarely preceeded by shivering and chill. The fever, during the first days is mild, about the third it is more or less intense; but the pulse is observed in most cases, depressed and irregular. At that time or sooner, we discover, besides the protuburance of the uvula and tonsils, livid or brown spots, blisters, and mortified membranous fragments not only in the fauces but also in other surrounding parts of the mouth. To these spots in a short time succeed little apthæ spreading wide, the inflamed and painful edges of which have a kind of virulence. In some this vitiated state lies deep, and is not visible; but difficulty of swallowing, hoarseness, difficult respiration, and snorting, and especially the excretion of membranous filaments, clearly shew this disease. For it is proved by *anatomical experience*, that these gangrenous ulcers not only infest the

mouth, fauces and cavities of the nose, but also prevail in the œsophagus, stomach and intestines, as also in the larynx, trachea, bronchia and lungs. Eschars fall spontaneously from the affected and conspicuous parts, or filaments are thrown off, sometimes very broad, and not unlike genuine exfoliation. Meanwhile the mouth emits a very fetid odour; the tongue acquires an unusual thickness; the parotids, as already hinted, swell, and a stinking and mucous saliva, distills or flows in great quantity, &c. To these not rarely succeed vomiting and purging; not to mention cutaneous efflorescences, and various other symptoms more rarely observed. Death threatens those that are seized with this most destructive infection, from the fifth to the ninth day, which being overcome, the disease is protracted to the twentieth, thirtieth or fortieth day.

From the foregoing it is understood, why gangrenous Angina, although it appear very mild at its commencement, excites *the greatest terror*, because its deleterium affects the first passages of digestion, and the lungs; nothing can be conceived more calamitous than when these organs are seized with this disease. This unhappy termination threatens, if the sordid and conspicuous ulcers of the mouth, be widely diffused, and with unusual rapidity; if the blackish and livid eschars adhere very obstinately, and deglutition become very troublesome. Which misfortune taking place, the sick struggle but a short time with death, but about the fifth day of the disease, rarely later, bid adieu to worldly things. It is a maxim among all physicians skilled in practice, that this most ferocious disease is more dangerous in youth and adult age, than in advanced years: lastly, it is known that youth who escape this species of Angina, have long to contend with a morbid constitution of body, or what they call wavering health.

Gangrenous Angina sometimes demands venesection, but it ought to be practised, and rarely repeated, at the commencement of the disease. There is the same judgment concerning emetics; the mildest cathartics appear serviceable, for the belly, during the disease, is to be kept free, but violent purging is with all care to be avoided. There is a difference of opinion concerning alexiterials and sudorifics, which nevertheless I have believed might be exhibited without danger when the blood is not too hot. Antiseptics excel the rest, namely, water impregnated with the juice of lemons, or currants, or other acid, nitre, Peruvian Bark, and others which seem to possess similar virtues, among which camphor has not undeservedly been recommended. Cups applied to the occiput have been of service in some cases. Blisters also to the sides of the neck, have succeeded happily with many,

especially if the suppuration of them be promoted by cathæretics. Scarifications to promote the falling off of gangrenous flesh, have had the worst effect, and therefore are rejected by judicious practitioners, who endeavour to promote it by demulcent and refrigerant gargarisms, among which is highly extolled, the saccharum saturni dissolved in currant water, or infusion of red roses. Lastly, a liniment prepared of muriatic acid and honey, is preferred by many; with this the parts are anointed frequently through the day. This application suits especially with children, for whom the use of any gargarisms is denied.

Convulsive Angina, allied to the spasmodic constriction of the œsophagus treated of above, and mostly associated with it, varies much from the other species of Angina, both in the greater difficulty of breathing, and in swallowing being more impeded, so that even when erect, the patients can scarcely draw breath, while from accurate examination, there appears no mark of redness, obstruction, or swelling about the parts affected. Such is the violence of this disease, that it takes off some patients in a few hours. This very rapid species of Angina, concerning which authors treat with great carefulness, is rarely essential, but mostly appears symptomatic of a prior spasmodic affection, such as tetanus, hysteria, hypochondriasis, &c. Besides a putrid infection of the lungs, thymus, liver, &c. promote it, as is collected from the history of dissections. Convulsive Angina arising from a temporary cause, without any pre-existing organic fault, for the most part occasions needless alarm. But when it follows a severe disorder, or any immoderate evacuation, it ought to be considered fatal. And if it attend a putrid defecation of the liver or lungs, we may think of the funeral. Finally, we have already noticed that convulsive Angina is often mistaken by the incautious, for suffocative catarrh.

As it respects the cure: No pains are to be spared to allay the vehement motion of the spirits, or to promote revulsion. Antispasmodics answer the first purpose, both externally and internally used, if the obstruction permit. Namely, let the patients' snuff up the fumes of feathers, old leather, or other very fetid smell caused by the burning of various matters. Let them inhale the odour of very sharp vinegar, spirit of sal ammoniac, English volatile salt, &c. and take as much as may be of orange flower water, tincture of castor, or others of that kind. Meanwhile let cathartic and stimulant clysters be injected, to loosen the belly, and this is the principal point of cure. Let frictions on the back and lower limbs be kept up: let dry cups be affixed to the neck, occiput, and scapulæ. Blood drawn from the saphæna has been of use in some cases, especially if an accustom-

ed discharge of blood be suppressed, otherwise the practice is not without danger. Lastly, in many cases emetics have done good, when the first passages were overloaded. Nor have cathartics been prescribed with less advantage, if the obstruction admitted, or shortness of time allowed.

SECTION THE THIRD.

OF DISEASES OF THE TRUNK AND LIMBS.

SPURIOUS PLEURISY.

BY an acute pain about the circumference of the breast, as well in the sternum and ribs, as in the clavicles and back, which is usually exacerbated by examination with the fingers, or by every inspiration; the *bastard Pleurisy* is known, which is not rarely attended with dry cough and fever. This flying pain, (*point de côté*,) seems to affect the intercostals and other muscles lying on the thorax, and sometimes verges to inflammation by preposterous remedies, which we may conjecture, if the blood drawn affords the well known signs of inflammation: this by the very familiar translation, threatens the membrane lining the ribs, the lungs, and liver itself, as is proved by anatomical examination. This disease terminates in a short time, that is, it seldom lasts more than seven days; but often recurs if those once affected therewith are not careful. The Spurious Pleurisy seems to arise from the common cause of defluxions, unless it partake of rheumatism or gout, or originate from the retrocession of eruptions on the skin. It is thought void of danger while it spares the internal parts; nor is it considered alarming if it creep from one part to another. From the foregoing it is collected that bastard Pleurisy differs much from that chronic pain of the breast, occasioned by an injury of the internal parts.

The cure is commenced with venesection, if the pain be very severe, or there be signs of plethora; otherwise it is superfluous: nor are emetico-cathartics less beneficial, as often as the first passages are loaded with the depraved remains of digestion. But diluents, demulcents and pectorals are always given with advantage: the milder diaphoretics rarely fail. Anodynes afford relief, but ought never to be prescribed without premising general remedies. With respect to *external* remedies, present relief is obtained from topical emollients and anodynes; such as animal fat, oil of earth worms, ointment of althea, or poplar, tranquillizing balsam, &c. The common emollient fomentations emulate or excel the virtues of these; also cataplasms of the same order, with which some mix soap. Lastly, camphor ob-

tains no mean place among these externals. Vesicatories also upon the pained part, or applied to the scapulæ, may occasion a favourable revulsion. Among the common people the powder of pepper and ginger is highly celebrated, which when applied in a similar manner have the same effect.

DISEASES OF THE LOINS.

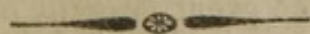
LUMBAGO, which takes its name from the part affected, obtains the first place. It has its seat in the very thick aponeurotic sheath which invests, and as it were collects in one, the extensor muscles. *This pain fixed on the loins*, often partakes of rheumatism and gout, and is encreased by any motion or even touch of the trunk; and by this mark is clearly distinguished from genuine nephritis affecting the kidneys or ureters. The lumbago, although very obstinate, is thought free of danger; especially in old age, when it is supposed to be occasioned by gouty matter. Yet a spurious nephritis does not spare the young, but rather frequently proceeds from the immoderate exercise of the body, so common to this age. This is also sometimes promoted by suppression of the menses or piles. It is necessary to remark as we go along, that the abdominal muscles sometimes suffer a similar affection, which is sometimes mistaken by the unskilful for colic pain, sometimes for inflammation of these organs; and indeed with happy event is it sometimes treated by remedies used against the imaginary disease.

It is obvious that venesection will be profitable, if there be any suppression of sanguineous discharges: but we must use all endeavours in this state of things, that by the suitable administration of the above-mentioned remedies, the pristine evacuations be entirely restored. Cathartics are prescribed with benefit, and other helps which may keep the bowels open. While these are in use, we must not omit diluents and demulcents, such as whey, chicken water, emulsions, &c. The milder diaphoretics deserve praise, if the too great impetus of the heated blood do not forbid. To this end the topical emollients and anodynes directed for spurious pleurisy, are prescribed: but frictions, and pouring of warm mineral waters, or any resolvent decoction from a height, excel these. Fomentations and cataplasms of the same kind also possess their own virtues, these are usually sharpened with camphorated spirit of wine: lastly, the affected parts are well defended by skins with the hair on. But the best re-

medy of all is *motion of the loins*, at first very slight, on account of the great pain which it occasions, but afterwards gradually encreased, which usually carries off the disease.

How much the *febrile pain of the loins* differs from lumbago, is obvious to all; but there is another *very severe pain of the loins*, which might approach near to spurious nephritis, if it did not come on suddenly, and were not contracted from a well known external cause, namely, violent motion of the loins, or a kind of depraved state of the extensor muscles, since the body, when raised, is inflexible and strait. Wherefore it is nothing else than a certain *distortion* of the organs of motion, which occasions most excruciating pain, from the slightest effort, until the parts removed from their genuine situation recover their pristine state: which is effected by the spontaneous power of nature, or the most simple art. I know not by what fatality, even the most skilful surgeons, in the cure of this disease, as also in distortion of the foot, are altogether in the dark, unless that they rashly despise the very simple operation which is mostly committed to the rudest men, who have not even saluted surgery from the threshold, and is daily practised by some good women, not without the happiest success. It is performed by *friction alone* of the part first anointed with oil, by means of the thumb or entire hand, in the direction of the longitude of the back.

We think we ought not to omit, while treating of the affections of the back, a certain *adipose tumour*, which not only grows out from the back, but also from the scapulæ, and often attains to such a size, as to equal the amplitude of the larger gourd. This colourless and soft swelling is called by authors, *Natta*; and justly claims a place in the class of cystic tumours. This follicle partaking of no pain, contains nothing but *fat*, although sometimes it is borne by persons much emaciated. They labour in vain (*laterem lavant*) who attempt to remove this disease by internal remedies: and indeed all are futile, even the choicest topical resolvents, against a disease which is to be subdued by extirpation alone; this operation moreover, is very easily performed, and altogether without danger.



HERNIÆ, (RUPTURES) AND SIMILAR AFFECTIONS.

1. **EVEN** the rude and inexperienced understand that by this name is designated a tumour breaking forth from some part of the abdomen, arising from the falling out or exit of some viscus.

The intestine ileum, omentum, stomach, bladder, &c. are obnoxious to this morbid depulsion. The *most common situation of Hernia* is in the groin, viz. near the muscular ring which surrounds the spermatic vessels; or in the superior part of the thigh, namely, below the tendinous arch which gives egress to the crural vessels; and lastly, in the navel, and some other parts of the abdomen: hence proceed *inguinal, crural, umbilical, and abdominal Hernia*. The more common or inguinal caused sometimes by intestine, sometimes by omentum, and at times by both when confined to the groin, is called **BUBONOCELE**, but when thrust into the scrotum it is named **ENTEROCELE**, which last often becomes so large as to reach almost to the knees. But it is not always rightly distinguished, whether this tumour contain intestine, omentum, or both: nor is *Hernia vesicaris*, or of the bladder more easily known, which has a very similar situation. Yet the differences of these *Herniæ* may be ascertained by peculiar signs. The *intestinal* for instance, being more uniformly circular, is endued with a peculiar elasticity: but the *omental*, the surface of which is unequal, appears more flaccid. It is well known that the intestinal duct has been found bent or doubled in the most common *Herniæ*; but there occurs another species of intestinal *Herniæ*, *very rare indeed*, and if I mistake not, first observed by **RUYSCH**; which is formed by a *production* like a sack, of one side of the intestine, on which account, the canal always affords free passage to the contents: But this species of *Herniæ* is with difficulty distinguished in the living body, and is only detected by *dissection*.

Nor is the *Crural* at times easily discovered, having the situation and appearance of *bubo*; on which account it is little wonder if the incautious or unskilful, being deceived should set about opening this imaginary bubo, and precipitate themselves into a fatal error.

Arduous or violent labour, straining of the body, a fall from a height, immoderate hallooing, vehement cough, frequent sneezing, difficult parturition, &c. are so many usual causes of *Herniæ*, which also take their rise from a peculiar or congenital constitution of the body. It is well known that *Hernia* is very easily cured in youth: but it is otherwise in adult and old age. This affection is thought to be troublesome more on account of its tediousness than pain, so long as the relaxed abdominal ring allows entrance and outlet to the alvine fæces, but it happens otherwise if this matter be affected with morbid constriction; so that the circuit of the intestinal contents is altogether suppressed: which misfortune, especially in the true intestinal *Herniæ*, is speedily followed by the *iliac passion*, in which, if long pro-

tracted, there is great danger of inflammation and gangrene. This *unhappy termination*, as announced or manifested by very severe tormina, hiccough, cold sweats, obscure and intermitting pulse, &c. all which symptoms are considered as forerunners of death.

If nothing more than usual happen, the protruded intestine ought to be gently pressed up, that it may return to its place, which is very easily performed, even by the patient himself when lying down, provided the size of the tumour be not great, in which case the *intestine ought to be replaced*, by the expert hand of a surgeon. But when the too great constriction of the ring prevents this expulsion, we must endeavour to bring about a relaxation of it; this is promoted by venesections, emollient clysters, fomentations, and cataplasms, semicupia, &c. *bandages*, or *trusses*, lest in time, the canal, forced from its due bounds, should again protude. Various officinal astringent plasters, are also brought into use, or cataplasms prepared of the flour of beans, the roots of Solomon's seal, greater comfrey, &c. Nor ought the internal use of vulnerary infusions to be despised; ptisans of comfrey root, &c. I know not for what reason the muriatic acid taken by the mouth has become almost obsolete: this remedy of a *Prior of Cabrieres*, as they say, was very celebrated so long as it was sold for an *arcanum*; nevertheless I am authorised, by experience to assert, that it has been of great service to many adults; but it is necessary that the patient while using it, should keep his bed for forty days at least.

But when in *Herniæ* of long standing, the parts protruded without the cavity of the abdomen, have contracted adhesion, or the ring, too much constricted, will not suffer dilatation, so that the surgeon in vain attempts to return the intestine, and the symptoms become urgent; it is expedient without delay, to have recourse to the usual *section*, which indeed demands great skill and dexterity in the operator; besides that it terminates unhappily, if the intestine be seized with inflammation or gangrene; which misfortune is usually brought on by the incautious handling of the intestine to be returned, or too long delay in sending for assistance. Nevertheless there are not wanting in this deplorable situation some remedies, which may procrastinate fate, but very rarely avert it. This *operation* is indeed more judiciously and easily performed *during the halcyon state*, or remission of the disease, that by a timely cicatrix the ring may be closed, or made narrower; and thus the passage for the intestines and omentum shut up: For this section is considered free of danger, provided the strength will bear it; otherwise it is justly thought difficult and highly dangerous. Concerning which it may be observed, by the bye, that it would not be ab-

surd to try another and perhaps a *safer and easier method*; namely, by directing the knife so that the superior part of the constricted ring may be cut; afterwards by the well known grooved conductor, let it be introduced through this wound into the Hernial sac; by the help of which the forceps may find an entrance into the said sac, which might be opened in a moment without hurting the intestine: in this way, if I mistake not, might be performed *safely* and with the *greatest* celerity, an operation usually attended with excruciating pain, and the greatest risk of life. But I submit this method to the decision of skilful anatomical surgeons, to be tried upon dead subjects only.

Next to inguinal and crural Herniæ, the *umbilical* are more frequently observed, being situated near the middle aponeurotic line of the abdomen; but other abdominal Herniæ very rarely occur. The *stomach* is pushed from its situation almost in the same manner, but I can easily believe from anatomical observation, that this viscus more frequently breaks through the confines of the diaphragm, than of the abdominal muscles. Whatsoever part abdominal Herniæ occupy, they are more prominent in coughing and holding of the breath, by which mark especially they may be rightly distinguished from other tumours: which nevertheless, does not hinder that some unskilful ones have taken them for abscesses, and have opened them, to the fatal injury of the patients. Yet the *omental and most common umbilical Hernia* is with difficulty known, because it often contracts adhesion, and does not protrude outward. It does not escape anatomists, that this kind of herniæ is frequently found in dissecting bodies. It is well to remark that umbilical Hernia growing to a great size, besides an omentum mostly schirrus, does not unfrequently contain a certain portion of the stomach or colon, whence arise mostly troublesome tearings, or a certain species of heart-burn, in which most physicians are at a loss to prescribe, who exasperate the disease by the preposterous use of a multitude of remedies, but never mitigate it. Umbilical and other abdominal Herniæ portend little danger, although they are less easily confined, but they very rarely incur the misfortune of strangulation, and hence are scarcely ever submitted to the bloody operation of surgery. Lastly, no practitioner is ignorant that women are more prone to these, after difficult or frequent parturition.

Hernia of the bladder in both sexes, is indeed more frequent than is commonly supposed. In men it puts on the appearance of hydrocele; but this species of Hernia is made plain by some degree of *compression*, and many patients, taught by their own experience, cannot make water by any other means. Yet sometimes a complicated Hernia of the bladder is met with; for

besides other viscera usually observed in other *Herniæ*, it sometimes contains a part of the vagina. Dissection teaches us this. No wonder if in this elongated process of the bladder, stones should often occur; concerning which various writers have made mention. It must not be concealed that this part of the bladder, driven out of its native situation, is in a short time agglutinated by the surrounding parts: hence this affection can be removed by no art, unless it be very early attended to, concerning which it is well to consult the *second volume* of the *ROYAL ACADEMY OF SURGERY*, the authors of which seem to have entirely exhausted this subject.

The *uterus* also affords a species of *Hernia*, in gravid women, which on account of its form differs much from the rest, and hence is very easily known, and restored by the most simple art, provided it be done in proper time. Yet sometimes every attempt is vain, and the only hope of the parturients, consists in the timely performance of what is called the *Cæsarian section* which operation experience proves to have succeeded well under these circumstances. Besides the above mentioned viscera, the spleen, and other parts of the abdomen are sometimes propelled out of their situation, and even out of the body, and require the same cure. Nor do *Herniæ* break forth from the muscular surface of the abdomen alone, but according to writers of unblemished integrity, the *foramina ovalia* and other bony openings, have given outlet to the intestines and omentum. But we think these ought to be passed by, as uncommon and very rare.

2. With this coincides a certain *spurious umbilical Hernia*, which on account of an aqueous humour collected therein, is called *HYDROMPHALON*. This tumour obtains a kind of transparency, for which reason it differs from *Hernia*. Practitioners know that infants are subject to this, but it not rarely takes its rise from ascites, in adult and advanced age, so that the serous abdominal collection finding itself an outlet through the relaxed and yielding umbilicus, is confined within the flexible and extensible skin, and is often collected there in such quantity, that the integuments ceasing to be elongated, are torn and ruptured; so that serum being evacuated through this opening, not only the tumour subsides, but also the whole abdomen becomes even. Wherefore in this complicated disease, if paracentesis be thought proper, it may be most suitably performed in this umbilical tumour. Finally, there are not wanting flatulent umbilical protuberances, which are to be treated as congenital.

3. It remains that, by way of conclusion, we give a sketch of another and unheard of external disease of the abdomen, ob-

served by us not many years since; which on account of its peculiar situation, may obtain the name of **HYPOGASTROCELE**. It arises from a depraved constitution of the fat surrounding the abdomen, not much differing from schirrus, on account of its stupendous hardness. The advances of this disease were very slow, in a very noble woman about her fiftieth year. At first, the abdomen was without pain, gradually elevated, but in time this tumour became troublesome, and excited a slow fever. The stupendous extension of the integuments, from the great mass of adipose substance surrounding the whole abdomen, did not hinder its stretching even to the hypogastrium, and like bronchocele, it hung doubled even to the middle of the legs. Meanwhile the other parts became emaciated, and as if exhausted by supplying the great abundance of abdominal fat. This very eminent woman died of the disease, having been worn down with emaciation and pains during the three or four months from the commencement thereof. *On opening the body*, this wonderful thickness of adipose substance presented to view, which about the ilia exceeded seven inches; there was, also to be seen an umbilical **Hernia**, projecting very little, and grown to the navel. Moreover, the abdominal viscera suffered the greatest destruction and were not only found to be schirrous, but contaminated with purulency and putridity. We were not indeed aware of these visceral injuries, but all remedies whatever were found inadequate to remove them: for various and innumerable remedies were thought of by a host of physicians and surgeons, which were altogether inert, and sometimes hurtful, wherefore we will not lose time by mentioning them. **AMATUS LUSITANUS**, has given a history, but with little accuracy, of an affection nearly similar; namely, of a tumour weighing twenty-five pounds, originating from the groins, and hanging over the legs; but whether the character of both diseases was the same, may be doubted.

DISEASES OF THE GENITALS.

1. **PHYMOSIS** and **PARAPHYMOSIS**, lead the dance, and are to be reckoned among the more common diseases. The *prepuce* or that process of the teguments which covers the glans, is often seized with inflammation, sometimes drawing its edges tight *above*, sometimes *below* the glans, whence proceeds the difference between *Phymosis* and *Paraphymosis*. From the in-

flamed part in both cases, like as from a burn, arise blisters, which are called with us, *crystallines*. This species of inflammation often partakes of the venereal virus; which also takes its rise from violent coition, *cum virgine defloranda, vel cum cynedis*. The apex of the penis is sometimes so covered and confined, that the urine scarcely passes, nor can it be remedied, by reason of the little ulcers lurking under the swelled prepuce. Another danger threatens Paraphymosis, to wit, gangrene of the glans, arising from too great constriction, as if by a cord drawn tight around it.

Phymosis and Paraphymosis ought to be treated like other inflammations, wherefore, *venesections* are of service, as also diluents, demulcents, paregorics, and other incidental remedies usually prescribed in this state of things: in aid of which come topical emollients and resolvents, namely, cataplasms prepared of crumbs of bread, of the flowers of elder and camomile, which as experience teaches, excel the rest; or let the parts be frequently fomented with warm milk or althea water. Plaster of mucilages, as occasion requires, or some other of like efficacy, deserve their own praise. Emplastrum de vigo, mixed with balsam of Peru, or reduced with oil of guaiacum, has been recommended by some. Washing the glans with the patient's urine, is serviceable; which is made to answer this purpose by compressing the margins of the prepuce while it is passing. Or warm wine, vulnerary and detergent decoctions, &c. are injected: by means of which not only the ulceration of these parts is guarded against, but also their agglutination prevented. But when the case is very urgent, it must be scarified, circumcised, or relieved by some other section, that by dissolving the obstruction the danger may be averted. As it respects the *phlyctenæ* or blisters, they are usually fomented with camphorated spirit of wine, or limewater impregnated with sal ammoniac, or other liquor of like virtues, against approaching gangrene, to which every one knows the genital organs to be liable.

2. The genitals of both sexes, (to prosecute the subject) are disfigured by *various tubercles*, which in respect of their form have received different names. For instance, they are called **PORRI**, **CRYSTÆ**, **CONDYLOMATA**, &c. Very numerous ones sometimes occur on the glans or prepuce, sometimes dry, sometimes moist, but they occasion little inconvenience, although they excite no small suspicion of lues. Wherefore before the cure is undertaken, we must enquire particularly, whether they arise from latent venereal virus; in which case it is expedient to have recourse to the above related specific method. Nor yet do these tubercles vanish by these remedies even the best, but require

also external treatment. This is quickly done by extirpation with forceps, or simple ligature, if the base of the tumour allow. The cure is more tedious with cathæretics, namely, burnt allum, to be reckoned among the milder, powder of savin, red precipitate, &c. which are sprinkled upon the part moistened with saliva, or mixed with Basilicon ointment. Some apply phagœdenic water with this view, or butter of antimony, lunar caustic, and others of that kind, which are cautiously to be used, lest the neighbouring parts endued with exquisite sensibility, become inflamed by their irritation.

Another species of tumour, although very rare, is observed on the genitals, which is not to be omitted. This swelling is known by the name of *Node*, and is mostly contracted by the too great ardour *æstuantis tentiginis*; it affects the corpora cavernosa, and is attended with no pain. Nor is this tumour visible unless when the penis is erect, which otherwise is sought for in vain. It is nothing else than a kind of protuberance like a hernia, of these swelling little sacs, which admits almost of no cure, since the affected part can never be subjected to any compression, the genuine remedy for these dilatations. Some recommend the styptic plaster of *Crollius*; but topical astringents even the strongest are useless, since even the slightest stiffness of the penis prevents the efficacy of the most powerful.

3. The genitals of both sexes are obnoxious to certain *exulcerations*, scarcely differing, in my opinion, from the little ulcers which usually invade the mouth of sucking children, or the nipples of nurses. These ulcers mostly take their rise from recent or old venereal virus, and also proceed from filthiness alone. Those contracted in the camp of Venus are designated by the name of *chancres*, some of which are indolent and whitish, and confined within certain limits; are not deeper than the surface; others creeping more deep and wide, attended with pain, and mostly contaminated with fetid sanies, the lips of which appear inflamed or callous. Nor are there wanting ulcers affecting the frœnum of the prepuce, which work themselves a lodgment in the cavity of the urethra. This affection is often attended with gonorrhœa virulenta, buboes, and other symptoms of lues venerea, for which reason it is sometimes very obstinate. *Rhagades et Fissuræ*, (chops and fissures) of the genitals both of men and women, are altogether of another sort, which are healed in a short time by oil of eggs, *Galen's* cerate, or any other demulcent liniment.

Ulcers which do not penetrate deep, although they proceed from neglect of cleanliness, or from some venereal taint, are removed in a short time by the very simple lotion with warm wine

or mineral water : But ulcers of *a bad kind* ought to be attacked *with other weapons*. Venesection for instance, is of use if their surface be affected with inflammation ; and in this state fomentations and emollient cataplasms are no less beneficial. When the inflammation is abated, suppuration must be promoted by the help of ointments prepared for that purpose ; which being effected, burnt allum, powder of savin, red precipitate, and other exsiccants and detergents well known to experienced practitioners, ought to be used. When these topicals are ineffectual, it is necessary to recur to mercurial ointment, to fumigations of cinabar, and the other more powerful remedies. *Callous ulcers* are usually touched with the stronger cathæretics, namely, phagædenic water, *divine water of Fernellius*, collyrium of *Lanfranc*, butter of antimony, or lunar caustic, nevertheless we must beware lest we rouse the hornets and excite inflammation. After allaying the pains arising from these applications, digestives complete the cure, namely, the cleansing ointment of parsley, the red drying ointment, ointment of white tutty, &c. to which may be added oil of myrrh, *per deliquium*, which is much approved by some well skilled in surgery. While these are in use, we must attend to the blood, namely, by a suitable regimen, by mercurial cathartics from time to time repeated, by sudorific medicines, or genuine antivenereals, which wonderfully assist the operation of external remedies.

4. What is to be understood by PRIAPISM or SATYRIASIS, no man of letters is ignorant. This lustful itching of the genitals often exercises such tyranny, that it hurries the patients, deaf to all persuasions and threatening, even to *madness*. This most disgraceful disease affects both sexes, changing only its name, and is in a small degree mitigated, only by the emission of semen. But the patients are inflamed with so great a desire of venery, that even after repeated copulation they are not at all satiated. *Satyriasis* mostly invades the young, the duration of which at this age, is not very long ; but it sometimes comes on with such violence as to occasion death. Nor does it spare more advanced age, in which it is thought not to be dangerous, but far more obstinate. Debauchees are obnoxious to it ; those excited by the rage of love ; those who are intoxicated by very facetious or lustful conversation with their paramours ; those who are very fond of reading lascivious books ; or who use cantharides in order to excite lascivious venery ; and lastly, high livers, or those who indulge in wine or rich dainties. This lustful priapism is also promoted by cancerous ulcers of the bladder, great size of the kidneys, double spermatic vessels, and other organic faults, which *dissection* exhibits.

In this state of things, we must use our endeavours to allay the fierce motion or the spirits, and to regulate the distracted mind by admonition or threats. On which account we must let blood freely, and with a similar view refrigerants and demulcents are to be copiously drank, in which number are milk, whey, lemonade, barley water, and emulsions, chicken or veal water, impregnated with nitre, &c. Sedatives of camphor and water lillies, as also of the seeds of palma Christi, afford present relief. Against this disease, preparations of white poppy, lettuce, and pursley are very much celebrated. Nor are baths and semicupia to be omitted, being very profitable under these circumstances. Lastly, those who are seized with this shameful disorder ought to avoid, as worse than a snake, brothels, lustful thoughts, obscene books, lascivious conversation, and in short all sports of the mind, which may stir up, or exacerbate the disease.

5. IMPOTENCE FOR VENERY follows this insatiable desire of coition, which some foolishly refer to witchcraft. If it arise from any chronic fault, it vanishes gradually after the primary disease is subdued: otherwise it baffles all remedies: if it originate from a mind beclouded with prejudices, or from any silly bashfulness, let the fearful ones be excited to courage, and there needs no other remedy. Lastly, that impotency is easily overcome, which invades gluttons and those who are devoted to lascivious delights; but it is thought incurable if it depend on any organic fault. Very *nutricious* diet often performs the whole cure, the mind is to be composed by wholesome precepts, to cheerfulness, and to agreeable exercises of the body. Let cows' milk be exhibited at once, also soft boiled eggs, jellies, baked or boiled pigeons, almonds, filberts, and pistachio nuts; generous wine, chocolate, and others calculated to restore the powers of the body. There are some who with the most destructive consequences, advise the common use of cantharides, to those who have been exhausted by debauchery and luxury. But this remedy imparts very momentary vigour, and usually brings on bloody urine, nephritic pain or other injury. Lastly, some by the blandishments of noted paramours, by licentious feeling of their breasts, by impressing kisses upon their lips, or by *whipping*, prepare themselves for their sweet enjoyment, while haunting the bawdy-houses: but these are more like heinous crimes, than the genuine precepts of medicine.

6. GONORRHÆA, vernacularly called *chaudepisse*, although the most familiar, is to be reckoned among very intricate diseases. Its character often lies in obscurity, since its causes are with difficulty evolved, and the genuine source of the disease is

withdrawn from our scrutiny ; and lastly its cure is very troublesome. Nor do the differences of gonorrhæa appear more clearly, even when examined in the more indelicate way. Nevertheless, it is necessary to explain them according to ability ; I conjecture therefore, from experience, that there is a *quadruple* species of gonorrhæa, namely, the *internal virulent*, which is very familiar, the *external virulent*, the *simple*, and the *spurious*. But each species has its peculiar modes and grades ; and lastly their association is so ambiguous, that it needs an *Œdipus* to distinguish them. Yet this is the disease which the fathers in the art despise, and the cure of which is mostly committed to the unskilful and ignorant.

Internal virulent gonorrhæa (to prosecute my design) shews itself about the fourth day, from an impure embrace, and rarely after the twelfth. When it comes on, there distils from the penis a kind of serous humour, which in time becomes yellow, or contracts a kind of greenness, becomes thicker and sometimes fetid. It cannot be doubted that this matter partakes of pus, since even the plentiful discharge of it, does not hinder a copious flow of semen in coition : which indeed proves beyond all doubt the truth of the assertion. This species of gonorrhæa is attended with pain and heat in making water, and this pain seems falsely to have its seat in the extremity of the glans ; which nevertheless, in some cases prevails through the whole course of the urethra or near the root of the penis. Meanwhile the urine flows with difficulty, or is altogether suppressed : the severe pains arising from this cause are exacerbated by the erection of the penis, which in some is twisted like a rope, on which account the gonorrhæa attended with this symptom, is called among us, *chaudepisse cordée*.

Various other diseases arising from the same cause, are often associated with virulent gonorrhæa, namely, inflammation and tumours of the prepuce, which are called *crystalline*, ulcers occurring every where, buboes, ophthalmia, &c. Besides, in this species of gonorrhæa, that defluxion of the humours on the testes, and its coverings is very common, which has the vulgar name of *chaudepisse tombée dans les bourses*. This symptom owes its rise to the suppression of the flow of the virulent matter, which is usually brought on by riding, loose living, and astringent injections prescribed by some sciologists &c. This condition of the disease is rashly called by some, *dry gonorrhæa*, since it is no more proper, in my opinion, to designate by this name, the *venereal dysury*, attended with most severe pains and burnings in making water, which, if we except the flow of the

humour, puts on the appearance of virulent gonorrhœa, and brings on similar symptoms.

Virulent gonorrhœa when recent, and attacked with timely remedies, is easily cured, but every one knows that when inveterate it is exceedingly troublesome, since, among the numberless venereal disorders, this only occurs, which refuses to be subdued by even a full mercurial course. But when it runs through its stages in one tenor, or without any violent symptom occurring, and is not extended beyond the fortieth or fiftieth day, it very rarely imparts lues venerea; yet if by ill-timed cure, the gonorrhœa be checked too soon, or by the carelessness of the patients or physicians become chronic, it is considered as an indication of lues venerea, and often baffles the very best remedies. Lastly, when of long standing, it brings on atrophy, and sometimes death. *Dissections of bodies* exhibit the *source* of this disease in the *prostate gland*, and also manifest an injury of the *vesiculæ seminales*, as also exulceration in the urethra, from the coalition of which when of long standing, arises a callous cicatrix, somewhat protuberant, which by narrowing the canal, hinders the free exit of the urine. This is the imaginary sarcosis, to which chronic dysury is usually referred, and remains a long time after gonorrhœa is removed.

The cure is mostly begun with venesection; after the pains are abated, mercurial cathartics are of great service; but they are not to be exhibited before the fourteenth day of the disease, yet after this time they ought to be often repeated. Meanwhile endeavours are to be used through the whole stage of the disease, to inject demulcent and emollient clysters, which not only preserve the bowels loose, but also, like an internal bath, assuage the pains. Diluents are properly administered at the same time, as also demulcents and mild aperients, among which those most in use are milk, whey, emulsions, water impregnated with nitre, ptisans of althea roots, grass, strawberry, water-lilly, &c. The aperient mineral waters, as well cold as warm, also deserve praise, which seem to answer the purpose of these medicines. Diaphoretics are recommended by some, but they ought not to be exhibited before all things be restored to their halcyon state. The same may be said of vulneraries and detergents, the best of which is lime-water diluted with milk: but this remedy ought to be given with a skilful hand. Hypnotics also should be prescribed with caution, namely, laudanum, diacodium, pillulæ de cynoglossa, &c. but if the pains be urgent they must be administered. Camphor is given more safely, which although it does not possess so great efficacy, yet has a less temporary effect. When by the proper use of these remedies, all the symptoms

have abated, and there is a due flow of the purulent matter, we must attempt the cure of the latent ulcer: with this view are successfully prescribed balsam of Copaiva, of Canada, China turpentine, and others of a like nature. If these do not succeed, nothing forbids having recourse to dragon's blood, alum, catechu, and other astringents, all other things agreeing. The same effect, and with less hazard, is produced by the various martial waters, which penetrate to the inmost recesses of the body. But if after all these remedies have been exhausted, the gonorrhæa do not at all yield, we think it would not be improper to try a certain remedy spoken of by GARIDELLUS, treating of the bladder, in his *History of the Plants of the Province of Gaul*: it is composed of Hypocystis, gum guaiacum, cochineal and cantharides. This remedy, in no wise despicable, may be used only in this condition of things, namely, against very obstinate gonorrhæa, which will not yield to any other means.

Nor ought *external remedies* to be omitted, some of which take the palm from the *internal*, among which nothing indeed is found more efficacious than mercurial inunction upon the scrotum, and neighbouring parts. About one drachm of Neapolitan ointment is used for this purpose, which must be repeated four or five times in the course of the disease, interposing three or four days. If at the commencement of the disease, the pains be very severe when the penis becomes stiff, they may be allayed by fomentations of milk, decoction of althea, or other emollients. Semicupia are happily used against ischury, or this symptom is assuaged by injecting into the urethra milk, oil of sweet almonds, decoction of althea, of flaxseed, &c. When the disease decreases and the symptoms abate, lastly, when the humour with which the glans penis is moistened becomes thick and whitish, injections prepared of *panacea*, calomel, or plantain water are profitably exhibited. In like manner are happily used the various warm mineral waters. If all these fail we must have recourse to astringent injections, composed of bistort, tormentil, horse-tail fern, pomegranate, alum, dragon's blood, &c. But to confess the truth, these last astringent remedies are not exhibited without danger, and are always disagreeable to experienced practitioners.

Among the remains of inveterate gonorrhæa, nothing is so grievous to the patients as *the constriction of the urethra* which brings on dysury or ischury. We have above noticed that this originates from the scar of chronic ulcers somewhat protuberant and callous, but not at all from excrescences, as supposed. It now remains candidly to unfold the rational method of cure, confirmed by multiplied experience. Wherefore if the urine be

altogether suppressed, having premised general remedies, it must be drawn off by means of the catheter, as the case is very urgent. Afterwards having instituted a suitable regimen, we must persist a long time with diluents and demulcents. Nor are injections, fomentations, and semicupia prepared of emollients, less beneficial; which succeeding, it is expedient to have recourse to *leaden* or *wax rods* (bougies) of different thicknesses, which being first lubricated with oil, are cautiously to be introduced, like a catheter, into the urethra; by the help of which the canal is gradually dilated, and the obstruction obliterated, whereby a way is made for the more free discharge of urine. If these simple helps be unequal to overcome the morbid obstruction, *other bougies made of cathæretics and maturants*, ought to be employed, by means of which the scar is again made sore, and afterwards consumed by suppuration; the principal point of cure turns on this, to prevent another constriction from the recent cicatrix, by continuing for a long time in the use of the more simple *bougies*. Lastly, the most rude and inexpert is aware what is to be done in *dry gonorrhæa*, in which the object is, to soften and relax the rigid and constricted organs; this is effected by venesections, diluents, demulcents, and internal paretics, as also by semicupia, fomentations, injections, clysters, &c.

External virulent gonorrhæa, affecting the glans and prepuce is promoted by inflammation and ulcerations lurking between both parts; from which, when the urethra is dry, a purulent humour distils in small quantity, becoming more plentiful by pressure. Although this affection seems very slight, yet it is not altogether void of danger, and requires nearly the same cure prescribed for internal gonorrhæa, excepting injections into the urethra, and the other remedies against dysury and strangury, which never attend this species of gonorrhæa. Moreover the use of vulnerary and detergent washes affords present relief, the place of which is sometimes filled by pure wine, a little warm. This affection often takes rise from internal gonorrhæa, with which it is implicated, namely, when any kind of virulent humour from native or contracted phymosis, is suppressed, and collected under the prepuce; from the retention of which proceeds this injury of these parts; in this state of things, nothing is to be omitted for uncovering the glans by emollients; or the fault is obviated by suitable injections already mentioned, and is mostly cured with ease.

Simple Gonorrhæa is nothing else than a dropping of genuine semen, which is attended with no pain, and partakes not at all of lues venerea. This whitish matter flows out spontaneously

and in small quantity together with the urine, before or after making water, which also is excreted while at stool, or after a clyster, or at any time. It sometimes arises from superabundant semen in the luxurious, or those who live a life of celibacy, especially if they delight in obscene books, conversation, or thoughts; the affection arising from this cause excites little fear, but it is thought more dangerous if it owe its rise to a laxity or atony of the organs, as sometimes happens in the weak and phlegmatic. This species of gonorrhæa is considered dangerous when it originates from a depraved diathesis of the blood, to which the cachectic and scorbutic are prone, whose strength as they approach to atrophy, is gradually exhausted. Nor do those occasion less terror which are brought on by some organic fault; which threatens persons who labour under long continued virulent gonorrhæa, or who have addicted themselves to licentious venery. To comprise all in one: If this species of gonorrhæa be owing to no fault in the receptacles or emissaries of the semen, nor in the humours, it is altogether without danger, and easily subdued; otherwise this kind of flow causes much trouble to the physician.

Blood-letting is rarely necessary *in the cure of simple gonorrhæa*, but cathartics are thought highly beneficial; rhubarb, cassia, tamarinds, magnesia, and others of the mild kind ought to be used. If all other things agree, temperants and demulcents are useful, namely, milk, whey, emulsions, lemonade, or water impregnated with nitre, camphor, &c. Some have been relieved by depurants, antiscorbutics, vulneraries, diaphoretics, &c. As in the cure of virulent gonorrhæa, vulneraries also, and roborants are of service, namely, balsam of Copaiva, of Canada, and turpentine, red roses, and pomegranate, Peruvian bark, dragon's blood, martials, or mineral waters of the same nature. But topical astringents seem to do little good, yet nothing hinders that they may be tried; nor are aromatic, roborant and cold baths to be despised.

The spurious Gonorrhæa, when free of pain or itching heat, is often scarcely distinguished from this last. Yet these diseases have a different termination; to wit, the simple gonorrhæa, as already hinted, when long continued, threatens atrophy; and no wonder, since it is the genuine discharge of semen; but the spurious, although chronic, occasions little inconvenience, because of the difference of the matter discharged, which is supplied by the prostate and neighbouring glands. The spurious gonorrhæa seems allied to the *fluor albus* in women, and is not more easily subdued. To this species ought to be referred the gonorrhæa occasioned by drinking fresh beer, which is remedied

by a little spirit of wine. Whatever be the cause of spurious gonorrhæa, it is subdued by suitable remedies, provided it be not deeply rooted; in which case it is thought to be very obstinate. Having premised general remedies therefore, if the case require it, temperants and the milder aperients are brought into use, among which the best are acidulated mineral waters, which multiplied experience testifies to have often succeeded well. Diaphoretics deserve their own praise, which usually determine the morbid matter mixed with the blood, to the pores of the skin. On this account, in a doubtful case, it is proper to use balsamics, and astringents, since from the ill-timed suppression of this excretion, may be excited serious diseases, unless prevented by the actual cautery. But few are pleased with this tedious remedy, against a disorder that is free from danger, and otherwise occasions no inconvenience.

Having done what is directed for the various species of gonorrhæa, order requires that we subjoin some observations concerning *nocturnal pollution*. This involuntary venery is mostly excited by lustful dreams, it is also promoted by the sight of a beautiful woman while awake, by the blandishments of paramours, &c. This affection is not void of danger, if long protracted, since it often ends in simple gonorrhæa, which under these circumstances is with difficulty subdued, and threatens tabes. It very familiarly invades young men who are excited by the ardour of love, or who indulge too much in immodest or lascivious conversation. On which account the chief cure depends on interdicting every wanton custom; and there is commonly no need of any other remedy. Meanwhile cooling broths are useful, water impregnated with nitre or lemon juice, emulsions, &c. Anodynes are highly esteemed, viz. water lilly, camphor, or any other directed for satyriasis, the virtues of which seem to be emulated by the mineral anodyne liquor. By some in whom confidence may be placed, shepherd's purse and other astringents are recommended. Some are fond of a cataplasm made of wine and strawberries, applied to the region of the pubis. Nor lastly, are roborant and even cold baths to be despised, which may afford great assistance to other remedies.

7. It is necessary before we proceed further, briefly to treat of **HÆMORRHAGE OF THE PENIS**, which flow proceeding from the blood vessels of the part itself, ought rightly to be distinguished from bloody urine originating from the bladder and kidneys, in which the blood is intimately mixed with the urine, while it distils pure in the genuine hæmorrhage now treated of. Of no other nature perhaps is that discharge of blood from the urethra, although very rare, to which, like the catamenia, some

men are subject, and in the same manner as in the weaker sex, is protracted from puberty to the fortieth or fiftieth year of their age. But there is the greatest difference between the causes and stages of these two states. Young men addicted to wanton venery are prone to genuine hæmorrhage of the penis, also debauchees who with wicked design use cantharides to excite venery and pleasures. Whoremongers incur this danger, who frequent brothels while under virulent gonorrhæa; to whom it sometimes happens that *when all in a lather*, they emit during coition, blood instead of semen. Hæmorrhage of the urethra excites great fear, especially if long continued: since from this not only arises ulceration of the canal, but also tabes. This disorder is to be treated like other hæmorrhages, and moreover, requires injections of milk and sugar, barley water, red roses, &c.

8. INFLAMMATION OF THE TESTES AND SCROTUM, concerning which we have slightly treated already, is mostly occasioned by a defluxion of the virulent humour in gonorrhæa, upon these parts: But it sometimes has another origin, namely, from lues venerea, from a stroke, from violent compression, or the incidental causes of other defluxions. But if this obstruction be owing to suppressed gonorrhæa, when that is entirely restored, the tumour vanishes in a short time. Concerning this very common solution of the disorder we cannot doubt, although in what manner it proceeds we cannot clearly explain; nor yet, even if gonorrhæa do not return, does this disease refuse to be subdued, which has its first and last seat in the *epididymis*, that often after the complaint is removed, remains for a long time swelled and indolent. Inflammation of the testes and their coverings mostly terminates by resolution, yet it sometimes brings on suppuration, fistulous ulcer, schirrus, and gangrene, hydrocele, sarcocele, &c. If it arise from contusion of the testes, it excites vomiting, convulsions, and other distressing symptoms. In this state of things the scrotum is often consumed by gangrene, so that the testes appear altogether naked: but by the wonderful power of nature, this involucrum is in a short time re-produced, and its contractility renewed.

As in other inflammations, the obstruction of these organs requires *venesections*. After the vessels are depleted, and inflammation abated, the milder cathartics are given; especially if this swelling be caused by suppressed gonorrhæa. At the commencement of the disease, cataplasms prepared of a combination of emollients and resolvents afford present relief. Maturation also are useful, if it proceed from an external cause. Among resolvents, *Cutler's earth* is not undeservedly recommended, (that is, what falls off the grindstone as it turns round) mixed

with oil, and vinegar of roses, and applied like a cataplasm. Some advise the leaves of henbane, dressed under the ashes, but this stupifying topical cannot be applied without some danger, to a part verging to mortification. But the best of all are mercurial inunctions upon the scrotum itself, or cautiously repeated on the neighbouring parts, if the swelling participate of lues venerea: fumigations of cinnabar answer the same purpose. Lastly, let emplastrum de vigo be applied to carry off the remaining protuberance of the epididymis. But when this defluxion of humours is ascribed to any contusion, plasters of diabolitanum, of cicuta, or other resolvents of that sort are happily applied. While these are in use, we must not omit emollient and anodyne clysters, proper regimen, &c.

9. These organs are liable to *other species of tumours*, among which HYDROCELE claims the first place; this is a cystic tumour or what is called tunicated, growing to the testes and their involucra. This affection at first gives little trouble, and is also mostly concealed, so that it is often carried a long time by the sick, without knowing it, till by its encreased size it becomes visible; in which situation it is distinguished from other tumours by a kind of fluctuation, and contains serum mostly limpid, but sometimes bloody. Another species of hydrocele is observed, to which persons labouring under hernious dropsy, are liable: this last has its seat in that process of the peritoneum, which receives the intestine or omentum when out of the abdomen. Hence it appears how easily the fluid collected there is propelled into the cavity of the abdomen, by even the slightest pressure; and this mark gives the character of the said tumour, so long as it consists of hernia and dropsy: since the same happens in hernia of the bladder; but the urine issuing through the urethra by this pressure, rightly distinguishes both states. We add nothing concerning that very rare tumour of the scrotum from urine, to which a return is denied to the bladder. There remains, lastly, a watery tumour of the scrotum, more common than the rest, namely, from œdematous obstruction, which some call *spurious hydrocele*. This swelling of the sacciform teguments threatens or follows dropsy, is propagated often in a dangerous degree to the penis, and occasions phymosis or paraphymosis, very troublesome to the sick.

Legitimate hydrocele is reckoned among the most obstinate disorders, especially if it be of long standing: for the cathartics and diuretics prescribed for other species of serous colluvies, do little good here; nor are topical discutients and resolvents of more service, but nothing forbids the cautious trial of both. If these do not succeed, it is best to abstain from all cure, until the sick

become unable to bear the tumour on account of its increased size. Then the follicle is evacuated by puncture, with a suitable and well known instrument: but yet in process of time it swells again, and acquires its pristine size, on which account this operation ought to be repeated from time to time. In this state of things there appears but one way of cure, namely, the *extirpation* of the cyst, by the celebrated hazardous section, or its *consumption* by means of the cathæretics, in the use of which the sick are tormented with such excruciating pain, that some are hurried to madness. It appears then that the issue of both methods is doubtful, on which account the more experienced remain in anxious suspense, or prefer a palliative cure.*

When *spurious hydrocele* is a symptom of any kind of dropsy, it requires an internal cure not differing from that of the primary disease. Even topical resolvents and roborants are used with advantage; namely, fomentations prepared of aromatic wine, spirit of wine, lime water, ley made of the ashes of twigs; as also cataplasms composed of the *vinum eupatorium* of AVICENNA, agrimony, &c. Marine salt is much celebrated, first made to decrepitate, and put into a linen bag; which when it has contracted any moisture, ought to be renewed. The scrotum sometimes attains so great a size, together with the *œdematous penis*, that scarifying becomes necessary; by means of which the affected part soon subsides. But gangrene sometimes follows this operation, which is usually prevented or removed by warm fomentations of camphorated spirit of wine. In this unfortunate state a cataplasm also of Peruvian Bark deserves the greatest praise: this has now been proved by multiplied experience. Lastly, a seton drawn through the skin in a depending part, may with safety exhaust this œdematous obstruction, no wonder therefore that it is preferred by the judicious to dangerous scarifications.

10. **PNEUMATOCELE**, with us, *hernie venteuse*, is a flatulent tumour of one side of the scrotum. This affection rarely invades adults, but is very familiar to infants. It is distinguished from hydrocele by its peculiar transparency. Besides, hydrocele increases slowly, but this very rapidly. Pneumatocele is altogether without danger, and easily cured by discutient and resolvent remedies; namely, fomentations prepared of birthwort, mint, sage, camomile flowers, elder flowers and wine; or cata-

* Happily for persons labouring under this disease, another remedy has been discovered since our learned author's time, which is less hazardous and painful, and frequently successful, namely: promoting adhesive inflammation in the sides of the sack, by injections of tepid wine and water or other mild stimulant, after evacuation by puncture. T.

plasms made of the meal of cummin, rye, &c. to which may be added lime water, cow-dung, and such like chosen at the pleasure of the physician. But if the tumour baffle these remedies, it is necessary to have recourse to paracentesis; however, to confess the truth, there is very rarely any need of this surgical operation.

11. **VARICOCELE** affects the spermatic vessels, and on viewing the tumour, it is found to be rough with various varicose prominences, as it were heaped together in bunches, so that often not the least part of it is contained within the cavity of the abdomen; in which state there is but little hope of cure. *Varicocele* is mostly attended with pain, and not rarely verges to cancer, especially if it be improperly treated. To this species of disease those are thought liable who avoid venery altogether: it is also contracted by contusion; but it more frequently originates from lues venerea, scurvy, or other taint of the blood.*

As to the cure, let diluents, temperants and mild aperients fill every vacancy, after premising which, we may recur to woodlice and martial preparations. Every one knows the good effects of nasturtium, scurvy grass, mercurials, &c. in scorbutic virus, or venerea. Besides, some foment the affected part with cold water: others are careful to apply astringent fomentations and cataplasms: but all these internal and external remedies are mostly futile, so that the hope of cure rests on amputation alone of the tumour, and of the testis itself: which operation notwithstanding rarely succeeds, and even proves fatal if the tumour be partly hidden in the abdomen, in which strait it seems more advisable to abstain from all cure.

12. It remains while hastening to a conclusion, briefly to treat of **SARCOCELE**: That schirrous protuberance takes this name, not only affecting the testes, but also their vessels and coverings: this affection, in like manner as varicocele originates from a stroke, a fall from a height, or other contusion, and is also thought to participate of lues venerea, scurvy, &c. It is often mistaken by the unskilful or young surgeon for hernia, to the greatest injury of the patients, since the disease is excited and encreased by the various attempts usually made for reducing hernia. It is also sometimes with difficulty distinguished from hydrocele: but from close examination of the surface of the tumour, the difference between them is manifest; not to mention the fluctuation, which belongs to hydrocele alone. The commencement of sarcocele is mostly indolent but although slow in the pro-

* In one case I suspected it to have been brought on by the practice of *Onanism*, and charged my patient with it. He acknowledged the fact: yet, strange to tell! felt no shame on account of it, but confessed he had *innocently* indulged in the habit, through fear of *committing adultery*! His strict moral character left no room to doubt his assertion. T.

gress it becomes very troublesome on account of its increase, and indeed this swelling sometimes puts on the nature of cancer, which may be opportunely prevented in the bud, but otherwise it is thought altogether incurable.

That we may omit nothing of what appears profitable in *the cure*, after premising generals, namely, venesection, cathartics, diluents and baths; we may try the virtues of aperients, sudorifics, incidents, or other remedies directed for scrophula. Resolvents may be applied externally, namely, plaster of soap, of cicuta, of frogs with mercury, mercurial inunctions, &c. But these remedies mostly do no good, nor is there greater hope from extirpation, since it often has a terrible termination, especially if we think to preserve the testes safe, which can never be done without very troublesome dissections, that bring on grievous symptoms; viz. Fatal convulsions, and especially that species which by authors is called *tetanus*, as I remember to have often observed. Nor is the consumption of the tumour by applying cathæretics less to be dreaded, since during their action the sick are tortured with such excruciating pains, that becoming utterly unable to endure, they wing their way to the ætherial abodes.

DISEASES OF THE ANUS.

1. **HÆMORRHOIDS**, (piles) deserve the principal place in this class, and are seated in the veins of that name, both internal and external. The *tumid* hæmorrhoids, of which we now treat, are those various tubercles, sometimes solitary, sometimes in great clusters besetting the anus, and attended with a greater or less degree of pain, and sometimes raging during costiveness. The external are visible, the internal also sometimes present to view while at stool, or are known by examination with the finger introduced into the anus. Hæmorrhoids are one while soft and wrinkled, and hang down like little bladders; again they appear tumid, livid and blackish. Their size is different, for now they scarce exceed the magnitude of a pea, again they sometimes acquire the size of a hen's egg. As if partaking of herpes, they often become troublesome, with itching; but this is an uncertain *sign*, because, as already hinted, it also respects ascarides. The pain of Hæmorrhoids, pulsating, heavy, shooting, &c. is often so exacerbated, as scarcely to be described. They are thought to be familiar to melancholics, especially to

those who have suffered frequent hæmorrhages in youth. They are promoted by the too free use of luxuries, or ardent liquors, long continued riding on horseback, and idle and sedentary life, warm baths, gravidity, difficult parturition, &c.

The *wrinkled Hæmorrhoids* occasion not the least inconvenience, and are mostly borne without the persons' knowledge. Besides the *tumid become little troublesome*, so long as they are confined within certain limits; but when seized with inflammation they bring on most violent pains, and sometimes exercise such tyranny, as to occasion vehement fever, iliac passion, delirium, convulsions, apoplexy, &c. By which dreadful symptoms it is obvious to any understanding that the sick are brought to their end. Other *misfortunes* threaten from this inflammation, namely, suppuration, which frequently ends in very obstinate fistulæ; or schirrous obstruction, which not seldom puts on the nature of cancer, not to mention gangrene which often threatens under these circumstances. Taught by *anatomical observation* we esteem it certain, that inflammation and gangrene of hæmorrhoids, even of the external, are very often propagated to the intestines, mesentery, or other viscera of the abdomen; what is to be prognosticated in this case, any one may understand.

When hæmorrhoids are affected with inflammation, or are more than usually severe, the cure is to be attempted by repeated venesections. It has sometimes been useful in a very urgent case, to let blood until fainting be induced. The milder laxatives are prescribed with advantage, namely, oil of sweet almonds, solution of cassia, &c. Meanwhile diluents should be copiously quaffed, as also demulcents and temperants, viz. whey, chicken water, emulsions, cooling broths of river crabs, veal, &c. which being premised, and the symptoms abated, we may call in aperients and even incidents: namely, martials, æthiops mineral, &c. But these remedies must be cautiously given for a long time, and in very small doses. The use of sulphur, both internal and external, has had a very happy effect in this case. Internal narcotics command a truce to the raging pains, but they may be do the greatest injury: this does not escape the notice of judicious practitioners, who usually deal very cautiously with these medicines. Let these observations on internal remedies suffice: we come now to others, in the suitable administration of which consists the principal point of cure. Tepid water, or decoction of mullein, often affords present relief; or the *vapour* of any other emollient herb. Fomentations have the same effect, prepared of milk, decoction of althea, of rich figs, &c. which moreover supply materials for injections. By some, in whom credit may be placed, a fumigation excited with the

powder of *scrophularia*, is recommended. Besides, emollient *cataplasms* are with advantage applied, prepared of crumb of bread, pulp of apples, and such like; which are usually followed by resolvents, taken from the flowers of elder, camomile, &c. Perhaps no more excellent *euporiston* (medicine easily prepared) can be thought of than warm wine, with which the effected part ought to be frequently fomented. Demulcent and anodyne liniments deserve their own praises, applied outwardly, or introduced, into the anus; such as oil of eggs, or of linseed, cream or butter, poplar ointment, nutritive, or others of that sort, with which, as occasion requires, camphor, *saccharum saturni*, or opium itself may be mixed. But among the best resolvents and anodynes the Neapolitan ointment takes the lead, which we do not hesitate to assert, supplies the places of all other *topicals*, as multiplied experience has taught. A citron cooked under the ashes affords another most excellent topical, against swelled and painful hæmorrhoids; also let the part affected be sprinkled often through the day with the warm juice of it: this is to be sure a very troublesome remedy, but it promises great efficacy. Nor are there wanting other *topicals* celebrated by some, namely, oil of box-wood, tobacco leaves fresh and bruised, &c.

But when all these remedies both internal and external, are unable to subdue the obstinacy of the disease, it is necessary to recur to another method, which consists in the depletion of these tubercles. To this end let *leeches* be applied, by the suction of which the piles soon become less, and the pains are assuaged. Some think that this may be sooner done by means of the *lancet*, that by the wound inflicted, the blood stagnating there, may find an outlet: which method is best, we leave for wiser heads to determine. There is another and perhaps a safer way of cure, namely, *extirpation*, which is very easily performed, and daily practised with success against very numerous piles; provided that one or two be left at the hæmorrhoidal outlet, otherwise there would be no little danger to the patients. Lastly, it is of greatest moment in the cure of the swelled piles, whatever method be used, to keep the bowels open, as well as by means of refrigerant diet, as by the help of mild laxatives and clysters; for if this caution be neglected, other remedies very often do no good.

2. THE HÆMORRHOIDAL DISCHARGE, (to proceed in order) in which the veins of the same name pour out pure blood, if it recur periodically, and be confined within certain limits, is easily distinguished from any other bloody discharge; but when it distils sparingly and in a ceaseless flow, it is sometimes taken for scorbutic dysentery. Yet dysenteric blood always appears

diluted, or intimately mixed with mucous matter, and is never excreted but by stool, while the blood of piles is ejected pure, before or after the hardened feces, (scybala). The hepatic flux also sometimes resembles the flow of piles, but a view of the stools alone preserves from the mistake; not to mention other signs, to be treated of elsewhere. The flow of piles is thought *immoderate*, if it be too long continued, and recur too frequently; or lastly, if the blood issue in a full stream: for sometimes it is extended even to the twentieth or thirtieth day; at others it takes place twice, thrice, or even four times in the month: or the loss of blood becomes greater every day; its quantity sometimes amounting to one or two pints. MONTANUS makes mention of a certain person who lost two pounds of blood per day, for six weeks. Heavy pains in the back or about the pelvis, griping, internal heat, fever, vertigo, numbness of the legs, &c. denote an immoderate flow. This is followed by loss of strength, loathsome paleness of the face, cachexy, &c. Persons of a sanguineous or melancholic temperament are subject to flows of piles, also those who live high, and lead inert and idle lives; they are promoted by too great costiveness, long riding on horseback, &c. This morbid disposition of the body is often transmitted by parents to their offspring; nor are there wanting children of seven or eight years of age who suffer this flow in a manner to reduce them nearly to death; it however spares the youth.

We have already hinted that the *flow of piles is salutary*, when confined within certain limits; and indeed sometimes, an immense discharge appears to diminish the health none at all. It takes place in some to the amount of two or three ounces, as often as the bowels are emptied, and without injury. Indeed there is an account of a certain person who for four years, discharged about one pound every day, and retained good health. It is known moreover, that some women occur, who in a short space of time have lost about twenty pounds of blood in this way, without injury to their health: but this ought to be reckoned out of the common order of things, and very rare. The flow of piles, immoderate in quantity or duration, is not without danger; since it very often exhausts the strength, brings on slow fever, or threatens tabes or pulmonary consumption. Cachexy and dropsy arise from the same cause, as also schirrous obstruction of the liver or other abdominal viscera; or some other organic faults which dissections exhibit.

Immoderate flow of piles is cured like other hæmorrhages; namely, let blood be drawn from the arm; let refrigerants and temperants be used; let ptisans be given with nitre, milk, or

whey, emulsions, barley or rice gruels, &c. By some, induced perhaps by the opinions of the ancients, pimpinella is highly recommended. But acidulated or martial mineral waters, and various preparations of iron, seem to excel all other remedies, and by pervading all parts, open the obstructions; so that the blood returning from the lower parts easily finds its usual channel. The stronger astringents cannot be given unless in a very urgent case, such as dragon's blood, alum, essence of rabel, &c. But ptisans of greater comfrey may be used without danger; as also nettle juice, tincture of roses, catechu, &c. The stimulant and acrid cathartics are to be avoided as worse than a snake; but rhubarb, cassia, and tamarinds, are advantageously prescribed. Among the paretics, the oriental saffron, camphor, and mineral anodyne liquor are useful, nor if other circumstances agree, ought we to forbid diacodium, anodyne tincture, or other narcotics. Externals also afford their share, namely, immersion of the hands in warm water, frictions repeated on the upper limbs, tight ligatures on the arms, &c. We cannot apply plantain, shepherd's purse, and bistort externally without the greatest caution; nor bole armenian, dragon's blood, sarcocolla, and other astringent; which are never used by the fathers of the art unless in cases of the greatest danger.

3. For the same reason that the **FLOW OF PILES** when periodical and customary, is healthy, it follows that their suppression is dangerous, for it threatens obstruction of the vena portæ, from which arise various injuries of the liver and other viscera connected with the branches of this vessel, which *dissections make manifest*. From the same source proceed numberless diseases, among which frequently occur vertigoes, apoplexy and palsy, asthma and suffocative catarrh, hypochondriac affections, anxiety, nephritis, bloody urine, cachexy, dropsy, gout, &c. hence it is plain how much to be feared is the suppression of this customary or long established flow. This misfortune is caused by irregular living, terror, cold suddenly contracted, preposterous use of astringents, imprudent venesections, &c. from which evident causes when suppression arises, it brings the sick into great hazard of life. But it is reckoned less dangerous; if it depend on a peculiar constitution of the humours or organs, which happens even without any struggles of nature.

From the foregoing it is easily understood why the cure of long continued piles should have special reference to the misfortune of *suppression*, since from the drying up of this drain the feculent blood usually excreted, flowing back into the vessels, threatens an injury of all the viscera, and hence may promote more terrible symptoms. Wherefore no pains must be spared

to call back the suppressed flow and restore it entirely : no one is ignorant of the good effect of drawing blood from the saphena in this state of things. Meanwhile temperants and aperients are much esteemed, viz. fumitory, hartstongue, succory, &c. Bitters have their own merits, as also emmenagogues. Lastly, if nothing hinder, cathartics are useful, prepared of aloes and especially colocynth. When internal remedies are ineffectual we must call the external to our aid, among which leeches applied to the anus are justly celebrated in the highest terms. Cups are beneficial in some cases. Frictions with rough cloths are profitably used. Lastly, clysters are injected with advantage, prepared of colocynth and other acrid substances : suppositories made of the same materials have been of service. But all these remedies, to confess the truth, are used in vain, unless obsequious nature come to their aid.

4. The hæmorrhoidal vessels discharge another fluid, mucous, whitish, or yellowish, not seldom streaked with blood, which some call **WHITE PILES**, and others, *hæmorrhoidal mucus* or *sweat*. This flux seems sometimes to alternate with legitimate piles, which perhaps it substitutes, so that we may infer that there is a kind of consent between the two discharges, unless it rather resemble the fluor albus of women. These mucous sor-des have an ichorous nature, or deceive with the appearance of pus ; and one while transude through the external, again through the internal vessels. Those seem more fluid which proceed from the external veins, but the internal, on account of the delay which they suffer in the intestine rectum, are observed to be thicker. This affection sometimes occasions slight inconvenience, and again brings on most troublesome itching, exulcerations, inflammation or fistula itself. Gripings of the bowels precede this excretion, or a kind of perturbation of the belly, flatulence, tightness of the abdomen, and a sort of spastic motion of the rectum. This is usually attended with a kind of heavy pain of the loins, with more sparing and saturated urine, torpor of the mind, debility of the legs, coldness of the feet ; frequent stools, tenesmus, excretion of worms, &c. Moreover, in some cases fissures and chops are formed in the anus, which are sometimes followed by ulcer and fistula, or schirrous obstruction of the rectum ; also miliary pustules break out, like serpigo, exceedingly itching, &c. This exudation is repeated at stated times, and mostly observes the periods of the piles. Cachectics and melancholics are thought to be prone to it, and especially such as are without the legitimate flow. It is contracted from a slothful and idle life, from high seasoned food ; from wine and venery, from the imprudent use of aloetics, &c. This hæmorrhoidal sweat,

like the common flow of the piles, is sometimes salutary. But it is often continued a long time, and sometimes even till death, since like the true piles and fluor albus, it cannot be checked without danger, if the usual general remedies be neglected. For this humour, mixed again with the blood, may bring the greatest damage to the viscera, hasten dropsy, and promote gouty and nephritic attacks.

Nevertheless this hæmorrhoidal sweat may be safely treated, provided the judgment of cure be directed to a close attention to, and investigation of the cause of the disease. Experience proves that the milder laxatives and cathartics would be of service, but there is doubt of the efficacy of stimulants and hydragogues, celebrated by some. The long continued use of diuretics and diaphoretics has had wonderful effect, by the help of which a kind of morbid matter is disengaged by the kidneys or pores of the skin, from the blood vessels. Depurants do no less good, which have the power of amending the bad state of the humours: the mineral waters, both cold and warm, may serve the purposes of both. These being premised, we may use martials and tonics, exhibited a long time, and in very small doses; nor must we omit through the whole course of the disease diluents and lubricants taken from the diætic source. Emollient and demulcent clysters also have their merit, liniments made of oil of eggs, butter, &c. Injections or washes composed of decoction of althea, mullein and others of the same kind. Lastly, some attempt to exhaust this exudation by applying the cautery to the neighbouring part; but the sick usually bear this drain with more uneasiness than the disorder itself: hence another method of cure must be adopted.

5. TUBERCLES *infesting the ANUS*, on account of their peculiar appearance, or the whims of physicians, receive different names: from this source proceed *verruca*, (warts) *mariscæ*, (blind piles) *condylomata* (soft, colourless tumours) *figus* (figs) &c. But it is expedient to remark that these tubercles of whatever sort, are often resembled by the *wrinkled piles*, by which the incautious or unskilful are very often deceived. These excrescences are mostly attended with no pains, but sometimes are seized with inflammation, by which they become very troublesome, and indeed put on the appearance of cancer. These callous tubercles not only project outwardly, but are not rarely concealed within the rectum, and beset this tube in such crouds, as to hinder the free exit of the fæces, as *dissections* teach. The melancholic and scorbutic seem prone to these little prominences, which are also reckoned among the symptoms of lues venerea. Very numerous *mariscæ* infect the anus of *** who are in the

practice of a *nefarious* and *preposterous* copulation. Moreover, chops often attend these tubercles of whatever kind, which are usually ascribed to the same cause.

The drying ointments usually exhibited against these excrescences, do little good; nor does the liniment made of vinegar and ashes of twigs answer a better purpose, although much praised by some: these tubercles are subdued by extirpation alone. This is the *Herculean Club*, by which they suffer themselves to be slain; for which purpose the knife and ligature are applied, provided the disease be manifest to view. There are some who prefer treating it with cathæretics, but this mode of cure is justly considered too tedious and troublesome. Yet these remedies do little or no good, unless by the due administration of internal remedies, we guard against the bad state of the blood and humours. Nor does there appear any other way of curing those tubercles concealed within the intestinal tube, which cannot without danger be removed by cathæretics, that irritate the neighbouring parts endued with exquisite sensibility. Nor will their situation admit of being cut off with the knife; for they are often so concealed as to elude the search of the fingers, much less present to view; so that we must often trace them by mere conjecture alone.

6. It is well known from the foregoing that *FISTULA ANI* arises from inflammation and suppuration: yet all abscesses of the anus do not become fistulous, since sometimes they are cured like others, especially if they break out in a short time, be attended with pain and fever, and become visible: but when they proceed slowly and silently, that is, with very obscure pain, so that the purulent matter being contained there longer than is proper, works itself cavities and lodgments, fistula cannot be avoided: and indeed the custom has prevailed among surgeons to designate by this name abscesses not yet open, on account of the injury which they already occasion to the neighbouring parts, refusing the usual remedies, because they never can reach the winding bottom of the sinuses: for which cause the matter collected there, for want of a declivity, will not suffer itself to be cleansed out by the usual injections, and gradually penetrates deeper. It is necessary to remark that *Fistula Ani* originating from genuine or legitimate inflammation, excavates deeper recesses, to the right and left, and therefore occasions greater trouble to the surgeon. But that which arises from inflamed piles is mostly confined within the coats of the rectum, and usually subdued with ease.

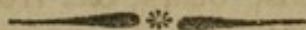
The cure of recent *Fistula Ani* is mostly performed with simples, or is affected by the spontaneous effort of nature; nor

are examples wanting of this happy termination ; but when chronic, deep, and callous, it resists all remedies, and is mastered by *cutting* alone. Fistulous ulcer of the anus partaking of lues venerea, sometimes yields to specifics, which if it refuse, the cure of it by surgery becomes more easy. Long continued fistulæ as well as ulcers, sometimes afford a salutary drain, which never can be dried up without great danger. For there are many old persons, who by the aid of these enjoy sound health, from the deficiency of which there is great danger, and indeed death stands at the door : as I observed a few years ago, in a man about fifty years of age, whose old ulcer, for the cutting of which the surgeons were preparing, suddenly dried up, and the passage was so closed, that the scar could scarcely be perceived : in the mean time the patient had been so well for two or three months afterwards, that he thought while this happy circumstance lasted, he need care very little about preventive medicines : in which state of security his strength suddenly failed, and he was taken off by instant death as if struck with lightning : his body when dissected exhibited a serous collection both in the brain, and medulla spinalis.

7. It remains that we briefly treat of **PROCIDENTIA ANI**, (*chûte de boyau.*) Sometimes the *prolapsed intestine* returns spontaneously ; but it happens otherwise if it hang out to a certain length : for this prominence caused by the doubling of the tube, often reaches to five or six inches, and very rarely beyond it, namely to one or two French feet, and further, as some relate.

It does not escape the *good women* that infants are liable to this disease ; but tenesmus and diarrhæa bring it on at any age, as also too great costiveness, vociferation, and straining in making water, stooling, or paturition. Moreover, it is promoted by piles, worms, stone of the bladder, previous lithotomy, &c. *Prolapsus ani* from these causes, is easily restored to its pristine situation, but if it depend on loss of tone or palsy of the parts, in very old persons, or those labouring under chronic dysentery, it admits of almost no cure. It is well to remark that the part of the intestine removed from its situation, sometimes swells, and not rarely verges to schirrus, on which account it is with difficulty returned. In some cases also the protruded intestine is seized with inflammation and gangrene ; in which state there ought to be no delay in amputating the affected part, which is easily done without much risk. Yet in some the prolapsed intestine is expeditiously replaced ; but to confine it in its native situation, is a matter of very great difficulty. With this view are prepared astringent fomentations with catechu, acacia, galls, pomegranate rind, &c. boiled in austere wine, or alum water, in-

which cloths and sponges are soaked, to be applied to the anus, and confined by suitable bandages. Internal astringents are futile, which by only confining the belly, and encreasing the difficulty of stool, do much harm. We add nothing of *rhagades* or chops of the *anus*, since they require the same cure as fissures of the genitals, concerning which we have treated above.



DISEASES OF THE LIMBS.

WE have purposely omitted gouty, rheumatic, scorbutic, and venereal pains of the extremities, elsewhere treated of, nor will we dwell on tremor, convulsions and paralysis, which come under the order of diseases of the brain. We have left out luxations, fractures, &c. as connected with diseases of the bones: for the same reason we thought that scrophulous tumours, ganglia, elephantiasis, &c. should be omitted. Yet there are not wanting very many affections that are to be comprehended in this chapter: namely, *long continued contraction of the limbs*, peculiar *atrophy* of them, *œdematous swelling* not partaking of leucophlegmasia; *white swellings* besetting the connections of bones, *paronychia*, *perniones*; those pustules of the legs called *roseolæ saltantes*; *corns* of the feet, *sciatic pain*, *cramp of the legs*, *injury from venesection*, *distortion of the extremities*; and lastly, *fetor of the feet*; concerning all which we have thought it would be best briefly to treat singly, and in proper order.

1. *Chronic contraction of the limbs*, commonly called **CONTRACTURA**, takes its origin not from convulsion of the muscles, but from a peculiar dryness or emaciation of the organs. The flexors and extensors are equally affected with this disease, but the bending muscles overcome the force of their antagonists, so that the fingers and toes always appear bent and hooked: nor does the reason of this phenomenon escape anatomists. It is obvious to any one that spasmodic fits frequently returning, usually promote this affection; also palsy of long standing, chronic, rheumatic, or gouty pains, burns and wounds, poisonous vapours from vaults, caves, or other subterraneous places, spasmodic colic, &c. The incipient disease is easily cured, but when adult or chronic it is reckoned altogether incurable. Wherefore, having premised general remedies, let diluents and demulcents be largely drank, among which preparations of milk obtain the first place; afterwards the milder diaphoretics are useful; depurants and antiscorbutics also deserve praise, but as experience testifies,

the mineral waters take the palm from all others, which by reaching to the intimate recesses of the contracted vessels, restore the free circulation of the blood, and give flexibility to the wrinkled fibres.

Yet the principal point of cure consists in the timely use of external emollients. Various liniments are prepared with this view, from oil of earth-worms, of camomile or bays, from *animal* fats, such as chickens, bears, &c. from ointment of althea, and numberless others of a similar nature. The affected part is also rolled in the warm skin of a sheep, calf, or other recently killed animal, or is thrust into the belly of an ox not yet deprived of vital heat; moreover, the contracted limb is advantageously immersed in an emollient decoction, in the warm blood of any animal, in broth of tripe, in warm milk, &c. but nothing perhaps is found more efficacious than pouring upon the part any of the various mineral waters, which also afford efficacious steams and baths. Some recommend the mud of these waters. Lastly, it is of the greatest moment in the use of these topicals, gradually to stretch the contracted part, or cautiously to move it, and to defend it well against external cold.

2. ATROPHY, or *wasting of the limbs*, mostly depends on a peculiar fault of the nerves, or medulla spinalis, to be detected only after death. It is also promoted by an evident cause, namely, a tumour pressing the nerves situated beyond the case of the cerebrum and medulla, and spreading over the affected part; from luxation, having the same effect, &c. The emaciated part is often deprived of sense and motion, from which also phlyctænæ not rarely break out, which denote threatening gangrene. If this affection be owing to an internal cause, it mostly baffles all the endeavours of physicians; but it may be overcome if it proceed from an evident cause, and it is proper for us to attempt it. Nor are trials forbidden even in the first case, which sometimes through favour, have a happy effect. Wherefore, having premised general remedies, if need be, diluents and demulcents, temperants and aperients of the milder sort are to be used; diaphoretics may also be tried with advantage. If all these fail, it is necessary to have recourse to the warm and cold mineral waters, to be selected as occasion requires: which indeed far exceed other internal remedies of what kind soever. Nor are external emollients of trifling efficacy, namely, baths prepared of the broth of tripe, the decoction of mallows, of althæa, mullein, or other emollient herbs. Inunctions of oil of earth-worms or camomile, with ointment of roses, of althea, &c. But the pouring upon the part from a height, the warm mineral waters, either

native or artificial, seems to excel the rest. Lastly, dry cups are of little service, although proposed in this case by some.

3. **ŒDEMATOUS SWELLING OF THE LEGS**, which also rarely affects the arms, does not always depend on cachexy and dropsy, for no one is ignorant that pregnant women, and some asthmatic persons are liable to it; besides it is promoted by suppression of the menses or piles, as also by any immoderate hæmorrhage, by erysipelas, ligatures, or by garters themselves drawn too tight, or by any other cause compressing the veins. This swelling of the legs is also caused by standing, walking and riding too long. Chronic diseases finally bring it on, in which cases however, it ought to be considered as the forerunner of dropsy. This affection when recent and slight, vanishes in the morning, and occasions no inconvenience; but when serious and long continued, it inflicts torpor on the limbs, and sometimes impedes their motion. When this obstruction increases greatly, the teguments, yielding no longer, are burst, and gape with various chinks, from which sometimes there is a serviceable discharge of serum: in which event the swelling of the part soon lessens; but then beware of gangrene, which misfortune is threatened by deep and very acute pains. Œdematous obstruction of the legs is easily overcome, if it take its rise from an external and slight cause, from defect of strength or recent taint of the humours: when it proceeds from quartan fever imprudently checked, it is only dispelled by the return of the fever. But it baffles all these remedies if it be produced by any incurable chronic disease.

Œdema of the legs is usually treated like cachexy and dropsy, having regard to the cause; we shall therefore avoid unnecessary repetition: but it is often performed by *external remedies* alone; or even this method is discarded, and the cure committed to the spontaneous efforts of nature. Among topicals, great benefit is derived from fomentations prepared of decoction of hemp-agrimony, tansey, elder flowers, and juniper berries, of lime water, and ley made of the ashes of twigs, of alum water, or smith's forge-water, &c. The vapour of ignited spirit of wine is useful in some cases. A cataplasm made of pidgeon's dung, salt and vinegar has been beneficial in others. The leaves of dwarf elder bruised with spirit of wine, and applied like a cataplasm deserve great praise. Moreover, the affected part is profitably immersed in warm ashes. Hot bricks to the soles of the feet are also advantageously used; but beware lest they bring on erysipelas. Lastly, there is no little advantage, when the disease is slight and recent, derived from stockings made of dog's skin, or leggings carefully put on, which being applied in

the morning when the legs are free from all obstruction, may prevent the recurrence of swelling. But these repellents do not agree in all cases, and are never to be applied without using diuretics and hydragogues, which may determine the devious serum to the kidneys or intestinal outlet; otherwise there is danger of œdematous swelling of the penis and scrotum, or a collection of serum in the cavity of the breast and abdomen, which practitioners know to have often happened. Finally, sometimes in a very urgent case scarifications have succeeded happily, which notwithstanding may bring on gangrene.

4. The genuine character of **WHITE SWELLING** of the joints, and especially of those affecting the elbows, lies in obscurity. This protuberance often partakes of scrophulous virus, although it is not rarely occasioned by contusion or some other external cause. The size is various, which often increases so immensely as to bring on atrophy of the inferior part. White swelling, indolent at the beginning, becomes in process of time troublesome, and indeed slow fever is very often excited by the severity of the pains; marasmus soon follows. Yet this species of tumour, when soft and of the same colour with the skin, is mostly attended with no heat, nor pain, so that in most cases surrounding the connections of the bones, it has the appearance of œdema, or partakes of its nature, on which account some have taken it for a certain species of dropsy. But *anatomical dissection* refutes this, which exhibits a kind of gelatinous matter, produced by the synovia, and impacted or heaped together in the texture of the fibres, now within the ligamentous capsules, and now without these coverings: fungous excrescences of different sorts, or glandular concretions, a kind of adipose matter, and the lymphatic vessels conspicuous with hydatids, &c. From which it is manifest that white swelling comes nearer the nature of schirrus, than of œdema, or rather partakes of neither.

We may justly conclude from the foregoing, that *this species of tumour is difficult of solution*, especially if any matter, as often happens, stagnates in the capsular ligaments of the joints. Besides white swellings very often tend to suppuration, and a very offensive fistulous ulcer arises from the ruptured abscess, which even brings on putrescency of the ligaments or caries of the bones, and pours out together with ichor, a kind of limpid and whitish matter, in no wise differing from synovia of the joints: whence it is little wonder if from the exhausting of this, the ligaments should become dry; the joints contract stiffness, and the part be deprived of all motion. This very obstinate disease, usually baffles the art both of physicians and surgeons, yet sometimes it yields to remedies both external and internal,

provided the bones and ligaments be sound, and it consists in simple defluxion of the humours: but when it has gained deep root, they *lose both oil and labour*, who set about the cure of it.

Hence we understand why a very heavy task is imposed on those who persist with the *internal cure*, since very often, even after exhausting their farrago of remedies, they do not effect a pin's worth of good: so that the sick, being impatient of delay, or wearied out by the long continued cure, are forced to bid farewell to all remedies. Those that are most in use are taken from the classes of cathartics, diuretics, aperients and incidents, to which may be added depurants and sudorifics: but by these remedies, how great soever be their virtues, nothing is done, unless *topicals* come to their aid, which in this case ought to be considered more efficacious; these are roborants and resolvents, namely, fomentations with tartarised aromatic spirit of wine, or other sharp ardent liquor, or impregnated with alum and vitriol. For the same use also are successfully applied, vinegar, bole Armene, myrrh, mastich, &c.

Sometimes in the very rudiments of the disease, compression performed with a suitable bandage does good. At the same time there is benefit derived from frictions with hot cloths, fumigations of karab or olibanum, pouring of simple water upon the part from a height, or mineral water used in the same way: lastly, the sudden fall of these waters has been profitable in some cases; which it is well by the bye to remark, has also had a very happy effect upon some gouty persons. Lastly, there are some who highly recommend mercurial inunctions upon the part affected; which truly under some circumstances has been of service, but experience proves that it does not agree in all cases. But when all these remedies of every sort have been exhibited in vain, it is expedient to recur to *another method*, namely, altogether *surgical*, which consists in *section* or the administration of *caustics*; that afterwards by the well known means, the opened tumour may be forced to suppurate; but either mode of treatment requires a skilful hand, lest the tendons and ligaments should be injured: then the wound is to be treated in the ordinary manner, namely, by topical digestives, detergents and cathartics. Among the ointments most approved under these circumstances, the best are Basilicon, Ægyptiacum, &c.

This ulcer, as above remarked, supplies a kind of whitish matter very much like the synovia of the joints, hence it seems best to protract the cure a long time, lest from the hasty healing of the ulcer, the cause of the disease being not yet exhausted, should be confined there, and the patient incur the danger of a

return ; which misfortune it is well known to practitioners that many have suffered.

5. PARONYCHIA, vernacularly *Panaris*, *ou mal d'avanture*, is that inflammation besetting the extreme points of the fingers, and very rarely of the toes, which is attended with very burning heat, and severe pain. It is sometimes mild, and of short duration, not rarely pervading every finger, again it is very bad, and obstinately adheres to the part first affected ; hence on account of its seat being more or less deep, it affords diverse grades of malignity, and puts on a peculiar character. Inflammatory and scrophulous tumours of the fingers are easily distinguished from paronychia surrounding the nail, because of their different situation. The pains of paronychia are often propagated through the whole arm, which not rarely swells also from the same cause ; or the matter prevading the tendinous sheaths, to the palm of the hand, occasions there the greatest destruction. This disease when slight, or confined to the teguments, is easily cured ; but it is otherwise when deeply rooted ; namely, it affects the tendons, ligaments, periosteum or bones themselves : in which state of things the sick complain of burning and most cruel lancinating pain : from the same source also proceed vehement fever, very obstinate watchfulness, faintings, delirium, convulsions, &c. Paronychia of both kinds verges to suppuration, but if it be of a bad kind it threatens gangrene and caries of the bone : these misfortunes threaten, if the swelling of the part do not accord with the violence of the pains. Paronychia of both kinds is very often promoted by puncture, contusion, immersion of the hand in cold water, &c. and is also sometimes caused by the blood being too much heated, or in too great quantity.

The cure of slight paronychia is performed with simple maturants, namely, cataplasm of crumb of bread, or rich fig, moistened, if you please, with woman's milk. When it runs into suppuration, it ought to be opened without delay, that a way may be made for the pus : which being evacuated, the cure is finished in a short time by brown or Basilicon ointment. But paronychia of a bad kind is very troublesome to the surgeon ; at the commencement of which a vein ought often to be opened, while using diluents and demulents : nor are narcotics forbidden if the pains be very severe, yet they must be exhibited cautiously. Meanwhile endeavours must be used to promote suppuration by suitable topicals. For this purpose those above-mentioned are used, namely, cataplasm of crumb of bread, brown ointment, diachylon with gums, and others of that kind. When pus is formed it must be evacuated as soon as possible, lest by detention it should injure the subjacent parts. Nor must

we spare in cutting the soft parts, if the disease have reached the bones: and indeed sometimes it is necessary to amputate one or two joints or even the finger; lest the whole arm should become diseased, and the patient be reduced to the hazard of life. Then the wound must be dressed with balsam of *Arceus*, ointment of storax, tincture of myrrh and aloes, and other choice antiseptics. Exsiccants and cathæretics are also brought into use, if the case require: namely, oil of guaiacum, burnt alum, spurge, and others usually exhibited in the cure of sordid ulcers.

Persons subject to paronychia are taught by their own experience to smother this disease in the cradle, by dipping the finger frequently into boiling water; for this very quick and oft-repeated immersion may check the commencing disease, and hinder its progress. There is another *preventive*, of no less efficacy in my opinion, which is more agreeable to the timid, namely, hot ley made of the ashes of twigs, in which the finger is held for a long time, even for many hours. For the same purpose are used spirit of wine, decoction of chamædris in milk, &c. all which possess a resolvent virtue, provided they be applied at the first invasion of the disease; but are otherwise hurtful, that is, during the formation of pus. In a similar way paronychia of the feet may be prevented or cured; this is a much more rare disease than the others: but it is of much more dangerous tendency, since the phalanges of the affected toes are rarely saved.

6. *PERNIONES*, (*mules ou engelures*) familiar to infants and youth, especially of the weaker sex, not only affect the feet and hands, but even the nose, ears, &c. This inflammatory tumour is distinguished from the rest by a blueish colour, and most troublesome itching; it is broad and flat and never runs into suppuration. But it sometimes opens into various fissures, that become so many ulcers, which often assume a bad type, for their edges being livid and swollen, the fetid sanies with which they are contaminated, the blisters breaking out from their surface, excite no little fear of gangrene and caries of the bones. *Perniones* are almost never cured during the winter season, but spontaneously vanish with the grateful return of spring, to re-appear with the commencement of the following winter. Some are used to prevent the return of them before the coming on of winter, by frequently immersing the part usually affected, in the blood of an ox: others with the same view apply washes, or pour upon it the warm sulphureous waters. Nor are there wanting some who prevent the increase of the disease already contracted, that is they avert *Perniones* threatening after intense cold, by repeated friction of the part with snow; which remedy

as above hinted, also prevents the formation of gangrene from the same cause.

But when this disorder has become old, *all means of cure* are precluded during the cold of winter; we must therefore continue a mere palliative cure. To this end topical demulcents afford wonderful assistance, namely, oil of olives, or of sweet almonds, the officinal marrows and lards, spermaceti, and the common and simple cerates, &c. Moreover, resolvents of different kinds deserve no small praise; to wit: fumigations prepared of the seeds of hen-bane; washes of tepid urine, hot wine, spirit of wine, to which may be added camphor, theriac, &c. But inunctions with balsam of Copaivā, petroleum, oil of turpentine, &c. are profitably used. Lastly, saponaceous plaster, or others of similar efficacy, are serviceable in some cases. We say nothing of ulcer, gangrene and caries, since they require their own most common cure.

7. There break out from the legs, certain **INFLAMMATORY PUSTULES**, almost of the size of a bean, scarcely differing as to form, from venereal tubercles and epinyctes, concerning which **AURELIUS SEVERINUS**, if I mistake not, first made mention, under the title of *Roseolæ saltantes*, the name being taken from an intensely *red areola*, and from a very troublesome itching, which forces the patients into strange motions of the legs, so that they seem to *dance*. These pustulus commonly invade the youth of both sexes, and mostly end in resolution by the help of simple topicals prepared for this purpose, or by the spontaneous powers of nature: so that they require scarcely any medical treatment, unless it be to prevent their frequent return: for which purpose, having instituted a proper diet, and premised general remedies, we may with advantage exhibit refrigerants, temperants, depurants, and other well known remedies against cutaneous diseases.

8. No one is ignorant of **CLAVI PEDUM**, *Corns of the Feet* (*les Cors*,) nor is it unknown that these callous tubercles, mostly affecting the periosteum, arise from long continued compression, and that their pains are from the same cause; these are obviated by laying aside the foolish fashion of tight shoes, or the corn is defended by soft wax or any other plaster, for these materials retain the impression of the corn, and therefore defend it from all attrition. Besides, every prominent part is carefully cut, or torn out with the nails. Emollients first applied, favour this extraction; namely, cataplasms, and plasters possessing these virtues, as also a piece of beef; the leaves of greater houseleek, and live-long; or immersion in warm water, which seems to excel the rest: these being premised, the callous nucleus is very

easily torn out by the roots, and taken away. Some attempt the resolution of the corns, by bathing the feet in ley prepared of the ashes of twigs: some with this view apply garlic, plaster of gum ammoniac, de vigo, &c. Among the best resolvents the bark of the *Acajou nut* is recommended, which, being acrid and like a caustic, often irritates the neighbouring parts and promotes inflammation and suppuration; for which cause this topical is rejected by practitioners of no inferior note. It nevertheless may be tried with very great caution, and after premising emollients, which I have found very often happily to succeed.

9. *ISCHIAS*, with us, *la sciatique*, usually preceded by numbness and formication of the part, mostly takes its rise from rheumatic or gouty matter. For it is plain that there is a strict affinity between both diseases. Sciatic pains for the most part begin first in the loins, from which they spread to the outer part of the thigh and are fixed in it, though sometimes they are propagated to the leg and even to the foot. This disease, although very obstinate is mostly free from fever, and without danger: but from the chronic or of long standing, the affected part becomes weaker, and not seldom emaciated and contracted. The suppression of the hæmorrhoidal flux usually brings on *sciatic*: The melancholic, the wretched, those excited by the ardour of love, and intent on serious meditations, as also the scorbutic, gouty, calculous, &c. are obnoxious to it. Lastly, it is sometimes contracted from an external and slight cause, namely, from cold, when the part has been rendered susceptible by heat: from immersion in cold water, from a violent strain, bruize, &c.

The method of cure, directed in rheumatism and gout, is also exhibited with necessary exceptions, against sciatic. Wherefore opening the saphena is useful in some cases; leeches applied to the anus may have the same effect, but nothing is esteemed more useful than large draughts of diluents, demulcents and temperants; which being premised, diaphoretics are sometimes beneficial, although during their action the pains are frequently encreased. Meanwhile the belly is to be kept loose, both by laxatives and emollient clysters. Hypnotics ought to be prescribed with caution, which by bringing on a remission, only encrease the obstinacy of the disease. As it proceeds, the common saponaceous or STARK's pills are prescribed with advantage. Flowers of sulphur, with milk, and spirit of turpentine with honey, all which in this case are enumerated among the best internal resolvents. Moreover, the affected part must be well defended against the cold, and ought not to be kept quiet, notwithstanding the pain which the sick experience in moving it. Ex-

ternal remedies also contribute their share, namely, frictions with camphorated spirit of wine, emollients and anodynes well known to all; a cataplasm prepared of bryony root and linseed oil, resolvent fumigations, vapour bath, pouring the warm mineral waters from a height on the part. Lastly, many have experienced happy effects from blistering and cupping: nor is the actual cautery itself to be despised, either with the hot iron, or by the conflagration of moxa, which, not undeservedly extolled by the ancients, has perhaps taken the palm from almost all other remedies.

10. That troublesome and SPASTIC, fugacious STUPOR OF THE LEGS, which is vernacularly called *la crampe*, the genuine character of which is very obscure, is scarcely reckoned among diseases. There arises sometimes in this state so violent a pain, that the sick have been for a long time unable to endure it. We may conjecture that this troublesome sensation sometimes partakes of spasm, sometimes of stupor, and affects those who lye down or sit in a wrong position. We do not hesitate to assert that it is merely spasmodic when invading at night in bed; in the other case it evidently arises from compression of the nerves, on account of an improper position. Hence it partakes of the nature of torpor, although attended with vehement pain. Friction and walking about, remove the first species, change of situation alone overcomes the second. But this spastic torpor of the legs is to be distinguished from *that very acute pain*, which those who are in bed suffer, from a peculiar extension of the limbs, which perhaps approaches near to distortion, since it seems to depend on a slight depulsion of the muscles or tendons from their situation, which is remedied by gently moving the hand applied in the longitudinal direction of the muscles, which operation although to be performed by the sick, is much more speedily effected by persons instructed in anatomy.

11. INJURIES FROM VENESECTION, to which we now come, consist in the wounding of an *artery*, *aponeurosis*, *tendon*, and *nerve*, which as every one knows, brings on very alarming symptoms. Other affections occur besides, which originate from venesection, namely, *ecchymosis*, *thrombus*, and *lymphatic tumours*, from which we take our exordium. Blood entering the cellular texture of the skin, affords an example of *ecchymosis*, which fluid, if it excite a tumour, produces *thrombus*, and almost from the same cause are formed *lymphatic tumours*. Every stagnation of blood within the texture of parts is somewhat dangerous, since it not rarely tends to inflammation, followed by suppuration and sometimes gangrene. But nothing is to be feared from a lymphatic tumour, which mostly vanishes of itself. These

tumours of either sort mostly yield to spirituous resolvents, hence cloths dipped in spirit of wine, vulnerary, or Hungary water, are usually applied with advantage. Salt bruised and put into a moist bag, yields considerable benefit, not to mention numberless other topicals which may be selected at the pleasure of the physicians; they ought nevertheless to be suspended when any marks of suppuration appear; in which condition diachylon plaster, brown ointment, &c. are profitably applied. If, lastly, the part become livid, and cause any fear of gangrene, we must without delay have recourse to scarifications. But the rest of the cure is to be performed by the proper administration of digestives and common antiseptics, in the form of fomentation or cataplasm.

We cannot doubt of the *section of an artery in blood-letting* if the blood issue with force, and in jerks: but a wound of the first or second coat of the artery is with difficulty known, when no blood escapes, from which proceeds in a little time an *aneurism*, of which elsewhere; this surgeons usually guard against, by applying to the wound a little ball of chewed paper, confined by a proper bandage, or by any other kind of compression. But when the artery is cut, the liberal flow of blood is not to be restrained; and indeed, if other circumstances admit, it may be discharged *ad deliquium animi*, (to fainting.) Afterwards by the above-mentioned method the artery is to be compressed. But if the blood flowing with difficulty, enter the texture of the surrounding parts, it ought to be instantly checked by applying similar pressure, which having been done, the vein of the opposite arm is to be opened. In a word, the threatening danger of aneurism is easily averted, if the surgeon have presence of mind, since it must be evident to all what is necessary to be done in this time of hurry as to the cure.

Puncture of an aneurism or tendon is reckoned no less dangerous, which manifests itself by a kind of resistance that surgeons feel when performing venesection, and by very acute pain which mostly follows at the heels of this most unhappy wound. Yet some do not complain of this pain until after a few hours, which is commonly propagated through the whole arm even to the axillæ. Meanwhile there arises in the injured part a very troublesome inflammatory swelling, attended with shivering and fever, and sometimes causing convulsions, and other alarming symptoms. This inflammatory defluxion of humours verges to suppuration; the abscess and ulcer thence proceeding, affords nothing but a sanious or ichorous pus, and in a short time contracts most offensive putridity. Gangrene threatens not rarely, which

occasions great trouble to the surgeon, and reduces the patient to great hazard of life.

The cure ought to be undertaken by numerous venesections, repeated without delay, during which the diluents, demulcents, and anodynes, so often recommended, are to be largely drank: but the chief point of cure turns on the suitable administration of topicals; among the more approved of which, are oxycrate, white of egg, bole Armeme, &c. If the part already protuberate, another method of cure is to be attempted, namely, fomentations and emollient cataplasms, resolvents and anodynes to be applied. But when marks of suppuration have become manifest, cataplasms made of bread and milk, or of lilly roots, must be used: the abscess however, ought to be opened as soon as possible, lest the stagnant matter remaining too long, injure the neighbouring parts. Moreover, among the best topicals against wounds of the *tendons* and *aponeuroses*, made by the lancet, are to be reckoned the balsam of Peru, turpentine, spirit of wine, balsam of Fioraventi, Hungary water, and such like, of which a few drops are to be distilled into the first and second wound. Lastly, various digestives and exsiccants, namely, brown ointment, that of white tutty, of ceruss, &c. may be used with advantage in the cure, as occasion requires.

It remains briefly to treat of *puncture of a nerve*, mostly portending nothing bad. The cutaneous nervous branch incurs this danger, which accompanies the more conspicuous vein of the arm, either right or left, above or below; so that no rule can be given for avoiding it, and perhaps it is the first that presents to the point of the lancet. Nothing is to be feared, if this small cutaneous branch of the brachial nerve be cut transversely, and very little inconvenience arises, if we except a kind of numbness; but the case is otherwise from a wound of this cord itself: for pains arise therefrom, which are propagated to the wrist or the extremity of the middle finger, and sometimes are so severe that the whole arm swells, fever comes on, and other grievous symptoms take place, which are quieted in a short time by dividing the whole nerve; this experienced surgeons know to be the shortest method of cure. It is customary also to anoint the injured part with oil of sweet almonds, or earth-worms, using friction at the same time. Others apply spirit of wine, balsam commendatoris, Fioraventi, or other spirituous topical: but to confess the truth, the genuine cause of the disease escapes the notice of most.

12. From violent stretching or elongation of the tendons and ligaments there arises **DISTORTION OF THE FOOT**, vernacularly *entorse*, which is sometimes done with such violence, that the

membranous coverings suffer a kind of laceration, and both tendons and bones themselves are removed from their situation, which last, by the spontaneous efforts of the ligaments, are usually restored to their pristine state; otherwise there arises a mere luxation, concerning which hereafter. But the *luxation of the sesamoid bone* of the big toe, belongs to this place, which is contracted from the same cause, and sometimes occasions very severe symptoms, which rarely cease without amputation of the toe. Distortion of the foot is associated with very great pain, in a short time followed by inflammatory swelling round about, which hinders the discovery of the genuine cause of the disease by the touch. This defluxion of humours sometimes runs into suppuration, unless timely prevented: from the same source proceeds fistulous ulcer, very obstinate on account of the oozing of the synovia, putridity of the ligaments, caries of the bones, or ankylosis, followed by slow fever and marasmus. Distortion has its most common *seat* in the connection of the foot, but the wrist and elbow are not to be thought free from it. The most usual distortion is brought on by a fall or stroke from an eminence, and also by any wrong position in walking or dancing.

The affected part ought to be immersed, without delay or before the swelling takes place, *in cold water*; but snow, ice, white of egg, oxycrate, lemon juice, alum, and the other *repercutients* may answer the same purpose. But a remedy easily prepared, and every where to be met with, is justly to be preferred to these. Yet these ought severally to be applied early, lest they become hurtful, and render the disease more obstinate; for after the right time is passed, or when inflammation has taken place, roborants and resolvents are to be used, namely, red roses boiled in generous wine, the watery decoction of elder flowers, leaves of wormwood, or juniper berries; spirit of wine mixed with Balsam of Peru, camphorated spirit of wine, &c. sometimes as occasion requires, we may exhibit emollient digestives, and anodynes: but it often happens that the swelling is made more obstinate, and does not yield to these remedies; it is expedient then to recur to pouring the various mineral waters on the part from a height. There are some who in this state of things, thrust the affected part into the belly of an ox recently killed, and with happy success; which ought to be often repeated. We add nothing concerning venesection, temperant laxatives, and other general remedies, which may be given in this case according to various circumstances.

13. SWEATING OF THE FEET, excepting the smell which is disagreeable to every one, occasions no inconvenience: wherefore in this case, attention is only to be paid to cleanliness: nor

is this accustomed condition of the body changed without risk. Woe therefore to those who commit themselves for cure to certain ignorant fellows and rascals, who with their *astrigent topicals* attempt to suppress this very salutary excretion, namely, by immersing the feet either into a decoction of alum, or sprinkling the part with some absorbent or styptic powder, from the preposterous administration of which, may proceed innumerable serious disorders; such as vertigoes threatening injury of the brain, suffocation, cough, heart-burn, obstruction of the bowels, pains both internal and external, &c. by which it is clear to almost every physician, that some patients have been brought into very great hazard of life: which imminent danger is averted, if the attention be directed to bring back the accustomed excretion without delay, and to reinstate it entirely. This is effected by warm pediluvia, the vapour of boiling water, fumigations, &c. which being without effect it is necessary to fly to sinapisms and blisters, not to mention venesections, cathartics, and other evacuates, to be used according to circumstances.

DISEASES OF THE BONES.

1. CONCERNING LUXATIONS and FRACTURES, we shall treat briefly and as it were incidentally; lest we should seem to *thrust our fork into another man's mess*. How bones are removed from their situation, or broken, need not be told, nor are anatomists ignorant what is to be done in both cases. *Luxations* of the heads of the *vertebræ* and of the *coccyx*, very rarely occur, but frequently the lower jaw, clavicles, shoulder, radius and ulna, wrist and ankle, &c. are removed from their genuine situation. By a fall from a height, a stroke, violent straining, or convulsive fit, the bones are separated and even broken. But *luxations* are subject to other causes, namely, relaxations of the ligaments, too great a flow of synovia into the articular cavity, swelling of the bones, &c. Bones removed by any external cause are easily replaced. But they return with more difficulty, and are much less easily retained, if they be caused by any organic fault, especially in cachexy, scurvy and palsy. *The hip thrown out of its acetabulum*, is scarcely to be reinstated by any art, or retained there. This luxation however occurs more rarely than is generally supposed: but more frequent and even more difficult of cure are considered the fracture of the neck of the thigh bone, and the separation of the epiphysis from the head of the same,

which are also taken by unskilful surgeons for luxation, as in *dissections* I have very often discovered. The tarsus removed from its situation causes very great trouble. Lastly, luxation of the vertebræ is considered fatal.

The indication is, not only to direct the luxated or fractured bones to their genuine or former situation, but also to retain them there: in order that the overstretched ligaments may acquire their native firmness after the *luxation*, or that in *fracture*, the ends of the bones being adapted to each other, they may unite by the forming callus. This is the principal and difficult *point of cure*. Moreover, we must guard against contusion, wound, inflammation, pains and gangrene, as also fever, convulsions, &c. which usually attend luxations and fractures. When the bones are reduced to their former seat, they ought to be confined by suitable bandaging; for another danger threatens its relaxation or slipping off. If the injured part be bound too tightly, there is danger of œdema or inflammation; and indeed gangrene may follow both. Some benefit is derived in either case from topical astringents and roborants: but the coalescing or agglutination of the bones is perfected by the powers of nature alone, and therefore this only duty is incumbent on surgeons, namely, that by cautiously applying their rollers, they may prevent the motion of either part, until the ligaments and agglutinated bones becoming strong, dispel all fear of a relapse. For it is well to know that the ligaments of the lesser bones are restored in a short time; but that those of the thicker bones recover their former state slowly; and in the same ratio, the lesser bones coalesce within about fifteen days, while the firm reunion of the larger ones, is not completed before the fortieth day, and even later.

2. **ANCHYLOSIS**, is that coalition of connecting bones, by which they are altogether deprived of motion. But when the joint preserves any motion, even obscure, the dryness or rigidity of the ligaments alone is in fault. This state is rashly referred to ankylosis, on which account it is expedient rightly to distinguish each affection, which contusions, luxations, fractures and distortions usually bring on. Swelling of the bones also produce it, or stagnation of pus, disease of the ligaments, defect of synovia, or its morbid state, &c. Scorbutic patients are thought to be prone to ankylosis, whose joints especially make a kind of creaking in motion; as also scrophulous, siphylitic and arthritic persons. If this articular affection take its rise from any injury of the ligaments or synovia, or other fault of the joints, it can scarcely be subdued; yet there is some hope of cure: but when the bones coalesce by absolute agglutination, there is no remedy.

Nevertheless the genuine character of this disease is always doubtful.

Emollients may impart a degree of flexibility to the rigid ligaments, namely, fomentations and the common cataplasms possessing these virtues; liniments prepared of marrows and lards, baths of any kind, pouring of mineral waters from a height, or water impregnated with common salt or sal ammoniac, &c. which indeed are of prodigious service in spurious anchylosis. But all these are exhibited in vain, against inveterate union of the bones. We must not however despair in the incipient state; in which nothing forbids trying the virtues of mercurial inunction, plasters de vigo, of soap, diabolitanum, &c. But if these attempts have been without effect, nothing remains but amputation: this method of cure is not agreeable to many, since the remedy seems worse than the disease itself. Lastly, the cautious and daily motion of the part may avert threatening anchylosis both true and spurious; not only hindering the coalition of the bones, but also their rough edges are smoothed, and the dryness of the ligaments guarded against.

3. **EXOSTOSIS**, is a kind of morbid protuberance of the bones, differing in degree of density, for even the familiar exostoses of healthy persons contract the hardness of bones, but others are observed to be soft and yielding to the touch. These last, at first view scarce differing from *ganglia*, and breaking out from the cranium and larger bones, are called *gummata*, and are considered as a symptom of lues venerea. There is another species, by reason of its hardness, obtaining a middle place between both, which partaking of venereal virus is called *Node*. But among exostoses ought not to be reckoned the arthritic *tophi*, the callous prominences after the healing of fractured bones, nor the ossifications of tendons very familiar to old age. Exostoses occupy a certain part of the larger bones; but in the smaller, the whole bone is affected and swells, as is frequently observed in the hands and feet. Besides, this species of tumour is sometimes indolent, sometimes attended with pains and even slow fever: which difference is produced from the peculiar structure of the part, or from the nature of the internal cause. The rudiments of exostoses are mostly obscure, and their progress is slow; yet there are not wanting some that become visible in a very short space of time, and quickly acquire a stupendous size; but their nature is often hidden and very intricate, and frequently is not brought to view until after the *dissection of the bodies*. The texture of some, as already hinted, scarcely differs from the native structure of the bones. They appear covered with a kind of crust, like a nucleus very thick.

and hard: others being carius, contain a soft and fleshy substance, a kind of matter like white of egg or jelly, a true purulent matter, but more frequently sanious, and very fetid.

Some exostoses are borne through the whole course of life: others *end in resolution*, or are affected with suppuration and caries. If this protuberance yield after a time to remedies, there is nothing to be feared, but when it vanishes spontaneously the case is dangerous. The coats of the tumour contracting an inflammatory redness, very severe and deep pains, afford signs of suppuration, in which state the exostosis becomes softer, with no fluctuation, and is eaten with caries. It is best to abstain from all cure, if the exostosis being congenital or derived from an external cause, give no inconvenience nor disfigure the part. But if derived from an internal cause it is subjected to *specific remedies*, which if it indolently baffle, it ought to be committed to nature alone; otherwise its resolution is to be attempted with topicals prepared for this purpose; namely, plaster of diabolitanum, of cicuta, de vigo, &c. With this view there is surprising benefit derived from pouring upon the part the warm mineral waters from a height, and at the same time drinking them. If all these have been exhibited in vain, we may have recourse to surgery, which consists in the section of the tumour or the administration of cathæretics, but experience proves that either method is never without danger.

4. **CARIES**, or ulcer of the bones, appears under a two-fold form, to wit: *dry*, and *humid*. The first especially respects the bones when uncovered, or when the periosteum is taken off; hence being subjected to the contact of air or pus, it is known by a yellowish, brown or black colour of the bone, and then may be taken for a certain species of gangrene; since, as mortified flesh is thrown off from the sound by the spontaneous motion of nature, in like manner the layers of the bones, or tainted portions, although they appear of the native texture, are mostly disjoined from the sound and subjacent substance. This separation receives the name of *Exfoliation*, which is soon performed in children and youth, and proceeds more slowly in advanced age; and indeed it sometimes happens that the denuded bones do not undergo this process. Exfoliation is not limited, but even the principal part of the larger bones is removed from its seat. This is very often observed in the tibia, the greater part of which falls off from both ends. Hence it is obvious that exfoliation respects only the *dry* caries. The moist differ very much from this; it not only like genuine ulcer, eats the texture of the bone, but also produces fungous flesh, and gives out a very fetid sanies.

The *humid caries* sometimes proceeds from an internal cause, namely, from the virus of venerea, scrophula, &c. It is promoted by suppuration of the marrow, exostosis, &c. for example, *spina ventosa*, concerning which hereafter. Among the *external causes* of both species, are enumerated contusions, fractures, aneurisms, and various other tumours; but it more frequently arises from an ulcer of a bad kind. We may conjecture that the bone is tainted with this disease, if the ulcers be moist with an oily, blackish and sordid sanies; if fungous flesh grow out from the bone, or if it be pallid and indolent. It is produced by roughnesses, to be detected by the probe or finger. But when on the contrary, very thick, granulous and sensible fleshy excrescences are observed, no suspicion is excited of the bone being injured. Ulcers of the mouth, nose, commissures of the eyelids, and joints, especially threaten this misfortune. Recent caries easily yields to timely remedies, but the old scarcely admits of cure. It is thought not free from danger if it proceed from an external cause, but when owing to an internal, it justly excites great terror.

In the *dry caries*, exfoliation is mostly performed by the spontaneous power of nature: or we call in the aid of *surgery*, by which every tainted part is removed with instruments adapted to the purpose: nor is *this method of cure* less suited to the *humid caries*; and in both the principal object should be to prevent the further excavation of the bones by the stagnant sanies. Moreover, various medicines are applied as well to promote exfoliation, as to check the caries. In the slight kind, the spirit of wine, Hungary water, or other spirituous liquor are sufficient. But if the caries be deeper, having well scooped out or scraped the bone, as already inculcated, the powder of birth wort, florentine orris, myrrh and aloes, spurge, oil of cinnamon, cloves and guaiacum, are applied with advantage; these not only hinder the further progress of caries, but also favour exfoliation. There are other remedies, especially efficacious against humid caries, which hinder the generation of bad flesh, and may consume whatsoever taint occurs. Of this kind are oil of camphor, spirit of nitre, phagædenic water, &c. which finally not succeeding, it is expedient to fly to the actual cautery, the bone being first well scraped. But it must not be omitted, that the hot iron cannot without danger be applied to the scull, sternum, ribs, and other spongy bones, nor are they less to be dreaded, if they be very near the ligaments, tendons, nerves, &c. the burning of which becomes very dangerous.

It is well known that flesh of the best kind proceeds from the surface of the bone, and that those are of a bad sort which

break out from the edge of the ulcer. Wherefore it is clearly manifest from an accurate view of the ulcer, what is to be *hoped* or *feared*, from either method: but caries which attends cancerous ulcer, cannot be subdued by any art; in which state of things, laying aside all hope of cure, it is necessary to flee to *amputation* of the part, as to the sacred anchor. Nor are there wanting other caries, produced by a taint of the blood and humours, which also demand this extreme remedy, unless the exciting cause be eradicated by specific remedies: for ulcers attended with caries very frequently present themselves, which arise from venereal, scorbutic, scrophulous virus, &c. and therefore can be subdued by their appropriate method alone, namely by the use of incidents, mercurials, antimonials, sudorifics, and antiscorbutics. Otherwise, remedies are inert, and it must be obvious that amputation itself would be of no service.

5. We come now to SPINA VENTOSA, which some take for genuine cancer of the bone. This dire disease is *known* by a kind of protuberance situated near the connection of the bones, attended with very acute pain, exacerbated by the touch; although the skin at first does not recede from its native colour. As this disorder advances, the surrounding parts are drawn into consent and swell, and this prominence appears flatulent. In this condition of things, the pain is confined to a very narrow space, or it is fixed in one point, as though the periosteum were *pricked by a thorn*, whence this affection has received its barbarous Latin name. Spina Ventosa, as already hinted, when subject to an internal cause, exerts such severity, that very alarming symptoms are brought on thereby; unless it be prevented without delay. It is also reckoned among the very *obstinate* diseases, and indeed sometimes becomes altogether incurable. It mostly besets the spongy bones of the feet or hands, but rarely effects the connections of the elbow, knee, and lower jaw. It spares no age, but more frequently invades children, youth, and especially the rickety. Lastly, the scrophulous, scorbutic, siphylitic, &c. are justly considered obnoxious to it.

The principal *cure of Spina Ventosa* is derived from surgery, namely, the tumour is opened, by directing the section to the bone itself, so that the caries may be brought to view, and dressed with the usual remedies: then the wound is to be submitted to the common method of healing. Meanwhile *internal remedies* are not to be omitted; cathartics frequently repeated are of use; mercurials are given with advantage: wonderful effect is produced by antimony, guaiacum, sassafras, and other sudorifics, incidents and depurants above recommended. The celebrated DE HAEN, highly esteemed as a practitioner, has greatly extolled

the use of the Peruvian Bark, both internal and external. Sometimes mercurial inunctions and fumigations are successful. And some prefer emplastrum de vigo. But with these remedies either internal or external, physicians often labour in vain, so that the only hope remains from amputation of the part; which operation notwithstanding never succeeds happily, if the blood and humours depart from their native state, or their dyscrasy have not first been guarded against. Concerning *mollities ossium*, softness of the bones, a disease very rare and intricate, known to the Arabians, and perhaps derived from scorbutic or venereal virus, although it does not yield to the specifics for either disease, we add nothing, since all have hitherto been in the dark as to its cure. Finally, we have been intentionally silent concerning *creaking of the bones*, which is rightly numbered among scorbutic symptoms.

SECTION THE FOURTH. OF DISEASES OF THE SKIN.

VITIATED SWEAT.

THE history of cutaneous diseases is with all authors the most intricate, because every one affixes the name which suits him best; and various affections, differing one from the other, are comprehended under the same title; while one and the same disease, having an appearance dissimilar, receives a various *nomenclature*: so that from hence arises a doctrine, not at all satisfactory to a mind seeking after knowledge. Wherefore, discarding the silly notions with which books abound, and guided by my own practice, I have chosen from this source only such as were approved. To the class of cutaneous diseases belong jaundice, palsy, wounds, burns, gangrene, and some other complaints, which for the sake of order, I have mentioned elsewhere. Wherefore, avoiding all needless repetition, I have collected in this section, those cutaneous affections only, which have no place in the other orders. Of this kind are *vitiated sweat, the lousy disease, spots and eruptions, scab, and other breakings out* of the surface of the body, of which it is incumbent to treat separately, beginning with vitiated sweat.

Sweat produced by the heat of the air, and not varying from the natural appearance, does not belong to the list of diseases. But the *sudden suppression* of this excretion excites no little fear, since various species of catarrhal defluxion proceed from hence, affecting the head and breast, namely, headach, vertigo, comatous affections, coryza, toothach, and quínsey, hoarseness, cough, and suffocations. From the same cause arise fever, fainting, heart-burn, griping of the bowels, spontaneous lassitude, rheumatic pains, gouty attacks, &c. Nor do less evils threaten the checking of febrile sweat; for besides the obstinacy of the primary disease, there come on internal inflammations, heartburn, faintings, &c. which at last do not rarely bring on slow fever and dropsy. Wherefore if in either case *sweat has been imprudently checked*, no pains must be spared to *bring it back*; or *another evacuation is to be promoted*, which may serve the purpose of sweat. The first indication is answered by the timely administration of cordials or *sudorifics*: this desirable effect is

often obtained by a draught of tea or coffee, broth well warmed, &c. But the pores of the skin are more successfully opened by the heat of a bed, *hot baths* and stoverooms, *exercise of the body*, &c. With the other view are exhibited *venesections*, *cathartics*, *diuretics*, and other evacuants of any kind, which may carry out the devious humor by the various emunctories.

Nothing is to be feared from sweats which are slight, or contained within the limits of nature : those that come on at night from difficult digestion, are of the same character. But *chronic sweats are of a dangerous tendency*, especially in slow fever; for the strength is gradually exhausted, and suspicion is excited of some latent injury. Sweat, in acute fever, is often esteemed critical and salutary ; yet sometimes it ought to be considered symptomatic, and therefore in this case we must predict with caution. Every experienced practitioner knows that intermittent fevers terminate by sweat, if the sick keep their bed ; but if they get up too soon, the skin being scarcely moist, or the pores of the skin altogether closed, it is little wonder if the disease become more obstinate. But *sweats are the more to be feared*, the more they recede from their native state ; unless however there appear an evident cause of this phenomenon: for there are various examples of *dirty* and *greenish* sweats : *blueish* and *blackish*, *milky*, and *bloody*, *oily*, *gelatinous*, *earthy*, &c. arising from the peculiar and sound condition of the body, or from some latent disease. There is the same judgment concerning *cold sweat*, sometimes excited by a slight cause, sometimes to be numbered among the fatal symptoms in almost all diseases. Lastly, we say nothing of *Sudor Anglicus*, pertaining to the class of malignant fevers.

The faults of sweat proceeding from some *primary disease*, are submitted to the above-mentioned methods of cure, but *chronic sweat* requires a remedy *peculiar* to itself ; which consists in demulcents and temperants ; the best of which are preparations of milk, gruels of barley and rice, the common emulsions, lemonade, nitre, vitriolated tartar, pulvis temperans, &c. all which are useful for moderating the impetus of the blood, and abating its heat. Moreover, laxatives are given with advantage, which by drawing out the serum from the coats of the intestinal tube, prevent its more free determination to the skin. Diuretics by clearing out the kidneys afford the same benefit ; nor are other evacuants ineffectual. But when *sweats periodically recurring*, justly raise suspicion of latent intermitting fever, having used timely precautions, the Peruvian Bark, and other febrifuges must be used. Besides the sick should not remain too long in bed, and should be covered with light cloathes,

should avoid warm air, keep themselves quiet, and observe the strictest rules of diet, &c. Let this suffice concerning too great a flow of sweat, or obstinate continuance of it. To this it is expedient to add something with respect to sweat of an *offensive smell*.

Fetor of the arm-pits and feet is most common, arising from sweat, as every one knows; there are also offensive effluvia of the whole surface of the body, which are mostly associated with breath tainted in the same manner. The fetor of the sweat, to which coloured people are especially obnoxious, partakes of no danger, and ought never to be submitted to cure. Moreover, certain fetid sweats, well known to physicians, break out, in small-pox and various fevers, which denote a happy termination. But the case is otherwise with respect to that very stinking or cadaverous odour, which some patients near their end emit, in which state of things we may prepare for the burial. They violate the sound precepts of medicine, who set about the *internal treatment* of this chronic fetor, since the offensive smell, not proceeding from disease, ought to be managed by cleanliness alone, viz. washings, bathings, frequent change of linen, &c. Care is to be taken lest this condition of the body should be rendered more offensive, by the too free use of wine, the eating of high seasoned food, &c. They also are of the most dangerous sentiment, who think to check this fetid sweat, by sprinkling the linen with powdered alum, filings of iron, or other astringents; since this salutubrious excretion cannot be suppressed without immediate risk of life: which indeed must be obvious to even the rude and inexperienced.

PHTHIRIASIS. THE LOUSY EVIL.

WE are not treating in this place of *lice* produced by *filth* and *nastiness*, but of a certain peculiar and very rare disease, which with respect to rank, invades even the *nobles* themselves. The lice, in this kind of disorder, not only infest the external skin in heaps, but lurk even beneath the teguments, and the pericranium itself; yea and perforating both tables of the cranium, as also the meninges, they get into the brain itself: which stupendous phænomenon *dissections* have exhibited. This most loathsome disease has a fatal termination, since hitherto the genuine method of cure has been undiscovered. Yet nothing hinders trying the virtues of powdered aloes, the seeds of staves-

acre, and American caustic barley, which in a short time expel the common lice, produced by filth. But these remedies ought to be considered inert against lice lurking in the body : in this state of things if there be any remedy it must be sought in mercurials, which by pervading all parts may attack and overcome these most offensive enemies ; for in these difficulties we must not mind medical rules, lest we lose the favourable opportunity.

Inguinal lice, well known in our brothels by the name of *Morpions*, are of another nature. They are commonly contracted in coition, and may also be communicated by any contact, or other mode. These obscene insects occasion very troublesome itching, and adhere, and are so fixed in the skin, that they can scarcely be torn off. Inguinal lice are propagated immensely, and not only infest the genitals of both sexes, but even the eyebrows, armpits, and hairy skin. Yet they portend no danger, and are very easily killed. Black soap and the ashes of tobacco are excellent for this purpose. But the Neapolitan ointment, takes the palm from all other topicals, by which if applied, they are all killed how numerous soever they may be ; and indeed the *seminary* of this loathsome progeny rendered altogether extinct.

Mention is made by authors (that we may leave nothing untouched) of certain lice or little worms, which are known by the title of *Cirones*. These animalcula lurk under the epidermis, and are of such extreme tenuity, as almost to elude the sight. This disease, although very rare, affects children and youth, and mostly attacks the palms of the hands and soles of the feet ; from which there break out vesicular and itchy pustules, containing the little worm which may be taken out with a needle. But we must moreover endeavour to kill the hidden ones, or to prevent a new progeny : this is effected by bitter topicals, namely, wormwood in the form of fomentation or cataplasm, tincture of myrrh and aloes, and others of that kind. Oily and sulphureous applications are also useful ; but mercurials are the most efficacious, namely, Neapolitan ointment, emplastrum de vigo, &c. which by penetrating more deeply, may radically extirpate the disease.



SPOTS AND EFFLORESCENCES OF THE SKIN.

1. WE have already treated of purple, febrile, and scorbutic spots, wherefore we will comprehend in this chapter the others of less moment, but existing *per se*. 1. The face and neck of gravid women are sometimes disfigured by brown and livid spots,

which are called *ephelides*, and mostly vanish after parturition, or are borne throughout life. 2. *Lentigines*, (*taches de rousseur*) are well known, besetting the face, neck and hands, which species of *ephelis* every one knows to be very obstinate. Spots of both kinds are usually treated with various cosmetics; namely, with a preparation called, *virgin's milk*, oil of tartar per deliquium, oil of myrrh, &c. but these remedies are mostly futile.

2. *Hepatic spots*, (*taches hépatiques*) taking their name from the brownish red colour of the liver, commonly invade the neck, breast, and back; being somewhat rough and itching they seem to approach to herpes, and are attacked by almost the same weapons, but mostly without effect, unless refrigerants, depurants and other internal medicines come to their aid. 4. To these may be added, *nævi materni*, (*marques de naissance*) congenital marks, which have the appearance of spots and tubercles of many forms. It is commonly reported that these marks are derived from the uterus, for they say, that on whatever part of the body mothers touch themselves, when they picture to their imaginations any thing longed for; upon the same part of the embryo there arises and is imprinted the form of the same thing. Every one knows that all remedies whatever are inadequate to take out these spots. 5. *A species of Ephelis from Insolation*, coincides with this, or that brown colour of the skin, *la hale*, contracted by the sun; which when recent, easily vanishes by a domestic life: also lime juice, camphorated spirit of wine, various cosmetic soaps, &c. are used with advantage: but this colour when of long standing, adheres very obstinately.

3. It is hard to understand what writers mean by **EXANTHEMATA**, because by this name are designated not only spots of every kind, but even various prominent and pustulous eruptions; namely, phlyctenæ, purpura alba vel vesicularis, pimples from sweat, and other efflorescences of the skin, concerning which we shall treat presently. But the custom has prevailed among the more experienced, to call by the name of **Exanthemata** scorbutic freckles, purple febrile spots, and other eruptions very little prominent, with most simple specks, but more depressed than pustulous affections which especially have no existence of themselves, but take their rise from a primary disease; wherefore, they require no peculiar treatment: but we will dwell no longer on this nomenclature, changeable at the pleasure of any one, that we may hasten to what is wiser, and less trifling.

4. **ECCHYMOSIS**, is that spot of the skin a little prominent, caused by a stagnation of blood within the texture of the teguments, after a fall from a height, a stroke, or other contusion, puncture, tearing, compression, ligature, &c. nor are there want-

ing ecchymoses originating from an internal cause, namely, from a certain taint of the blood and humours, or a peculiar obstruction of subjacent parts. We shall dwell especially on the familiar and more serious ecchymosis *from contusion*, in which the bruised part first becomes red, then contracts a greenish or livid colour. It is often attended with pain and fever, and indeed sometimes verges to suppuration, and even gangrene. Yet it must be remarked that the skin after contusion, does not always vary from the natural colour, when it exerts its effects on subjacent parts, in which state the contusion becomes more dangerous, namely, by reason of the threatening formation of pus, which is often concealed for a whole month. Nothing but spirit of wine or other resolvent need be applied to a slight contusion; but the case is otherwise in the more severe, which brings on fever and inflammation: this is prevented by some venesections. Meanwhile vulneraries and absorbents are exhibited internally, the best of which are the juice of chervil and nettle, spermace-ti, turpentine, crabs eyes, diaphoretic antimony, &c. Pure spirit of wine is also immediately applied, or spirit impregnated with melted iron, camphorated spirit of wine with sal ammoniac, balsam of Peru dissolved in spirit of turpentine, storax, balsam commendatoris, &c. The plaster of spermaceti, cataplasms of the roots of Solomon's seal, greater comfrey, celandine, dock, bryony, &c. deserve their own praise: but if there be a collection of pus, the abscess is submitted to the usual method. Among the remains of contusion there frequently occur blackish livid spots, very troublesome, to remove which a cataplasm made of briony root is of great efficacy. Moreover, other ecchymosis, contracted from another cause, may be treated by a mode nearly similar.

5. Among efflorescences of the skin the various species of PURPURA as it is called, obtain no mean place, namely *alba*, *rubra*, and *urticata*. The *white* is known by miliary and vesicular pustules, the *red* by purple pimples or spots; both diseases sometimes exist *per se*, and are attended with no fever. They are also enumerated among the symptoms of malignant fevers, which are therefore by some called *miliary*: but the *urticata*, or *nettle rash*, called among us *porcelaine*, is of another sort, having broader and more temporary prominences of the skin, like *vibices* or stripes, attended with burning and itching, not unlike that which follows being beaten with nettles, or numerous musquitoe bites. These flat tubercles suddenly arise through the whole skin, and are often promoted by the heat of the bed, so that they vanish a short time after the patients rise, to return again. Sometimes they are attended with a fever not dangerous,

concerning which SYDENHAM has made mention, under the name of *erysipelaceous fever*, which by permission of this great man, we think incongruous. But this species of purpura in most cases is altogether without fever, sometimes breaking out after eating muscles or other testaceous fish; which is then without danger, and commonly lasts not more than three or four days.

6. There are other ANONYMOUS ERUPTIONS OF THE SKIN, of less moment, if we except *sudamina*, which follow sweat both breaking out from the heat of the sound body, and excited by fever; *venereal pustules* disfiguring the face, burning pimples affecting the same part, known by the name of *gutta rosacea*, &c. But there are some, void of fever, under the broad and vernacular name of *échaboulores*, which often arise from the heat of the air and insolation, but are also owing to various other causes. If from heated blood a similar eruption be excited, besetting the face, breast, and especially the arms, scarcely differing from *sudamina*; it is called by our natives *ébullition*. This very slight cutaneous affection is mostly attended by a fever, which I know not for what reason SYDENHAM has called *morbillous*, it vanishes when this ceases. These *pustulous efflorescences* usually invade young men, and especially boys, not continuing more than two days, they scarce rise above the skin, which they often leave scaly. It is expedient to remark that among the Arabs every pustulous and anonymous eruption is understood by the name of *essera*. These efflorescences are quite free from danger, and require almost the same cure, which after premising general remedies, consists in temperants, depurants and diaphoretics. But the cure of these very slight affections is mostly left to nature, unless by recurring frequently they cause suspicion of some latent taint of the blood: what is to be done in this case, need not be said.

HERPES AND ITCH.

HERPES, with us called *dartre* is that congeries of very small and itching pustules, or an area of different breadth, somewhat prominent, which besets the face, hands and other parts of the body. There occur various *species of Herpes*, which for the sake of clearer method may be reduced to *four*, namely, the *flying*, *mealy*, *miliary*, and *serpiginous*. The flying Herpes, *dartre volante*, is the slightest of all, the pustules of which rarely

running together, in a short time suppurate and dry up; it mostly affects the face, and ceases spontaneously or is subdued by very simple remedies. The *second* species of Herpes, or farinaceous, *dartre farineuse*, affecting one or more part, arises from numberless very small pimples scarcely conspicuous; from the running together of which arise brownish red Spots, interspersed with a kind of whitish and scaly powder: they seem to differ but little from the following species, the crust of which are often so very dry that they approach very near branny scales.

The *third* or *miliary* species, yields numberless very small pustules, from which arise in clusters very broad areæ, scattering themselves on the breast, loins, groins, scrotum, thighs, &c. It is very easily propagated by contagion, by towels, razors, cups, &c. which excites very great itching, and on being scraped or scratched, pours out a serous matter not unlike the Itch, which humour changes the Herpes into foul crusts. This species of herpes is very obstinate, and sometimes, as it would seem, returns after being subdued. The *fourth* species is *serpigo*, so called from *surpendo*, *creeping* or *spreading*; or this *fierce* and *eating herpes*, named among us *dartre vive rongeante*, forms little ulcers, which are moist with very acrid sanies, and run into humid crusts, falling off in the form of branny matter. It occupies various situations, and often surrounds the body like a girdle, and therefore receives this name. The *serpigo* is attended with very great itching, and excites an acrid biting pain, lastly, it can scarcely be overcome, and even when healed, leaves a scar or a kind of swelling of the part to be removed by no art. It is well known that herpes when very obstinate or of a bad kind, are caused by venereal, scorbutic or scrophulous virus, but most are ignorant that there is a consent between the liver and skin, so that it rarely happens in gravid patients, and those affected with tedious cutaneous diseases, that this viscus is met with unhurt: *Anatomical examination* teaches this. *Slight Herpes*, as already noticed, vanishes spontaneously, or by very simple remedies; the *farinaceous* is with difficulty mastered, but the other species are to be considered very obstinate. Lastly, Herpes affecting children, goes away at the age of puberty.

The cure of every species of Herpes is to be directed with this view, to obviate the dyscrasy of the blood; wherefore having premised generals, and fixed on a proper regimen, refrigerants and demulcents are prescribed with advantage; namely, milk, whey, emulsions, barley and rice gruels, &c. These are followed by depurants, bitters, and sudorifics, namely, fumitory, dock, nasturtium, and carline thistles, broths of river crabs, vipers, and antimonials. Nor are aperients and incidents to be omitted

if nothing forbid. Millepedes, martials and mercurials themselves possess these virtues, which by permeating all the organs, open the excretories, and carry out the morbid matter. But these offices are performed more happily by mineral waters, both martial and acidulated, and thermal, which are better adapted to promote the excretion of the molecularæ, and often complete the cure. Nor while in the use of these, ought cathartics often repeated to be omitted, which determine the wandering juices to the intestinal outlet.

Moreover, if all other things agree, baths afford relief: as to other topicals, although of less efficacy, they ought not to be left out, for the itching is allayed by cream, butter, oil of eggs, simple cerate, or solution of saccharum saturni in plantain water. The various mineral waters possess the virtues of resolvents and detergents. Nor are saltish waters, nor even sea-water itself, to be defrauded of due praise. Excellent effects follow the use of pomatums prepared with white precipitate or sulphur, and the pulp of dock. Sometimes exsiccants do good: namely, ink, cotton, *album rhasis*, cerate of lapis calaminaris, &c. Nor lastly, under certain circumstances, are the following unsuccessful, namely, arsenic, corrosive sublimate, and other cathæretics, with which nevertheless, we must deal cautiously. If lastly, the Herpes resist all these remedies either internal or external, nothing forbids trying the efficacy of the cautery burnt upon a suitable part.

It remains briefly to treat of a certain cutaneous disease, allied to the former, namely, simple *pruritus*, which, although no taint be conspicuous, seems notwithstanding, to approach near to Herpes: for like this, it is mostly met with dry, also moist with a kind of dew; and indeed there break out in patients who indulge too much in scratching, certain pustules, less numerous than in genuine Herpes, but also discharging a sanious matter. The lean, bilious, melancholic, and especially old persons who sit still, are thought prone to itch, and are tormented with it night and day. Pruritus is reckoned among the more obstinate diseases, and at first sight differs little from Herpes; it is even considered incurable in persons far advanced in years. Wherefore the *method of cure* in both diseases is not properly attempted, without first accurately attending to the exciting cause. The internal remedies already mentioned, usually given against Herpes, are suitable here, but in the Pruritus diluents, refrigerants and temperants seem to excel the rest, which, if the case require, may be followed by depurants and sudorifics. But nothing perhaps is found more efficacious than the daily use of simple

baths, with agreeable bodily exercise. Topical demulcents also deserve praise : namely, oils, fats, marrows, cerates, &c.

It is expedient to remark, before taking pen from paper, that topical remedies of any kind are never to be used in *pruriginous affections*, unless the cause of the disease lurking in the blood and humours be first attacked by suitable auxiliaries ; which being neglected, the disease becomes more severe, from the excretion of the virus being checked, especially when Herpes has been of long standing ; but by properly exhibiting internal remedies, we may safely reach the seat of the complaint. They indeed miss the mark, who, blinded by the prejudices of the vulgar, never think of the great danger which follows the healing of these long continued cutaneous diseases ; since daily experience proves the contrary : but we every where meet with men, who having for a long time been freed from this disease even when inveterate, enjoy very good health by observing a suitable regimen. It is true that the greatest danger threatens, if an old Herpes spontaneously vanish, or be driven in by *imprudent remedies* ; in which state of things, we must spare no pains to bring back the disease, or to make other outlets, by which the devious matter may escape. Nor are internal evacuants of every kind to be omitted in this case. These are the observations which I thought it would not be amiss to subjoin to the above treatise.

SCABIES. ITCH.

THIS very common affection, *la Gale*, is known by very itchy pustules between the fingers, and about the wrist ; and does not spare the surface of the body. But it is worthy of remark, that the face, which is often infected with various species of herpes, is altogether free from Scabies. No one is ignorant that this disorder hateful to all, is the most familiar to filthy people, and easily propagated, not only by contact, but by towels, cloaths, beds, &c. It is at first view hard to distinguish from those anonymous pimples, of which we have been treating above. But the very great itching of the pustules, and their assigned situation to which we may add contagion, in a short time give the character of this disease. Scabies, as well as herpes, and pruritus, is sometimes *moist*, sometimes *dry*. The *first* being less itchy, makes little ulcers discharging a sanious pus, from the concretion of which arises a crust which becomes a decidu-

ous powder; the *dry* being attended with very great itching, is therefore the most troublesome, and is moistened with no humour unless it be occasioned by the scratching of the nails. Both are confined to the skin, and are fixed no deeper.

Scabies, besides contagion by which it is widely disseminated, is *contracted* by savage filthiness and stench, and by damp houses. It is also brought on and favoured by the venereal and scorbutic virus, quartan fever, taint of the liver, &c. The recent Scabies is easily cured, especially when moist and in the young subject, but the inveterate is thought to be very *obstinate*, especially in old age. That is removed in a short time, which takes its rise from an external cause; but when derived from a bad state of the humours not rarely putting on the appearance of leprosy, it can scarcely be subdued. If Scabies of a bad kind *recede* spontaneously or by imprudent remedies, the case is dangerous; hence arise very serious disorders, namely, dangerous fevers, unmanageable cough, fatal suffocations, phthisis, epilepsy, apoplexy, &c. to prevent which misfortunes, after the unhappy *retrocession of Scabies*, *venesections* and *cathartics* are successfully used: nor do diuretics, sudorifies, and other evacuants afford less help, which by carrying off the devious and virulent humour, by the various sinks or outlets, may repurge the blood. With the same view are used the warm baths, which are calculated to open the pores of the skin. Sinapisms, blisters, &c. are also deservedly recommended. Lastly, in the same state of things are advantageously exhibited, flowers of sulphur, mercurials, and other remedies against Scabies, which remain to be mentioned.

No one is ignorant that sulphur, both internally and externally used, is justly celebrated as a *specific*, and that from this is prepared the very common ointment, which, after premising general remedies, may be rubbed on the affected part twice a day. The use of this ointment is rarely continued beyond the third or fourth day; nor is there need of any other cure, when not excited by an internal cause; but if any taint of the blood be suspected, it is necessary to take another method, which consists in the long continued use of temperants, depurants and aperients, the best of which are succory, borage, pimpinella, dock, fumitory, hop, river crabs, millepedes, &c. which are usually followed by diaphoretics, among which broths of vipers take the pre-eminence. While these are in use, cathartics are to be given from time to time. Moreover, in some cases preparations of milk are suitable, which perhaps have not their equal among temperants and depurants. Having used these, it is proper to have recourse to sulphur, both taken by the mouth and applied

to the skin. Mercurials indeed are preferable to this for venereal virus; otherwise they seem to be without any specific power, or become hurtful. Lastly, the cure is completed by drinking the warm mineral waters according to medical rule, which often answer the wishes of the sick, after other remedies have been given in vain.

Besides the *officinal ointment* prepared of sulphur and hogs lard, and above recommended as the most excellent remedy in this disease; other medicines may be exhibited as occasion requires, both demulcents and resolvents, namely, camphor, saccharum saturni, litharge, black soap, oil of eggs or of paper, oil of tartar per deliquium, nutritive ointment, or that which is made of the pulp of dock roots; Neapolitan, &c. Moreover, the method of cure is often directed by the *juvantia* and *lædientia*; and nothing ought to be omitted in this very obstinate disorder, which may seem profitable as a cure. Lastly, we must not conceal, that while using the above-mentioned remedies, the domestic *baths* do good, or those prepared of the warm mineral waters, which last not only happily overcome existing scabies, but are thought also profitable and necessary to prevent the disease.

IMPETIGO.

THAT *loathsome species of scabies* is thus called, which some think differs from the legitimate only in the more intense degree, and which appears, on account of its fierce and obstinate nature, to approach very near to lepra. The pustules in this affection are very numerous; which afterwards becoming heaped together and confluent, itch exceedingly, and are moistened with a very fetid sanies, which runs into scaly crusts. These pustules are not observed to be situated between the fingers, as is common in the genuine scabies; but are disseminated over the whole skin. Tubercles moveable, schirrous, and indolent, especially shew the character of Impetigo, disfiguring in a particular manner the face, which we have already noticed to be free in genuine scabies. Meanwhile as the disorder advances there take place pains spreading widely, or besetting every part of the body; the sick have a very hoarse, aukward, or mournful voice; the teeth have a loathsome blackness, the breath is fetid, and the bones here and there swell, &c. From which it is plain how much Impetigo, penetrating deeply, differs from genuine scabies, which is confined to the skin. It is no wonder if *leprous*

scabies, should cause such a taint, since it appears to originate from venereal or scorbutic virus.

From the foregoing it is collected, that *Impetigo* is exceedingly obstinate, and indeed altogether incurable, unless by suitable remedies the depraved state of the blood and humours be obviated. All the above-mentioned medicines are brought into use, but (after premising generals,) sudorifics and mercurials, together with antiscorbutics, seem to excel the rest, if there arise any suspicion of *lues venerea*, or there appear signs of scurvy. Nor, while these are in use, must we omit the milder cathartics, often repeated. Moreover, the warm mineral and martial waters, and other aperients and diaphoretics are given with advantage, the efficacy of which, in the cure of almost all chronic affections, has been often proved. Lastly, by some are recommended, and not undeservedly, the long continued use of sea bathing, provided the latent cause of the disease be subdued by suitable remedies, and cleared out from the blood vessels: and with the same caution other topicals ought to be used.

LEPRA. LEPROSY.

THIS species of disorder, anciently very common, which at first sight seems to consist of scurvy, *lues venerea*, and scrophula, of which perhaps it partakes; is scarcely known in our day; so that some have altogether doubted of its existence; induced by these reasons, because in those ancient times, *lues venerea*, then unheard of, might have been taken for Leprosy, and therefore it appeared to them consistent with reason, that this last was mere syphilis, formed *sui juris*, or deviating from its proper character. Yet it has been my lot to meet with many that were afflicted with this taint, in maritime places, whither it seems they had fled from it, and I have learnt many things from experienced physicians, to whose care the sick have been committed; lastly, the works of judicious writers, who were not ignorant of the difference between the two diseases, I have sedulously perused, in order to say something certain on this subject. Wherefore this *most loathsome disorder* seems to be nothing else than a scabby and scaly itch, diffused through the whole habit of body, or scorbutic, as they say, when arrived to the last grade; nor are there wanting those who refer it to malignant herpes. Anatomical examination contradicts both opinions, and shews that the viscera have contracted no less infection than the habit of body.

Although this disorder is open to view, yet it is rarely attended to, before the horrid taint of the skin and subjacent parts presents itself; and not until many years have elapsed from the first commencement, does it acquire this grade: before this it lurks under the mask of herpes or scabies, which cutaneous faults encreasing gradually, seem at first to portend nothing bad, until having attained the height, they put on the appearance of *universal cancer*. Leprosy first exerts its rage in the face, hands and feet; the skin at this time is scaly, and marked with spots of different colours; exasperated with dry or humid pustules; eaten by sordid ulcers, beset with branny and scaly crusts; nor is it destitute of feeling in this first stage, but rather affected with itching scarcely to be allayed: moreover, in time it becomes thicker and rougher, tumid, and chopped, callous and as if daubed with ointment; and lastly, cold and without feeling so that you may stick it, burn or cut it, without trouble to the sick. But it has not this effect, as most have thought, on subjacent parts, namely, muscles, tendons, and membranes, which when the needle is pushed deeper, are found to be sensible; whatever some authors adduce to the contrary, who not innocent of plagiarism, have rashly given credit to antiquated fables.

The face, as the disorder advances, is suffused with a livid or leaden colour; it is affected with what is called *gutta rosacea*; or very loathsome pustules break out which not rarely acquire the size of a walnut, especially on the forehead, cheeks and chin; the eyes become stern, the nose grows to an enormous size, the lips swell and are inverted; the tongue, become thick and rough, is scarcely retained in its situation, other parts of the mouth are exasperated with various prominences; nor are the larynx and glottis better off, whence the hoarse and shrill voice, intercepted by squealing. Sooner or later the elbows and knees become swelled, and their motions impeded. The legs œdematous and varicous; the hands and feet swelled up, chopped, and seized with inactivity and torpor. There arise from various parts tumours running into putrid ulcers, virulent, phagædenic, filled with worms, and often reaching to the bones themselves, which thereby become carious. The *Leprous* emit a very fetid or bad odour, both from the mouth and from the surface of the body, most of them complain of a kind of itching lust, by which the penis nearly bursts with stiffness. Whence it is not surprising that some authors have thought the disease of which we are now treating, to be mere *satyriasis*. Lastly, the falling off of the hair and eyebrows; the nose, hands and feet affected with gangrene and dropping off, are so many *symptoms border-*

ing on death. Under these circumstances the sick even when free from all care, become despondent, and overcome with grief they flee the company of men; hateful to themselves, they pursue others with hatred, even their parents and familiar acquaintance; until consumed with hectic fever and marasmus, they are, in answer to their ardent wish, loosed from the chain of mortality.

From the foregoing it is collected that *genuine Lepra differs from the Elephantiasis* which spares the internal parts; and usually invades the teguments of the legs only, nor does it go deeper, and rarely spreads farther. Yet I once happened to have observed this through the whole surface of the body, except the face, in a nobleman forty years of age. This disease, namely, *Elephantiasis*, is epidemic among the Egyptians, gives more trouble by its tediousness than pain, does not hinder the functions, and although very obstinate is mostly void of danger; the skin when tainted with this evil is of a blackish livid colour and swells, is covered with rough scales, itches and sometimes pains, but is never deprived of sensation. As the disorder advances, varicous veins project, tubercles arise, not rarely running into ulcers, and other lesions of the skin take place, usually observed in Leprosy, but much more mild.

It appears beyond all controversy that Leprosy is propagated by contagion; but it mostly invades the poor and indigent, the dirty and filthy. *This beastly disorder is with difficulty mastered*, even in the first stage, although the viscera, as it is thought, remain at that time untouched, and the surface only of the body be affected. If it sometimes happen that it seems eradicated in the second stage, it does not rarely reappear with the return of winter. In the other stage, that is, when it has taken deep root, it withstands all cure except the palliative. Nor is *Elephantiasis* less obstinate, when arrived to a certain grade, although it excite less fear, it does not spare even the most cleanly, as I have found by experience. Although histories of the dissections of those who died of this disease are rare, yet it appears that there is no internal part free from the leprous virus, except only the heart, which is mostly found unhurt. But the other organs both pectoral and abdominal, are found dry and contracted, stuffed or inflamed, affected with purulency, consumed by putridity and sphacelus, eaten by ulcers, &c. The trachea in the first place, and the bronchia present themselves wrinkled, ulcerated, full of tubercles, or infected in some other way, not to mention some faults of the bones, cartilages and ligaments, not always conspicuous before death.

The method of cure, as well as in lues venerea, consists in incidents and sudorifics, first premising generals, namely, diluents, demulcents, refrigerants, temperants, and depurants, the most useful of which are whey and milk, farinaceous gruels, broths of chicken, veal, tortoise, frogs, &c. nor are the succoracious and acid plants less beneficial, dock, fumitory, nasturtium, and the other antiscorbutic herbs. Domestic baths are also of service, which lend a helping hand to the internal emollients. By the help of these, added to a suitable regimen, and not omitting the milder cathartics, that the primæ viæ may be prepared, a way is made for more efficacious medicines, during the use of which we think that the principal object should be, to bring away the morbid matter lodged in the viscera, and to carry it out, when disengaged. With this two-fold view mercurials are usually prescribed, namely, panacea, calomel, æthiops mineral, &c. the well known sudorific wood, antimony, vipers, &c. the manner of using which is directed by opportunity and circumstances. Sulphur taken by the mouth, or externally applied by itself, or in the form of fumigation, is not undeservedly reckoned by many among the very best incidents. It is said by some in whom confidence may be placed, that nothing perhaps is found more efficacious than the decoction of elm. The warm mineral waters outwardly and inwardly used, seem to emulate the virtues of incidents and sudorifics; which experience proves to have been often of benefit. Lastly, nothing is omitted of the *topicals* prescribed for scabies and herpes, which may assist the other medicines: for they deviate from the right path, who think that all external remedies are of no account, since they have often done no little good when given with a skilful hand: otherwise it is reasonable to believe that they are not exhibited without danger. There is another remedy, which perhaps excels all the rest, namely, *castration*, by which the disorder is said to be entirely eradicated, provided it have not become deeply rooted; which seems to contradict neither reason nor experience; since there is no doubt, in the judgment of a host of observers, that the castrated are never seized with this disorder.

Forasmuch as *Elephantiasis* seems to approach near to Lepra, it has been customary to treat them with the same remedies, having regard to the grade: on which account, having premised generals, refrigerants, nitrous medicines, depurants and antiscorbutics, the internal use of *sulphur*, *mercurials*, and *sudorifics* is adopted. With a similar intention are exhibited sulphureous or mercurial liniments and fumigations. Moreover, vulneraries, detergents and other *topicals* directed in the cure of ulcers are used. But in like manner as in genuine Lepra, the Elephantiasis

mostly baffles all remedies whatsoever, and although conspicuous to the sight and touch, it altogether refuses to be subdued.

ERYSIPELAS.

NO one is ignorant that by this name is designated that inflammatory tumour, flat and depressed, attended with acrid and burning pain, and having a bright red colour. There occur various species of *Erysipelas*, to be mentioned below; the more common and legitimate of which arises with shivering and fever; and the inflammation of the skin does not shew itself till after two or three days. The *cinnabarine*, or rosy and shining colour flies from the pressing finger, and returns immediately when it is taken away: from which, no otherwise than from intense burning, proceed vesicular pustules. This tumour in a short time attains its height, the stage of which is comprehended within about seven days, beyond which the skin becomes scaly. *Erysipelas* spares no part; but it most frequently invades the face and legs, and not seldom creeps from one part to another. It is called *Zoster*, (*shingles*, a corruption of *cingula*, a girth) if it surround the body. The character of *Erysipelas*, as already hinted, is diverse; in the milder species the fever vanishes in a few days, although the tumour runs its usual course; but in the more severe species the fever continues longer, and more alarming symptoms take place. Besides it sometimes attends putrid, malignant and pestilential fever, and breaks out about the fourth day of the disease or later, a remission taking place. But in this condition its course becomes longer, and it not rarely ends in suppuration, or brings on gangrene. *Erysipelatious* defluxions are of another sort, and shew a different type, which cease spontaneously, or yield to the common resolvents within two or three days. Yet some of this character surrounding wounds, and often partaking of oedema, are observed to be more slow. Of the same kind also seem to be those erysipelaceous obstructions infesting the legs of hydropic persons, which altogether recede from the genuine course of *Erysipelas*.

There occurs another species, namely universal, which is exasperated with itchy pustules, running into scales, and named by some authors, *pustulous Erysipelas*, among us, *Erésipele bou-tonné*, which is often brought on by the use of wine and ardent liquors. But another species is noticed, to which this name

more properly applies, called by authors, *rosalia*, in the commencement of which pustules break out, differing little from *morbillous*, but their red and tumid areolæ are more extensive, and run together: so that the erysipelatous obstruction arises from thence, occupying the whole habit of body, which is continued to the ninth day, and leaves behind it scales covering the whole body. This affection, very familiar to infants and youth, ought to be considered more dangerous than measles themselves, for which it is often taken by the incautious, and has by some claimed the name of *spurious small-pox*; but by many it is treated as anonymous eruption.

A sanguineous constitution of the body, and especially bilious, heat of the air, immoderate exercises, watching too long, vehement passions of the mind, undiluted wine, the eating of dainties, &c. are so many *causes* of Erysipelas of any kind. It is also reckoned among the number of scorbutic symptoms, in which condition it is longer continued, and sometimes besetting the legs, degenerates into a very obstinate ulcer. Examples of this misfortune do not rarely present in old people. Erysipelas of the head and face is thought the more dangerous, the greater the swelling. It is also of a doubtful event, if it rush upon glandulous parts and especially the breasts, nor does the *zoster* portend less danger. Lastly, it is known to every one that the retrocession of Erysipelas is dangerous; since the symptoms arising from hence, sometimes excite fear of death.

The *judgment of cure* is directed by attending well to the age, temperament and grade of the disease. We cannot doubt indeed that venesection does much good, if the strength will bear it, and other circumstances agree. But from this too often repeated, the Erysipelas sometimes returns, and hastens death. They deviate from the right path, who from viewing what they call inflammatory blood, infer that very numerous blood-lettings are necessary. Concerning this borrowed error so common to sciologists, we have more than sufficiently treated elsewhere.

Afterwards diluents and demulcents are prescribed with advantage, namely, whey, chicken water, emulsions, drinks of milk and water, &c. Diaphoretics so highly recommended in the northern countries, become hurtful in our climate; unless the recess of Erysipelas threaten danger; nor are refrigerants thought more healthy. Moreover, at the commencement of the disease, an emetic affords present relief, if the stomach be filled with depraved sordes, but cathartics are not given with safety, until near the end of the disorder. Yet the belly is to be kept open in the usual manner, through the whole course of the disorder, and promoted by the stronger purges, if on account of

saburra lodging in the first passages, oppressive symptoms arise, namely, delirium, comatose affections, &c. Lastly, hypnotics are often profitably called in, but we must deal cautiously with these remedies, lest they impart a fallacious ease.

Respecting *the external cure*, various resolvents are applied at pleasure, the best of which are elder flower water, camphorated spirit of wine, lime water, &c. SYDENHAM's epithem prepared of spirit of wine, theriac and aromatics is applied with advantage. RIVIERUS recommends another, made of the decoction of sage and Castile soap. We have omitted numberless others mentioned by authors. But topical repercutients and narcotics are to be avoided as worse than a snake; nor are ointments, oils, and mucilages thought less dangerous, which are often used by the unskilful; since from their preposterous administration, the Erysipelas recedes, or is seized with gangrene. But when this eruption proceeds more slowly than is right; if it subside in the time of its increase, or do not vanish after the stage is completed, more dangers threaten, for averting which, cardiacs and diaphoretics are prescribed with success. In this state of things *vesicatories* perhaps take the palm from the rest. Lastly, Erysipelas frequently recurring, is usually guarded against by venesections, mild cathartics, temperants, and mild aperients, depurants and antiscorbutics. With the same view are exhibited preparations of milk and mineral waters, nor are baths to be omitted, both domestic, and prepared from the warm minerals, by which prophylactics, the fomes of the disease is usually eradicated.

SCARLET FEVER.

NEXT to the universal erysipelas, comes the scarlet redness, affecting the whole subtumid surface of the body with a colour like *cinnabar*, but with this difference, that the disease of which we are now treating, is exasperated with no pimples. This eruption is preceeded by *shivering* and *fever*, pain of the head and eyes, discharge of tears, with redness of the conjunctiva, and heaviness of the eye-lids, spurious quinsy, cough, difficulty of breathing, anxieties, &c. which continue until about the fourth day of the disorder, the face is suffused with redness, and soon after the body and limbs are affected in the same manner. The exanthemata breaking out separately, are in a short time expanded and run into one, which usually vanish on the

seventh day from the first invasion, the skin remaining somewhat rough and scaly; so that not unlike erysipelas, measles, and small-pox, Scarlet Fever is subject to a peculiar stage of duration. From universal erysipelas does not seem to differ a certain species of redness mentioned by some authors, in which miliary or vesicular pustules arise, sometimes very small, sometimes broader, with which the whole skin is rough: but we leave this doubt unsolved. Infants and youth are *prone* to genuine Scarlet Fever, but this efflorescence more frequently invades virgins and women who do not menstruate well. Like the measles, to which it seems nearly to approach, this affection prevails epidemically, and seems even to be propagated by contagion.

But scarlet redness usually excites less *fear*, which otherwise in a similar manner, but more mildly runs its course. Yet it is not without danger, on account of the remains which it leaves behind: namely, obstructions and stuffings of the viscera, both of the breast and abdomen, which occasion great trouble to the physician, especially if there come on difficulty of breathing and swelling of the belly, exciting suspicion of dropsy already stagnant in the cavity of the breast and abdomen. But to confess the truth these misfortunes rarely occur, unless the sick live irregularly, or the disorder be treated with preposterous remedies, which in this view ought to be considered no less fatal than small-pox and measles.

The cure of scarlet redness is performed with simples. Therefore sometimes at the beginning of the disorder it is proper to use the lancet, nor is it forbidden after the eruption, if the violence of the pulse, and oppressive pain of the head denote an exuberance of blood. In which state of things we must meet the urgency, as is confessed by all who are not blinded by the fear of retrocession. Meanwhile diluents and temperants are to be largely drank through the whole course of the disorder. As to diuretics or other remedies, usually directed for small-pox and measles, by those who following *gain* only, accommodate themselves to the whim of by-standers; they ought not to be prescribed without the greatest caution. Vesicatories applied to the back and legs afford present relief, if the brain be in any wise affected. Cathartics also are happily prescribed with the same view. But these last are not to be used before the scales fall off, which may then be often repeated to prevent the misfortunes which, as just hinted, no otherwise than after measles and small-pox, often have the most fatal termination.

MORBILLI. MEASLES.

WE will not according to the usual custom of writers, comprehend under one and the same head, the *Measles*, (vernacularly *la Rugeole*,) and small-pox; since these disorders do not differ less one from the other, than the efflorescences treated of above, both as to their nature, and their appearance and progress. Nevertheless the *manner of invasion* of the measles and small-pox is almost the same; and indeed these are affections often scarcely to be distinguished, either as to their forerunners, or their first eruption, so that even judicious practitioners are not rarely misled by precipitate judgment, unless assisted by the well known epidemic constitution. Yet there are not wanting signs by which each disorder may be known; for the first eruptions of measles are observed to be lenticular, and heaped into areolæ in greater numbers, than in small-pox, even of the confluent kind. Nor is there perhaps any other difference between the pimples breaking out in either disease, but as they advance, the marks become more conspicuous, so that the character of each disease is manifest, as will appear from what follows.

The measles take their rise with a tremulous chill, which is followed by febrile heat, and sometimes on the first day the shivering and heat alternate. The fever then increases, the head is oppressed, and drowsiness comes on, attended in most cases with sneezing or bleeding at the nose. Meanwhile the eyelids swell, the eyes are full of tears of a flame colour and flashing, the fauces ache, and there arises a dry cough with difficulty of breathing: moreover, many complain of vomiting, gripings and looseness of the belly, to these may be added anxieties, pains of the loins, &c. which are the forerunners of the eruption. About the fourth day of the disease the efflorescence shows itself in lentiform spots, or depressed pimples, which breaking out here and there afford various areas, rough to the touch. These pustules are observed first in the face and neck, low and without suppuration: in a short time afterwards they diffuse themselves to the breast, and according to the law of scarlet fever and small pox, are propagated to the other parts. After the variolous eruption the symptoms are abated, to return again; but these phænomena continue after the morbillous efflorescence is finished, which like scarlet redness, vanishes after the third day, the skin remaining scaly, or as it were sprinkled with a kind of farinaceous powder. Nor is the disease always repressed after the extinction of this, since not only the fever, cough, and diffi-

culty of breathing are sometimes continued, but even inflammation of the breast, diarrhæa, and other affections come on, much more dangerous than the primary disease. We add nothing of that imaginary morbillous fever, of fourteen days, which SYDENHAM has mentioned, since it is of the genus of miliary putrid fevers, &c. concerning which in their place, and (by the leave of this great man,) have no affinity with legitimate measles.

No one is ignorant that the measles, to which especially infants and youth are liable, *are rarely thought dangerous*, unless by imprudent regimen, or preposterous medicine, they vary from their character: for by the imprudent use of cardiacs and other stimulant remedies, while the cough is urgent, under the hope of promoting the eruption, peripneumony is often produced, which in this condition, sends many to that place from whence there is no return, or brings on phthisis or other dangerous and chronic disease. We may predict a happy termination, if the accession and recess of the efflorescence be subject to the constituted law of nature, described above. On the contrary when the eruption is earlier or slower, it even reduces the patients to the risk of life if continued beyond the fourth day, if new pimples are formed, or if they be disfigured with gangrenous spots. Lastly, all the symptoms are of a bad kind, which excite suspicion of affection of the brain, lungs, and abdominal viscera, since there is no doubt that the *internal organs* are affected with a very copious production of *morbillous pustules*, as *dissections* prove.

Measles require very simple or no *cure*, when recurring in the order constituted by nature; but the case is otherwise if the symptoms be aggravated, to prevent which after the first invasion venesections are of excellent service, by the help of which inflammation is prevented. An emetic also at this time is given with advantage, by which the saburra of the first passages is carried off, which in the progress of the disorder might infect the blood. Venesection is rarely to be repeated unless there be danger of inflammation of the fauces and lungs, difficulty of breathing, violent fever, &c. otherwise they are thought not only superfluous but hurtful, notwithstanding what those may prate to the contrary, who led by their own hypothesis, see nothing but inflammation in almost all acute diseases; for I have often observed, not without concern of mind, that, while in epidemic constitutions, patients have escaped who were committed to nature, others who submitted themselves to this imprudent method, winged their way, in great numbers, to the ethereal mansions.

Among the most useful and *efficacious remedies* are to be reckoned diluents and temperants; nitrous medicines also are useful

in some cases. As to cardiacs and alexiterials, formerly too much celebrated, and even now approved by the ignorant vulgar; they have ceased almost to be used, either in the cure of measles or small-pox: yet they ought not to be quite discarded, if the strength fail, or the eruption do not go on properly, or there be an unusual delay of the pustules. But the milder diaphoretics may be used, such as scorzonera, borage, flowers of the wild poppy, &c. If cough be urgent, pectorals, demulcents, and anodynes are of service; also the white decoction, diascordium, &c. if the bowels be too loose: but if there be too great constriction, emollient clysters and laxatives are to be used. Convulsive affections are to be treated with antispasmodics, nor are narcotics forbid, if wakefulness, cough and pains be very troublesome. But with these last, which were perhaps too much recommended by SYDENHAM, we must deal with caution, especially in infantile age. Lastly, spurious quinsy is guarded against by demulcent gargarisms, and emollient cataplasms; let the affected eyes be fomented with rose water, plantain, &c.

It is expedient to remark that a *very hurtful custom* has prevailed, to confine the patients in this disease, while in bed with curtains, and bury them as it were under the clothes; hence it is no wonder if their strength, being exhausted by too great an expenditure of perspiration, matters become hopeless, and many suffer the penalty of this fatal prejudice. Wherefore those seized with Measles and small-pox, ought not to change their accustomed mode of lying in bed, and should be covered with the same clothes. There is another, but wiser custom, that is, *after the disorder is removed*, to finish the cure with *cathartics* twice or thrice repeated: for it is proved by multiplied experience, that this method has been very salutary; and let those beware who neglect it, lest something unfortunate happen, nor are there wanting examples of this. Lastly, Measles, as well as small-pox, and other cutaneous eruptions, sometimes strike inward, in which state of things, nothing is to be left undone to prevent inflammatory obstructions of the viscera, and to invite the devious morbid matter to the skin, or intestinal outlet. This is happily effected by bloodletting, cardiacs and diaphoretics, but vesicatories take the palm from these, nor are cathartics to be defrauded of their merits.

VARIOLÆ. SMALL-POX.

THEY err from the truth, if I mistake not, who suppose that the *distinct* and *confluent* small-pox differ much one from the other, so that there requires a two-fold method of cure. From multiplied experience I do not hesitate to assert that this imaginary difference consists in the *grade alone* of one and the same disease. Nor are there wanting examples of the distinct being, contrary to the common opinion, more severe than the confluent themselves, both on account of the more plentiful formation of pustules, and in respect of the danger of the symptoms. Although this disorder appears plainly of itself, yet its accurate *delineation is arduous*, since the crowd of symptoms is so great, that we can scarcely enumerate them all, and besides their number they undergo various modes and assume an inexhaustible variety. It is necessary to remark before we attempt the description of Small-Pox, that the solitary pustules have been observed to be more prominent and pointed, but the confluent and heaped together, to be more depressed, and that the skin in this case was subtumid. The Variolæ break out from the whole surface of the body, not excepting the palms of the hands, and soles of the feet, and genitals; nor do they spare the bulb of the eyes, internal nostrils, mouth and fauces. SYDENHAM was pleased to call those *regular* which are attended with no severe symptoms; and to consider those to be *irregular*, which appear under what is called a malignant form, whether of the distinct or confluent order.

The shivering and fever with which this affection commences, are followed by headach, drowsiness or delirium, sneezing, noxious belching, nausea and vomiting, heart-burn and gripings, pains of the back, weariness, strangury, &c. A sweat more or less conspicuous usually preceeds the itching *eruption*. Breakings out, very much like flea-bites, shew themselves about the fourth day of the disease, in the face, neck and breast, and are afterwards propagated through the whole body. The fever abates after this eruption, or altogether ceases. Hæmorrhage of the nose especially in infants, preceeds or attends this efflorescence. Meanwhile the inflamed eyes cannot bear the light, and not rarely as the disease advances, by the eyelids swelling beyond measure, are altogether closed. At this time in some cases, a very troublesome swelling occupies the whole head and neck; which following the order of the eruption, pervades the whole habit of body: so that a universal erysipelas seems to afford

the base for the variolous pustules, which, as already hinted, usually infest the mouth, fauces, and even nostrils : in which state of things, the sick can scarcely swallow, and adults labour under a kind of ptyalism, while in infants the belly is loose. The more prominent pimples then run into suppuration ; at which time the fever again increases and the pulse becomes fuller. This state is called by some the *secondary fever*, nor are there wanting some who led by their own hypothesis, attribute it to a kind of imaginary putridity. Yet the fever never ceases in the confluent of a bad kind, which is only exacerbated during suppuration. Delirium and drowsiness, often the forerunners of the eruption, as above inculcated, may also come on through the whole course of the disease, as also convulsions, dysentery, &c. under which circumstances the sick are brought into great danger, about the eleventh or fourteenth day from the invasion, namely, before the falling off of the crusts, which usually happens between the twelfth and fifteenth.

It cannot escape the notice of any that Small-pox are more dangerous in advanced age, than in infancy or youth. The prognosis is usually taken from a view of the face and from the manner of breathing : for a very great swelling of the head and neck, with a plentiful production of pustules, and panting, excite very great dread. If variolous pustules break out on the first or second day of the disease, the case is of a doubtful nature, nor is the more tedious eruption thought less dangerous. We may conjecture a happy event, if the inflamed pustules are rightly prominent ; but pustules breaking out in clusters, very small or depressed, crystalline or like warts, and also of a blackish livid colour, are enumerated among the fatal signs : these finally ripen with difficulty and are changed into crusts. Their recession portends no less danger, if there remain no intumescence of the skin. A fever continuing after the eruption, threatens a serious disease, nor do morbillous eruptions or of any other kind, terrify physicians with less fear, nor blackish livid or gangrenous eruptions, blackness of the tongue and lips, &c. Bloody urine is thought fatal ; but other hæmorrhages are thought less alarming, especially in infants and those altogether free from scorbutic taint : lastly, catamenia breaking out in the course of the disease are thought to be innocent. A fatal indication is gathered from very great sweating in the first days, while the pulse is weak. A flux of the bowels especially dysenteric, or of any other sort, is reckoned among the fatal symptoms ; ishcury and dysury, on account of the subsidence of the pustules which it brings on, convulsions coming on after the eruptions, ptyalism checked in adults, or diarrhæa suppressed in infants, &c. Nor

are the sick out of danger even after the disease is removed, as above noticed, since other misfortunes threaten them, namely, abscess invading not only the external parts, but often lurking within the viscera; gangrene and caries, and other fatal affections; not to mention blindness, deafness, palsy of the legs, &c.

From the foregoing it is collected that Small-pox is followed by destruction and death. Cannot *inoculation* avert this mischief, as it is received among various nations from long and successful use? But it seems to be opposed by some, with very strong arguments, so that as yet "*sub judice lis est.*" Yet if confidence may be placed in the experiments hitherto made public, scarcely one among a hundred patients who have been inoculated, dies, while the legitimate Small-pox kill one out of seven. But we leave this controversy to be decided by experienced practitioners, that we may proceed to *dissections of the bodies*, in which there present to view the viscera, namely, the lungs, liver, pancreas, stomach, intestines, &c. covered with variolous pustules, scarcely differing from the cutaneous: with these pustules even the trachea and bronchia sometimes abound. Besides there occur here and there obstruction, inflammation, gangrene and putridity. The brain and cerebellum are found sunk in, or collapsed, their vessels turgid and varicous with blood. There is met with a blackness imprinted on the dura mater and substance of the brain; the heart is dry, the stomach eaten by ulcers, the omentum torn and putrid, &c. there is found a serous, sanious or bloody colluvies, both within the recesses of the brain, and in the cavity of the breast and abdomen.

Those who set about the cure of Small-pox, ought first to guard against coldness or inclement heat of the air, laying aside the prejudices of the ignorant vulgar. The cure of Small-pox of the best kind is performed with simples, unless more judiciously left entirely to nature; but when the disease is exasperated by the above-mentioned phænomena, there is need of the medical art. Wherefore at the commencement of this affection of a doubtful nature, in juvenile or adult age, the vessels are to be depleted by one or two venesections; then without delay the foulness is to be carried off by an emetic or cathartic, otherwise in the course of the disease it occasions great trouble to the physician. It is expedient to remark that numerous blood-lettings, the practice of which, even against experience, some who are eager for novelty have attempted to introduce, have mostly been in vain, and often by extinguishing the native heat, have become hurtful or fatal. For by copious blood-letting they do not prevent hæmorrhages and obstructions of the viscera, as some who are addicted to this method, imagine; which clearly

appears from my own observations of them, and from dissections. Yet venesection is not forbidden in any stage of the disease, when all other things agree, if suffocation threaten, ptyalism be checked, or there arise any alarming symptom: In which case even during the secondary fever, SYDENHAM himself ordered blood to be drawn: but it is well to know that this evacuation would be inefficacious against bloody urine and sweat, or other hæmorrhage; and in what is called malignant Small-pox, is to be avoided as worse than a snake. Having premised these observations on bloodletting, we come now to the other remedies, among which the most useful and beneficial are diluents, temperants and mild diaphoretics, namely, ptisans of grass, liquorice, borage, scorzonera, flowers of the wild poppy, lentils, &c. If the cough be urgent and the body too hot, chicken or veal water, emulsions, lemonade, &c. are of service; but these last cannot be used without danger, if the disease progress more slowly than is proper, nor is the spirit of vitriol forbidden, when the blood is too much heated; this is highly extolled by the very experienced TISSOT; but it ought to be administered with a skilful hand.

Cathartics, in the course of the disease, ought not to be prescribed unless there be an urgent necessity, or ptyalism be suppressed, but they may be safely used *when the small-pox are declining*, that is, about the falling off of the crusts; and indeed, as in the measles, they are to be often repeated, to prevent the remains of *the disease* which are often incurable or fatal. Meanwhile the belly must be kept free through the whole course of the disease, especially if the face and neck be too much swelled; in which state are profitably given, whey, Damascene plums, cassia and other mild laxatives, or suitable clysters are injected. Otherwise those who study the safety of their patients ought to abstain from cathartics; for from this method the fathers of the art did not vary a tittle, (perhaps too much addicted to it) which nevertheless, some have imprudently neglected, among the more modern *Polypharmaci*, who are above walking in the footsteps of the ancients. It is wonderful indeed, that those who by their unlucky practice, are daily striking against very dangerous rocks, should be so blinded by their own opinions as not to desist. Nor do they more happily hit the mark, in my opinion, who refuse to open the confined bowels, by emollient clysters; induced by the belief that the formation of pus is promoted by costiveness: nor was SYDENHAM himself, in other respects the illustrious arbiter of medical practice, free from this error.

Narcotics exhibited cautiously and in due season, obtain no mean grade in the cure of Small-Pox: yet does it not argue

temerity in the said author, who after the eruption was completed, used to exhibit diacodium twice or three times every day, even during delirium? I think, with deference to so great a man, that it is incongruous. Hypnotics indeed, by appeasing the violence of the humours, remove pain, and bring on sleep, but they as it were throw a veil over the disorder, and prolong it, besides delirium is often changed into mania by these remedies, and is never quieted; the belly also is rendered costive thereby. But against the fierceness of the cough demulcent pectorals are exhibited with advantage, and when hæmorrhage threatens, ptisans of rice water, greater comfrey, emulsions, nitrous drinks, &c. are given with benefit, nor are external astringents and styptics forbidden for restraining it. When the eruption is difficult or slow, and the pulse weak, alexiterials and cardiacs are of use: the best are pulvis Comitissæ, or the powder of vipers, syrup of the rind of lillies, confectio alkermes, &c. But in this state of things generous or Spanish wine is perhaps the best: Yet it ought to be remembered that this is the work of nature.

Too great looseness of the bowels in adults, is to be moderated by nitrous and absorbent medicines, but nothing perhaps is better in this dreaded situation, than an emetic itself, after the action of which astringent stomachics are safely used, namely, red roses, sumach, pomegranate shell, dragon's blood and others of that sort, to which may be beneficially added hypnotics. But no attempt is to be made to check the looseness in infants, for we have already noticed that this evacuation is very salutary in them. Acids are useful in bloody urine, and for ischury, grass, dandelion, pellitory, Glauber's salt, sweet spirit of salt, are prescribed. In convulsions, pulvis de gutteta and other antispasmodics are deserving of praise. If there be any signs of putridity in the first passages, spirit of sulphur, of vitriol and other antiseptics are useful. But if after the stomach is well depleted, nausea and vomiting should be urgent, lime juice mixed with salt of wormwood are exhibited with success. Lastly, when the double tertian fever or other intermittent follows the Small-Pox, we may recur to the Peruvian bark, the efficacy of which, in this case, has been proved by experience. Having finished the remarks on the internal cure, we come in order, *to external remedies.*

We have already inculcated that spurious quinsy is reckoned among the more troublesome and frequent symptoms of Small-Pox; care must be taken therefore to mitigate it. Gargarisms prepared of milk, decoction of rich figs, &c. answer this purpose. When the pustules of the face are too hot, they are usually fomented with a solution of spermaceti in oil of sweet

almonds, cream, or any other demulcent. Some cut off those that come to maturity, or perforate them with a silver needle; but if I mistake not, this method is unsuitable, by which the falling off of the crusts is rendered more slow, or the pits become deeper. If there be a necessity of drying them, chalk, ceruss, or such like, mixed with cream, or rose ointment are conducive; but it is not always safe to use these *topicals*. Washing the eyes with milk, althea water or other demulcent, is of benefit. That ordinary collyrium prepared of the waters of roses, plantain and saffron, seems to do little good. Especial care must be taken to prevent the agglutination of the eye-lids, lest the matter stagnating there should inflict ulcers both on the bulb of the eye, and internal surface of the eye-lids; which erosions then occasion very great trouble to the physicians, unless they are destroyed by the application of lunar caustic. *Warm baths* are justly celebrated, if the pox break out with difficulty; Nor are bathings of the feet without their use, for the same purpose, or fomentations applied to the legs. Vesicatories above recommended, not only bring back the receding eruption, but also mitigate the affection of the head, and with this two-fold view are frequently brought into use. Lastly, some who are anxious about trifles, attempt to take out those obstinate spots of the skin, remaining after Small-Pox, by oil of eggs, or of myrrh per deliquium, or other cosmetic; but little is gained by these *topicals*. Hence, unless I am deceived, it is better to commit to time the extinction of these marks, that do not at all affect the health. As to the other *remains of Small-Pox*, namely, loathing of food, slow fever, parotids, furuncles, ulcers of the cornea, fistula lachrymalis, œdematous swelling, &c. they require no peculiar remedies, but each disease demands its own cure, treated of elsewhere.

Having finished what was to be said of legitimate Small-Pox, we now come to a sort of *other species*, namely, *spurious Small-Pox*, vernacularly, *petite vérole volante*. But they differ much one from the other, except their first appearance, since in respect of character and stage, the disorder now treated of, comes nearer to scarlet redness and measles. Which notwithstanding does not hinder the incautious and unskilful, (deceived at first view,) mistaking spurious Small-Pox for the legitimate. But if the pimples of spurious Small-Pox be submitted to closer examination, they are found to be transparent or crystalline, on account of their apex being vesicular, and they contain nothing but serum. Besides, the spurious Small-Pox is terminated within about three day, and is usually preceeded by slight fever. Respecting the cure, having established a suitable regimen, little or

nothing is necessary to be done in the course of this disease. But after the pimples are dried, it is well to prescribe one or two cathartics: for the old practioners never omit this simple caution.

It would indeed be superfluous to dwell longer on these things of little moment, wherefore we conclude.

SYNOPSIS
OF THE
UNIVERSAL PRACTICE
OF
MEDICINE.



BOOK THE THIRD.

COMPREHENDING
THE DISEASES OF WOMEN AND CHILDREN.

SECTION THE THIRD.

Of the Diseases of Virgins and Married Women.



HYSTERIS. HYSTERICIS.

THAT Hysteris, familiar to virgins and married women, is allied to hypochondriasis, will presently appear; and there occurs no other difference between the two diseases, than what is derived from the peculiar temperament of either sex, or the well known structure of the genitals. Hysteris is justly reckoned among the more frequent disorders, and seems to spare only viragoes, or persons leading difficult or laborious lives. It often comes on clandestinely, and puts on the appearance of other disorders, resembling the more severe; wherefore it is little wonder, if it should be often blamed by the unskilful, that is, so often as they are in doubt about the character of the disorder, and know not what to do. Yet Hysteris and Hypochondriasis are so very various, and are associated with so many diseases, that the diagnosis of either is surrounded with the greatest difficulties. A slothful and idle life, grief and solicitude, jealousy, anger and other perturbations of the mind, long fasting; great loss of blood, or other humour, hæmorrhage, suppression of the catamenia or lochia, &c. are the common causes of Hysteric af-

fection. It sometimes preceeds or follows the menstrual flux; the sight of various horrid objects promote it; some odours, although very grateful to most people, &c. But it takes its most common rise from adversity: concerning which it is always necessary to enquire of the patient or of the bystanders. We cannot doubt that this proteiform and very intricate disease affects the nervous system, but experience and anatomical observation prove that this morbid constitution of the nerves is promoted by a certain state of the uterus and ovaries: for no one is ignorant that pregnant and puerperal women are more *prone* to Hysterics; very frequent births bring it on, faults of the menses, retained lochia, &c. But it seems to be placed beyond all doubt, that it is sometimes brought on by a peculiar state of morbid lymph.

Hysteris shews itself by so many signs, and is attended with such a croud of symptoms, differing highly with respect to the grade, age, temperament, and kind of living, that it deserves to be called a *legion* of diseases: hence it is plain that the *history* which we now attempt to give, will be very intricate. To begin with the superior parts: *The head is afflicted in various ways*, very often it aches exceedingly, and is affected with vertigo, and a kind of absence of mind: although there is an acute pain familiar to it, confined to a very small space, which is called *Clavus Hystericus*. Besides, many complain of a pulsation of the temporal arteries, of cold of the forehead, and noise in the ears. The limbs are sometimes shaken with spasmodic tremor, or are distorted by dreadful convulsions, followed by distressing weariness. Moreover, the patients are vexed with grief, and sometimes not in their right mind; at times they take deep sighs, or overcome with sadness, shed tears; sometimes they sing, and shake their sides with laughter; so that then they differ little from maniacs. Meanwhile there break forth flatus, acid or offensive belchings, with frequent spitting, sometimes tooth-ach. Frequent suffocations arising from constriction of the pharynx and larynx, excite terror, so that the patients seem to strangle from the swelling of the neck. A dry and very troublesome cough oppresses many: *palpitations of the heart* are very frequent, the violence of which is sometimes such, as to be seen and heard by the bystanders. Besides in many there is perceived by the hand applied, a pulsation of the celiac or superior mesenteric. Yet the pulse when usually felt, is now weak and slow, now unequal and intermittent, again quick and frequent, and indeed sometimes quite obliterated. A fever sometimes rises, which recurring once or twice every day, has the type of intermittent. These are the principal symptoms in the head and breast; we come now to the abdominal,

Hysterical patients are plagued with anxiety and nausea, and indeed great vomitings sometimes occur, nearly resembling ileus. Rumbings and pains of the bowels are frequent. And colic pains of the spasmodic kind not rarely become severe, and often exercise the greatest tyranny. In some the abdomen is *inflated* and swells, and presents a kind of undulatory motion; which not only, as they think, is directed from the uterus to the epigastric region like a ball ascending; but is propogated even to the fauces; which, as above hinted, is thereby affected with spasmodic and very violent constriction: of this phænomenon, it is well to remark, some Hypochondriacs also complain. The urine is colourless, the bowels sometimes loose, but oftener constricted. Heat and cold alternate, and wander through the whole surface of the body, and gapings and stretchings frequently recur. Moreover, the patients complain of pains of the back and of a spasmodic and very troublesome sensation of the legs. Lastly, there arises a swelling of the legs which does not vanish on lying down, and does not retain the prints of the fingers, by which marks any one may understand that it differs altogether from œdema.

The Hysteric sickness mostly suffers its own *accessions*, which sometimes return at stated periods, or certain intervals of time. These are denoted by yawnings, stretchings, hiccough, rumblings of the bowels, heat and redness, which are followed by shivering and paleness, a certain sensation of the womb, &c. It mostly begins with spasmodic constriction of the fauces and glottis, by which respiration and deglutition are impeded: convulsions of the limbs, followed by swelling of the tongue, and loss of voice. Many are seized with profound sleep, with loss of all sense, as in apoplexy; for which this state is sometimes mistaken by the unskilful: but the contraction of the lower jaw shews the character of an Hysteric fit, in which the panting respiration, with snorting, familiar to apoplectics, is altogether deficient. But it must not be concealed that an Hysteric invasion, when arrived to a certain grade, does not rarely run into genuine apoplexy, and indeed hemiplegia. Nevertheless, from an accurate examination of the antecedents, the difference of the two diseases is manifest. For, as above hinted, the Hysteric paroxysm is preceeded by undulatory spasms of the bowels, with inflation of the abdomen; swelling of the tongue and neck; convulsions very much resembling epileptic, by which not only the limbs, but also the muscles of the breast and abdomen are seized; which forerunners are entirely wanting in apoplexy.

An Hysteric fit presents also the type of syncope, by which many are deceived; but a loathsome paleness of the face, and cold sweats, shew the character of syncope, which besides goes off in a short time, while the Hysteric accession may last for many

days. Yet the pulse, in some Hysterics, as in syncope, is altogether obliterated, and indeed the functions of the breast seem to be lost, so that a looking-glass applied to the nostrils is scarcely obscured, nor do they wink when the flame of a candle is brought very near: wherefore in this condition the patients are cold, and seem to have breathed their last, and are considered dead; and sometimes, through an unhappy fatality, have been thus buried. Nevertheless by a view of the eyes alone, which after death, are quite deprived of their brightness, the mark of latent life may be discovered: to which mark may be added blisters from the application of vesicatories: which exert not the least action upon the dead body. Moreover, it is well to know, that some Hysterical patients, although they lie motionless, and cannot speak, yet retain in a degree their sight and hearing; and are not deprived of intellect, since some can express their thoughts by nods; and from anger or any other violent passion of the mind, they sometimes are roused and get up: which I remember to have seen in a noble lady, who lay motionless several days, the usual remedies in this case having been given, to no purpose. There was a proposal for applying a blister, which the patient observing, she was exceedingly averse from having it put on: while the surgeon was preparing for this operation, the patient, incited by passion, rose as it were with all her collected strength, gave the surgeon a violent stunning blow; and then relapsed into her former state; which by other remedies, or by the spontaneous powers of nature, soon after ceased. The Hysterical paroxysm sometimes soon goes off, sometimes is extended to many days, and not rarely, after deep sighs, ends in sweat. After its termination, the imagination in many cases is injured: for many burst into very loud laughter, and perform a thousand ridiculous gestures; until the mind become sane, they complain of heavy pain of the head, and of a kind of stupidity, also of a troublesome sluggishness of the body, just as if they had been bruised with strokes.

Hysteris, although difficult of cure, and sometimes baffling all attempts, yet mostly *occasions more terror than harm*. Nevertheless some hysterical patients are taken off by a violent fit, since this affection, as already inculcated, when attaining the utmost grade, may end in genuine apoplexy; the character of which appears beyond doubt, by hemiplegia not rarely following. At other times this disease is of long duration, occasions much inconvenience and impatience; and indeed very often lays secret snares for life. It is certain that jaundice has also often followed an hysterical fit: but whether this lesion of the liver was owing to this cause, we leave for others to examine: There is the

same judgment of some other affections, accidentally appearing after hysteris. Another evil threatens from long continued hysteris, namely, incurable atrophy, if the primary disease be occasioned by any organic fault of the uterus or of any other viscus.

Dissections exhibit the ovaries very much enlarged, or injured in some other way, they contain a matter sometimes limpid, sometimes muddy, blackish, &c. They also contain a sebaceous, cheesy, or gypseous matter; hairs, bones, &c. From these schirrous organs break out tubercles, hydatids, or other cystic tumours, sometimes of the size of a fist and larger. In almost the same manner the uterus, fallopian tubes, and the spermatic vessels themselves are found diseased, which contain substances of different kinds, as well as the viscera. The neck of the uterus is also found altogether obstructed with a cicatrix. This fault occurs much more frequently than is commonly supposed, after the laceration of its mouth by difficult parturition. We add nothing concerning a double uterus, and other congenital faults of the organs of generation, which are very rare, that we may speak of those lesions of the viscera, that are much more frequent. The stomach therefore is found thrust from its situation, and almost down to the pelvis; the duodenum is met with, beyond measure enlarged, its termination being constricted as by a ligature tied round it: the colon and rectum, stuffed and obstructed by hardened and whitish feces; the mesentery, pancreas, or other abdominal viscera, schirrous; putridity occurs every where. The heart sometimes presents to view, of very great size; its thalami swelled with tough and black blood, nor are there wanting what are called polypous concretions, &c. Lastly, there are found stagnations of various sorts, both in the cavity of the breast and abdomen, and in the brain itself.

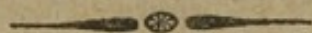
To proceed to the cure: venesection is of benefit, if there be marks of plethora, or the catamenia be suppressed, otherwise it is useless or hurtful. Emetics and cathartics are often given with advantage, but beware lest the stimulus being too often repeated, irritate the horns, which every practitioner knows to have frequently happened. After the *primæ viæ* are well depleted, anodynes are useful, in colic or other severe pains; if looseness prevail, and the sick be tormented with obstinate wakefulness, antihysterics are properly associated with narcotics, and especially the tincture of castor. Among paregorics the external and internal use of camphor has not undeservedly been recommended, which nevertheless many hysterical patients cannot bear: in such case the mineral anodyne liquor is more safely given. The Peruvian Bark merits great praise, either exhibited

by itself, or associated with antihysterics; which last may fill all vacancies; the best and most approved of which are valerian, elecampane, balm, sage, rue, mugwort, feverfew, flowers of the lime tree, saffron, amber, castor, asafœtida, orange flower water, compound water of balm, English volatile drops, succinated spirit of sal ammoniac, &c.

Other remedies are used as occasion requires; namely, aperients, emmenagogues, bitters, martials, aromatics and roborants, both simple and officinal, namely, mithridate, theriac, &c. But diluents abundantly drank take the palm from the rest, to this class belong the various natural mineral waters, to which may be added very simple water freely drank, whey, &c. Milk itself also merits praise, and often succeeds very happily. Nor are *external remedies* to be omitted, namely, domestic baths and semicupia, the most simple clysters, or carminatives and antihysterics, &c. Meanwhile those who use these remedies will do no good, unless they gain the confidence of their patients: for endeavours are to be used to free them from grief and sadness, that they may be taken off from their serious thoughts to which they are prone, and may be prevented from indulging in idleness; lastly, that they may be guarded against violent passions of the mind, from which arises this host of diseases, and in one word, that their minds may be composed to cheerfulness. Fear, with which the sick have been greatly agitated, has sometimes kept off this disease; concerning this amazing phenomenon, see the History of the ROYAL ACADEMY OF SCIENCES, for the year 1752. Excessive joy, violent anger, oppressive cares, &c. may sometimes have the same effect. Lastly, it does not escape any, that hysteric affection is very often occasioned by a morbid propensity to venery: what is to be done in such cases, is obvious to all.

Having finished what was to be said of the prophylactic cure, we come to the treatment when present; for *when the hysteric fits are prevailing*, they demand other, or *extemporaneous* remedies; among which is recommended, venesection, in the state of things already mentioned; otherwise I have learnt by experience that it would be useless or hurtful; which nevertheless (it must not be concealed) was approved of by SYDENHAM and other very eminent practitioners, who recommended it to be taken from the foot, arm and neck. An emetic also must be considered doubtful, for it is sometimes useful, sometimes does harm, and hence is not to be exhibited without the utmost caution. During the accession also, internal antihysterics are used with advantage, namely, tincture of castor, of amber, &c. There are not indeed wanting external means which may repress the

paroxysm : this end is answered by the smoke of any sort of paper, feathers, horns, old leather, &c. the same effect is produced by the odour of rue, vinegar, spirit of sal ammoniac, either simple or succinated ; English drops, or salt of the same nature. The fit is sometimes removed by sprinkling the face with cold water, and convulsions of the hands are subdued by the immersion of them into cold water. Moreover, various epithems are prepared, especially celebrated by the women, and applied to the navel ; the best of which are, plaster of galbanum, and an application prepared of myrrh and aloes on cotton : to which may be added petroleum, oil of saffron and of amber, castor's fat, &c. Besides, ligatures are fastened round the limbs, frictions are kept up on the legs, the soles of the feet are stimulated, dry cups are applied to the navel and limbs : clysters of turpentine, stimulant, cathartic, antihysterical, &c. are injected, all which when given in proper time, usually have a good effect.



PICA, MALACIA. DEPRAVED APPETITE.

IT is not a secret to even the rude and inexperienced, that virgins and pregnant women are subject to a sort of *depraved appetite*, in which they long for *unusual* or *absurd* things ; as an unusual quantity of salt, pepper, vinegar, &c. unripe fruit, raw flesh, unboiled fish, shells, earth, gypsum, quick-lime, ashes, coals, snow, ice, dirty paper, cotton, old rags, putrid leather, dung itself, and numberless others, which they consider as so many delicacies, and will hardly suffer themselves to be deprived of them. Others delight in the most fetid odours ; some love to rub earth, gypsum, chalk, or other friable body between their fingers, &c. *Pica* is the disease invading virgins, and is mostly associated with chlorosis, and especially affects those who are marriageable, although it does not spare the younger. If it affect the pregnant it is called *Malacia*, which rarely lasts beyond the four first months of gestation. Some sickly appetites of pregnant women, are for strange food, which they desire as eagerly as though they were starving, this being denied, they are in danger of many maladies, namely, fainting, abortion, or a certain organic effect on the tender body of the embryo, which stupendous event multiplied experience seems to *prove beyond all doubt*.

Although this depraved and morbid appetite, may not be dangerous of itself, yet it is not altogether void of danger, namely, when it respects things absurd and unfit for nutrition, which taken in a certain quantity, or used for a long time, may not only injure and subvert the organs of digestion, but bring on a taint of the mass of humours. No wonder then if from this source there should often arise chronic diseases, to be overcome by no art, and sooner or later terminating life. But as it respects that silly desire, which may be gratified by the touch or smell, it threatens nothing scarcely except chlorosis, which it often brings on. Nor are boys thought to be free from this bad habit, who rub and roll pieces of paper, and other substances, with great delight, between their fingers, nor are there wanting some who take pleasure in eating various absurd and even forbidden things.

In the first commencement of the cure, endeavours must be used by advice, threatenings, or other method, that all these objects promoting the disease, be removed out of the way, otherwise even the best medicines are prescribed in vain. Which being done, the *primæ viæ* must be attended to; having premised diluents, emetics and cathartics are given with advantage, which by reaching all the recesses of the stomach and intestinal tube, may carry out the depraved remains of digestion, or any absurd thing collected there. Then the stomach is to be restored by roborants; this effect may be answered by mint and balm, the rinds of citrons, and oranges, syrup of quinces or of lemons, extract of juniper and theriac, &c.

These being premised, the attention of physicians should be turned to the depraved diathesis of the humours; with which view diuretics and emmenagogues are prescribed, these may by traversing the intimate recesses of the body, qualify the depraved juices, open the obstructed vessels, clear out the kidneys, and deplete the vessels of the uterus. But this mode of cure suits best for virgins; for boys rarely need medical aid; it is also useless in pregnant women; since malacia, after the fourth month of impregnation, and at the longest, after parturition, ceases spontaneously, and entirely vanishes.

CHLOROSIS, OR THE WHITE FEVER OF VIRGINS.

THIS *species of cachexy*, by us called *pâles couleurs*, frequently invades virgins, *nullis inquinatas amplexibus*, especially when the breasts are plump, and women who are widows or have lived in barren wedlock. This affection is known by a certain paleness, attended with febricula, somewhat exacerbated at night, and is hence denominated *White Fever*; besides a pallid colour of the face, and of the whole surface of the body, and sometimes a greenish hue, which shews this very common disease, there occur other marks: namely, heaviness of the weakened frame, and disinclination to motion, pain of the head, with a propensity to sleep, restlessness of the legs with which they are plagued when lying down; difficult respiration as often as they walk fast, or ascend a hill or stairs, palpitation of the heart, pica, anxieties and faintings, collection of wind in the hypochondria, and whole body, &c. Besides the face swells, and especially the eye-lids; the legs and ancles are affected in the same manner, nor does this tumour vanish in the morning, as is customary with œdema. Suppression of the menses attends legitimate Chlorosis, otherwise we may suppose it to proceed from obstructed viscera. This disease is altogether void of danger and vanishes entirely on the flow of the catamenia, yet sometimes it ends in genuine cachexy, or brings on dropsy. Lastly, no one is ignorant that the barren are affected with Chlorosis.

The indication, as in the *cure* of cachexy, is, after premising generals, to reduce the thick juices, and open the obstructed tubes: namely, in the first place plethora is obviated by letting blood from the saphena; then attention is paid to the *primæ viæ*, by an emetic and cathartic often repeated, lest the foulness lodging there, from depraved digestion, or absurd matter taken in, should mix with the blood. Which being done, we must remedy the vitiated state of the blood; with this view it is expedient to have recourse to hepatics, stomachics, bitters, aperients, tonics, emmenagogues. Antihysterics are also called in to our aid; officinal medicines prepared of tartar and iron, are happily used, nor are absorbents and sudorifics of little service, when occasion requires. But perhaps all these remedies are excelled by the mineral waters, acidulated, martial, and warm; the warm pediluvium also affords help; frictions on the legs deserve some praise; nor are there wanting some practitioners, who after BARBEIRACUS, a very celebrated physician of *Montpe-*

lier, advise the baths. Lastly, this affection in most, spontaneously ceases by marriage.

DISEASES FROM CATAMENIA.

IT is known that this flow of blood, recurring at certain stated periods, or *every month*, amounting to from five to ten ounces, is continued from three to eight days. This menstrual evacuation shews itself about the thirteenth year of age, and lasts to the forty-fifth or forty-eighth: that which appears the earliest, usually ceases soonest, and vice versa; so that it seems to be comprehended within *five septennials*, (or terms of seven years.) Yet some masculine women, or country bred, or dancers, or hard labourers, vary from this law of nature, and are considered prolific nevertheless, since the insensible perspiration and sweat, supply the place of the periodical flow. But in the common condition of the body, all faults of the Catamenia should be reckoned as so many diseases; excepting that suppression depending on pregnancy, which therefore ought to be expunged from the list of diseases. On which account it is necessary for order's sake, separately and briefly to treat of these faults of the menstrual flow.

1. Among the most common faults, is to be numbered, SUPPRESSION of the MENSES to be rightly distinguished from the check on account of pregnancy, and the natural cessation, after completion of their periods; which nevertheless, if it be not gradually performed, that is within the space of one or two years, it occasions in most cases various symptoms, viz. hysteric fits, uterine hæmorrhage, fluor albus, &c. Morbid suppression of the menses is usually attended with chlorosis, with the skin, especially of the face and legs somewhat œdematous, oppressive pain of the loins, headach, wakefulness, difficult respiration, palpitations, heartburns, flatulency, inflation of the hypochondria, colic pain, &c. The pulse under these circumstances, is found weak, heat and cold alternate, the appetite is lost or depraved, nausea and vomiting are troublesome. Blood issues from the nose, lungs, stomach, kidneys, &c. But this species of hæmorrhage occasions more terror than harm. Some are seized with angina or opthalmy, but more frequently erysipelas and other efflorescences of the skin take place. Lastly, almost all who are timid, and labour under a sort of sluggishness of mind, become barren. In some, the belly swells from the expanded uterus, so that it sometimes raises *suspicion of pregnancy*, and many un-

skilful or incautious practitioners have brought a stain upon the character of chaste virgins. It is necessary to remark that swelling of the abdomen does not take its rise from genuine suppression of the menses, but rather from secreted menstrual blood retained within the cavity of the uterus; it is no wonder therefore, if on opening the obstruction this retained fluid break forth in great abundance, and from this evacuation, by some mistaken for abortion, the abdomen soon become flat and even.

The menses suddenly checked while flowing, bring on greater inconveniences, namely, by terror, anger, or other affection of the mind; by immersion of the hands and feet in cold water, by a violent cold, by diarrhæa, by imprudent venesection from the arm while the Catamenia are flowing, or by any other external cause. For from this misfortune, continued or intermittent fevers of a bad kind are often produced; internal inflammations, severe headachs, apoplexy, delirium, vertigo, epilepsy, hysteric fits, tremors, suffocations, and pains of some one part, besetting especially the limbs very severely. From the same cause proceed cachexy, dropsy, or other chronic affection. Suppression of the menses mostly yields to timely remedies if plethora alone be the cause; the case is otherwise if it be owing to penury of blood, but when it is caused by any organic lesion, it can scarcely be cured. That which happens about the forty-fifth year is doubtful, although it recede little from the law of nature, for often the most severe affections arise from this unusual condition of the body, especially if there lurk any taint in the humours, which at that time usually shows itself.

In examining the dead bodies many things present worthy of notice; namely, the uterus impervious from that caruncle called *hymen*, being entire, or from a cicatrix after the healing of this part when torn, or from some other vitiated conformation: ulcers occupying the neck or cavity of the uterus, fungous excrescences, serous collections within the uterus, gangrene of this viscus. To which may be added schirrous obstruction of the uterus and ovaries, tumours growing in the vagina, closing the passage to the uterus, &c. Other viscera of the breast and abdomen are also drawn into consent, the lungs are met with diseased in various ways; the size of the heart is sometimes increased, sometimes contracted, there is a collection of stagnant serum in the pericardium, or cavity of the breast, the liver is discoloured, obstructed, very much increased in size, beset with tubercles containing matter, tainted with putridity and gangrene. The spleen presents of stupendous magnitude, affected with putridity, and fluctuation when handled, like pap. The mesentery is found schirrous and purulent, the omentum deformed,

mortified, or putrid; not to mention numberless other injuries, sometimes reckoned as causes, sometimes morbid products.

Those who are desirous to cure this disease, ought strictly to enquire, whether there be any suspicion of pregnancy; since numberless pseudo-virgins, or wanton little whores are met with, who are impregnated, and by every art endeavour to conceal their very scandalous situation; under the semblance of curing this pretended disease, they desire to be bled in the saphœna, in hope of future abortion; so that even the most guarded are daily deceived. Yet there are not wanting some, who although they have known man, are ignorant of their impregnation, and think they are labouring under the genuine disease. But if after accurate examination the thing appear doubtful, it is thought better to wait and forbear, until the fifth or sixth month; at which time the marks of pregnancy become manifest, for then the breasts and abdomen swell, and from applying the cold hand to the abdomen, a certain motion is perceived in the uterus. But when, after having discovered no signs of impregnation, we ascertain the nature of the disease, the cure is to be procrastinated no longer; at the commencement of which the opening of the saphœna has not its equal for averting the symptoms which usually follow suppression. Sometimes if it be owing to a check of the catamenia while flowing, it is serviceable to premise bloodletting from the arm, which I know to have been often profitable in my practice. Bloodletting may succeed to the wishes of physicians, if plethora only be the cause: otherwise emmenagogues and aperients of another kind are to be used, as also roborants taken from the bitter aromatics; the best of both kinds are, hartstongue, dandelion, asparagus, broom and madder; white hoarhound, rosemary, juniper berries, roots of birthwort and angelica, myrrh, borax, iron filings, or crocus martis, chalybeate tartar, elixir proprietatis, &c. In an urgent case, we may sometimes use savin, or cantharides themselves; but it is necessary to deal cautiously with these remedies. Aloes and colocynth ought also to be given with a skilful hand: and other acrid cathartics, which may have a surprizing effect. Nor are the milder ones to be omitted. Antihysterics afford the greatest relief, such as camphor, saffron, castor, &c. Lastly, the virtues of mineral waters, especially those impregnated with iron, are well known to all.

To proceed to *externals*. Leeches applied to the vulva or anus, do good, by answering the purpose of venesection: nor are cups of little benefit, fixed upon the thighs or groins. Fumigations prepared of antihysterics are useful, but the vapour of the decoction of them is more esteemed, or that of simple wa-

ter. Pediluvium, baths, and warm semicupia are of benefit, nor are emollient fomentations to the lower limbs to be despised; especially if the flow have been checked by terror, cold, or any other external cause, in which case also a draught of generous wine given immediately, is of use. These remedies are given with more advantage just before the usual time of the expected eruption, namely, when the customary forerunners appear, such as heavy pain of the loins, a kind of griping of the bowels, feverish heat, &c. Almost in the same manner, having regard to the degree of the disease, the more sparing flow of the menses is prevented; although the intervals of accession be longer, and this evacuation may not proceed in its usual quantity. As to the natural cessation of the menses, there needs no remedy, unless subsequent plethora should require a few venesections, with a suitable regimen.

2. The menses sometimes vary from their natural and well known course, or find an outlet by other ways than usual, and are called **DEVIOUS MENSES**. These issue from the nose, eyes and ears; the salivary organs discharge them; the gums and sockets of the teeth, as is frequently observed in scorbutic patients. They proceed from the breasts, lungs, stomach, kidneys, bladder, anus, ulcers, &c. They sometimes pass through the texture of the skin, for the forehead, cheeks, navel, groins, arms, hands, feet, &c. yield an outlet to them. There arises, for instance from these parts, an inflammatory, painful and resisting tumour, from the spontaneous opening of which issues a certain quantity of blood, which being exhausted, the wound heals in a short time, to be renewed every month. Wherefore, having well attended to the nature of this preternatural and periodical flux, we must use our endeavours to divert it, and recal it to its own genuine strainers. This is affected by blood-letting from the saphœna, leeches applied to the vulva, cups to the groins, or inside of the thighs, the vapour of the warm water, or of some emollient decoction received into the genitals, and the other external remedies above treated of; those for instance usually prescribed against suppression, with which we must persevere until we bring on the well known disease.

3. **DIFFICULT MENSTRUATION**, comes next to suppression, in which this periodical flow does not take place without difficulty; this affection brings on various symptoms, namely, pains of the loins and thighs, swelling of the hæmorrhoidal vessels, pains and gripes in the uterus, loss of appetite, bad digestion, twitching of various parts, goose skin, hysteric fits, &c. which symptoms arise sometimes during the flow of the menses, sometimes before or after. Certain gripings of the belly especially

precede this species of sickness, dull pains of the loins, feverish heat, headach, difficulty of breathing, &c. under which circumstances threatening suppression, we must first *relieve the urgent symptoms*, namely, the pains, which are usually assuaged by internal demulcents and anodynes; namely, infusion of althea flowers, or flaxseed, chicken water, whey, oil of sweet almonds, &c. Antihysterics associated with anodynes are also of service, moreover carminative and terebinthinate clysters are of surprising benefit: cups applied to the groins and thighs are useful. But such remedies as these may be used in a case more difficult than usual; otherwise this business may be committed to nature: which being performed it is necessary to take the *prophylactic* cure, which consists in the timely use of emmenagogues, and other medicines usually exhibited against suppression, of which we have more than sufficiently treated.

4. THE INORDINATE FLOW OF THE MENSES, appears under a two-fold view, namely, in respect of the number of intercalary days, from the usual period; in the excess or deficiency of the variation; or in respect of the quantity, sometimes sparing, sometimes abundant. For there occur many virgins and married women, who suffer this flow often within the course of a month, which others do not undergo till after many months. But as to the quantity, many complain of it being too little, while others can scarcely bear its excess or abundance. This irregularity more frequently happens about the forty-fifth year of age, in which is usually completed the *sum* of the menstrual periods. It is proved by experience that young women who are obnoxious to this disease, are more prone to abortion: when it is long protracted it brings on slow fever, marasmus, cachexy and dropsy. It will not be amiss to remark that a *kind of hæmorrhoidal flow* sometimes issues from the varicous vessels of the vagina, attended with a certain pain, subject to no rule, which women usually take for the menstrual flow; by the relation of which even the most careful physicians are deceived; unless they attend to the usual forerunners of catamenia, which in this case are wanting. To this place belong menses protracted beyond the usual term, namely, to the fiftieth year, which then ought to be considered as a morbid state, threatening ulcer or cancer of the uterus.

Forasmuch as too small a menstrual evacuation differs little from suppression, the same mode of cure is to be followed, having regard to the grade: and therefore we need not repeat it. As to the profuse discharge of the menses, it is usually repressed by the remedies directed for hæmorrhage, yet these are not to be used without the greatest caution, and in a very urgent

case: since if no alarming symptoms manifest themselves, this abundant flow may be committed to a proper regimen alone. But when a slow fever follows loss of strength, and marasmus threatens; or signs of cachexy or dropsy appear, no pains are to be spared to repress or check this flow. Wherefore having premised generals, namely, venesections repeated during the intermissions; demulcents and temperants, to wit, milk, barley or rice gruel, nitrous emulsions, &c. it is proper to use absorbents and astringents; nor are styptics forbidden if these attempts fail, which nevertheless ought to be exhibited in very small doses and with the greatest caution, lest by the sudden and imprudent suppression, some misfortune happen. Some, in these difficult cases, prepare fumigations of frankincence, amber, and mastich; but these are thought trifling by experienced practitioners. Moreover, care must be taken that those who labour under a profuse flow of the menses, be free from anxiety, and be kept quiet as well in mind, as body; and indeed it is expedient for them to lie in a horizontal situation.

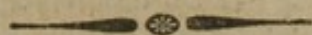
5. HÆMORRHAGE OF THE UTERUS, differs little on account of its appearance, from immoderate flow of the menses. But these affections have different origin. We are not treating here of that loss of blood which attends parturition or abortion, but of that profusion of blood much more dangerous, which proceeds from any other cause. This bloody fluid, issuing in a full stream, suffers a stagnation in the Uterus, and is forced into little masses, which together with the fluid blood, find an exit through the vulva, which indeed rarely happens in immoderate menses. Besides, hæmorrhage of the Uterus is subject to no period, although it not rarely becomes chronic: but to confess the truth, these affections put on such great variety, that the difference is scarcely perceptible, without the help of an *Ædipus*. This species of hæmorrhage is usually preceded by severe pains of the loins and back, paleness of the face, inflation of the hypochondria, goose-skin, &c. Phlegmatics, cachectics, and scorbutics are thought obnoxious to it. Heat of the air, as also a sudden cold contracted, promote it; also violent anger, too free use of wine, or ardent liquors, the imprudent use of coffee, acrid emmenagogues, great exertion of the body, immoderate exercise, a fall from a height, &c. It is excited by vehement fever, by the eruption of measles and small-pox. We have above inculcated that this stupendous loss of blood arises sometimes from the menses retained within the cavity of the uterus. Moreover, it is expedient to note as we go along, that women after this unusual flow of blood, become more fruitful.

No one is ignorant that profuse discharges of blood from the uterus are often *fatal*, especially with aged women, in whom there is danger of ulcer or cancer of the Uterus, besides marasmus, cachexy, dropsy, &c. Moreover, the blood issuing profusely often brings on syncope, convulsions, or death itself. Hæmorrhage of the Uterus in the first months of pregnancy threatens *abortion*, otherwise, namely, beyond the sixth month it is followed by *parturition*, which it is necessary often to promote by the hand of the midwife, provided the blood, as sometimes happens, do not issue from the varicous veins of the vagina: but the obstetric art can do no good before the sixth month of pregnancy; it ought also to be thought inert against *spurious gravidity*, which may also excite enormous hæmorrhagy. This mode of cure, to confess the truth, is attended with the greatest difficulties, and imposes a weighty duty on physicians, who often by avoiding *Charybdis*, run upon *Scylla*.

Hæmorrhage of the Uterus without pregnancy, is usually *cured* like other morbid flows of blood. Wherefore venesection from the arm gives present relief, which, experience has taught, would be more beneficial, if the usual quantity of blood could be drawn at several times. Benefit is derived from a decoction of greater comfrey, and pimpinell, the juice of plantain and nettle, tincture of roses, catechu, water impregnated with spirit of vitriol, or other internal astringent; to which may be added coral, shells, and other absorbents. Styptics are endued with greater efficacy, namely, dragon's blood, alum, essence of rabel. *Helvetius' powder*, &c. but they ought to be given with a skilful hand, no otherwise than hypnotics recommended by some. Ipecacoanha and simarouba are not undeservedly praised, which, from experience I am not afraid to assert, excel the rest. Moreover, various external remedies are brought into use, namely, the hands are wrapped in cloths dipped in cold water, the loins are fomented with vinegar, cups are applied about the breasts, ligatures are bound tight round the limbs, &c.

Hitherto we have treated of the present cure, that is, what is suitable in the paroxysm: we come now to the *prophylactic*. Wherefore, venesections prevent this disease if practised during the intermissions; as also a demulcent diet, namely, of milk, farinaceous gruels, &c. Lastly, refrigerants and temperants are opportunely given. These virtues are possessed by water impregnated with lime juice, whey, broths of river crabs, pulvis temperans, &c. The various natural mineral waters also do wonders, which by opening the obstructions, may prevent the stagnation of blood in the vessels of the uterus. Martials may have the same effect, and especially STAHL's crocus martis,

which not only enter the class of aperients, but are also received into the order of roborants. To these also belong other astringents, which, after premising generals, may be exhibited with advantage. Sometimes also as occasion requires, vulneraries, diaphoretics, and anodynes come into use. Lastly, let the sick be freed from care, and keep themselves quiet, especially during the flow.

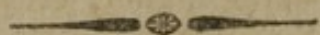


STERILITY. BARRENNESS.

IT is well known that women having attained the ultimate period of the menses are barren: also plethora, fatness, suppression of the catamenia, fluor albus, cachexy, scorbutic virus, lues venerea, &c. are so many causes of Barrenness, which is also contracted by a loose way of living, namely too great inconstancy, gluttony, wine, ardent liquors, coffee too freely drank, &c. These causes being closely attended to, it is obvious that Sterility may be easily remedied: but the case is otherwise if any organic fault be suspected, viz. the encreased size of the clitoris or nymphæ, the obstruction of the vagina from agglutination of wounds in difficult parturition, small-pox, lues venerea, burns, &c. from impervious hymen, which denies exit to the menses; whence proceed very acute pains with swelling of the uterus, tumours growing from the vagina, and having the same effect; too great flaccidity of the vagina, &c. Lastly, Sterility is thought to be incurable, which depends on a depraved conformation of the uterus, or schirrous obstruction of it; on its dryness, atony, callosity, or ossification; on tumours filling its cavity; on obstruction of the tubes; on swelling or dropsy of the ovaries, or other lesions of the genital organs hindering conception, which *anatomical* examinations exhibit.

From the foregoing we may learn that *the cure* of Barrenness is not to be undertaken without first strictly enquiring into the cause of the disease, which often will not yield to medical art, and, to confess the truth, mostly lies veiled in impenetrable darkness: so that in these straits, while there is no certainty of the genuine cause of Barrenness, it is not amiss to prepare the way for a cure by repeated experiments. Wherefore having fixed on a suitable regimen, and premised generals, the virtues of temperants, aperients, emmenagogues and roborants are to be tried; the best of which are simple cooling broths and domestic

baths, which often fulfil the wishes of the physician. We sometimes call in the aid of speedwell, mint, balm, fennel, or other roborants. But the various medicines, both extemporaneous and officinal, prepared of tartar and iron, excel these. Lastly, the acidulated and ferruginous, or warm mineral waters, answer almost every purpose: all which however ought not to be indiscriminately prescribed, but as occasion requires, and after having rightly ascertained the powers of the animal œconomy, the one or the other are to be used. For that physician does not benefit a straw, who has not nature as the leader and directress of his counsels.



DISEASES OF PREGNANT WOMEN.

IT cannot escape the notice of any one, that gravidity or pregnancy brings on various inconveniences, and indeed does not rarely occasion or resemble very serious disorders. Hence it is plain, of how great moment it is for physicians rightly to ascertain the genuine state of the uterus, *lest they mistake a cloud for Juno*, and incur the stigma of temerity. For we every where meet with spurious virgins, or little whores feigning chastity, who desirous of abortion, complain of a fictitious disease, that they may obtain venesection of the saphena, an emetic, emmenagogues, or other stimulant remedies usually given to bring away the fœtus. Nor are there wanting those who live in legitimate wedlock, who not knowing their mistake, and deceived by some inconveniences, imprudently commit themselves to be cured, because the *signs of impregnation* are often doubtful and *fallacious*. Yet from this concurrence we may gather something certain, namely, from the retention of semen in coition, or from a certain *very delightful sensation* which they experience, *emuncto telo virili*; from a certain loathing of food or depraved appetite, nausea and vomiting, heartburn and fainting, a pain of the groins and loins, pain and swelling of the breasts, with blueness of the nipples, and excretion of some milk, and the closing of the orifice of the uterus,

To these may be added a swelling of the belly, 'conspicuous about the fourth or fifth month, with a kind of prominence at that time about the navel, which is wanting in morbid tumours of the abdomen, and agrees with the age above indicated; although there are some examples of women who were impregnated, if writers may be credited, in the fiftieth, sixtieth, and

even seventieth year of their age, which ought carefully to be remembered. Besides, *gravid women* are more slow in their movements, labour under a sort of unusual sluggishness, and some are averse from the embraces of their husbands. Suppression of the catamenia ought to be reckoned among the uncertain signs, since it enters the class of symptoms relative to numberless diseases; besides, that in some, the catamenia flow in the first months from conception, nor are there wanting those who suffer this menstrual purgation, through the whole course of gestation, and experience testifies that both are more prone to abortion. Gravity with *twins* is known only by the protuberance of the abdomen being higher, nor yet is the sign certain, since all women who bear twins are far from having this surprising prominence of the belly. Nor does *superfatation* more clearly manifest itself, which is remote from the first impregnation, and excites abortion, while the first fœtus remains safe, and is brought forth at the usual time.

Every one knows the proper *manner of living during pregnancy*, nor are they ignorant that venesection about the third, seventh, and ninth months, has been very serviceable in many cases; yet we must be sparing of blood, if pregnant women be seized with acute disease, nor must we persist in strict diet, lest the fœtus be defrauded of its nourishment. Cathartics, unless necessity urge, are forbidden in the four first months of pregnancy, and when parturition threatens. These are the rules of HIPPOCRATES, and the fathers, to which some moderns, blinded by their own hypotheses, refuse to subscribe. Moreover, *pregnancy brings with it various diseases*, which require singly a peculiar remedy: among these are *malacia*, or depraved appetite, nausea frequently recurring, and vomiting, colic pains, and other gripings: looseness of the bowels, unusual sweats, frequent faintings, hysteric and convulsive fits, tooth-ach, cough sometimes dry, sometimes humid, palpitations of the heart, ischury or difficulty of making water, very troublesome piles, varices on the lower limbs, fissures of the abdominal skin from too great expansion, œdematous swelling of the legs, hæmorrhage of the uterus, abortion, difficult parturition; all which we have thought it worth the while to treat of briefly and in a bunch.

1. DEPRAVED APPETITE OF PREGNANT WOMEN, OR MALACIA, as above noticed, does not last beyond the fourth or fifth month of pregnancy, and therefore requires no cure. There is the same judgement concerning *nausea* and *vomiting* during the same stage, for nothing then is to be feared from vomiting: but the case is otherwise about the last months of gestation, since there is danger, lest by the enormous efforts, the fœtus be ex-

pelled from the uterus: wherefore all means must be used to check it. Venesection with this view has sometimes been practised; laxatives also have been given with advantage, and especially rhubarb: nor are absorbents useless: namely, crabs' claws, coral, &c. Lastly, orange flower water, syrup of wormwood, diascordium, and other internal or external stomachics, the extemporaneous mixture prepared of lemon juice and salt of tartar. *Gripings of the belly* are quieted by water of orange flowers and cinnamon, and other carminatives and anodynes usually directed in this case. *Diarrhæa* coming on in the last months of gestation excites no little terror; and therefore endeavours must be made to check it. This end is answered by cathartics, emetics and absorbents, in mentioning which we will not delay, lest we be accused of needless repetition.

2. SWEATS are thought serviceable during gestation, if confined within certain limits, but they are never void of danger, when excessive. Wherefore, when too plentiful they must be checked by the timely use of the well known temperants. Faintings are little dreaded, which, if they recur too often, are removed by the usual remedies. But *convulsions* are very alarming, in which it is necessary sometimes to promote parturition by the hand of the midwife. Otherwise they require the cure treated of elsewhere. *Pains of the teeth* are allayed by plaster of Tacamahaca, or other topical anodyne. Blood-letting relieves *obstinate cough*, as well as difficult breathing; nor is any other remedy necessary against *palpitations of the heart*; this remedy also usually relieves the pains of the *breasts* and *loins*. *Ischury* from the great size of the uterus lying upon the neck of the bladder, is often relieved by the horizontal position alone, and rarely requires the catheter. *Incontinence of urine* is indeed more difficult to manage, but portends nothing bad, and after the birth of the fœtus, spontaneously vanishes.

3. FISSURES of the ABDOMEN, on account of too great expansion of the teguments, is obviated by oil of eggs, or any demulcent ointment, to which we may add ceruss, saccharum saturni, &c. As to *œdematous swelling of the legs*, which is removed by parturition, it is best to abstain from all cure. But nothing hinders fomenting them when very much swelled, with aromatic decoction, lime water, ley made of the ashes of twigs, or such like, to which some add spirit of wine, Hungary water, or camphorated spirit of wine. Moreover, nothing is to be feared from a swelling occupying the limbs only, but if it be propagated to the loins and further, the case is dangerous, since in this condition of things there is danger of ascites and dropsy of the womb. Pregnancy is also not rarely associated with internal

dropsy; which then can scarcely be reached before parturition. The *piles* sometimes very troublesome, are usually assuaged by fomentations made of decoction of mullein leaves, elder flowers, flax-seed, heads of white poppy, &c. Lastly, the cure of *varices* is left to nature, or the method elsewhere treated of is to be used.

4. All remedies are futile against HÆMORRHAGE of the UTERUS, when the adhesion of the placenta is partly dissolved, in which state parturition or abortion is inevitable; otherwise venesections are of service. Ipecacoanha is extolled, &c. About the end of the third month, a hæmorrhage mostly breaks out, which is followed by abortion: This is denoted by very violent head-ach, goose-skin, flattening of the breasts and belly, heavy pains of the loins and hips, frequent making water, &c. It is obvious that *abortion* is of doubtful nature, on account of the serious symptoms brought on thereby: namely, profuse loss of blood, fainting, fever, delirium, comatous affections, convulsions, &c. This large flow of blood is often with difficulty distinguished, (as it is confined for many months within the cavity of the uterus, as well in virgins as in married women,) from the hæmorrhagy which denotes abortion: yet from the close examination of the signs of both states, as above described, the difference is manifest. Hæmorrhage from retained menses mostly excites false terror, it is indeed thought more dangerous when denoting abortion, especially about the first of pregnancy, and about the last months of gestation. But abortion is considered very alarming in any severe acute disease: for then it presages a fatal event, confirmed by various mournful circumstances.

5. Among the common CAUSES of ABORTION, are reckoned an idle and inactive life, a flow of blood from the uterus, acrid purges, vomiting and looseness, tenesmus and costiveness, calculus of the bladder, immoderate exercise of the body, vehement straining, strokes and falls from a height; violent passions of the mind, disagreeable odours, the immoderate use of coffee, wine, and other ardent liquors, certain drugs well known to whores, &c. When certain signs of this misfortune discover themselves, we must by all means endeavour to prevent it. Venesections, repeated about the usual times of the menses, may be of service. Moreover, women should indulge in quiet, or keep their bed while the danger threatens, *they should avoid coition*, &c. In this case there is no little benefit from the use of rice water, ptisans of greater comfrey, nettle juice, and other medicines commonly used against immoderate flows of the menses. In the same condition of things, the mineral waters impregnated with iron, are justly celebrated, especially with

women who are prone to abortion. But if, while the blood is issuing in abundance, abortion approach, all external and internal astringents are futile, since from daily experience it is proved that *the solution of the disorder* depends altogether on the expulsion of the embryo, placenta and grumous blood, which is commonly left to the powers of nature, unless the coming on of very violent symptoms should occasion fear of death, in which case the urgency must be relieved by the hand of the midwife, or by some other means.

6. No one is ignorant that the full TERM OF PARTURITION, is completed by nature about the end of the ninth month: yet there occur some births at seven and eight months. Authors of veracity mention them at ten, twelve and even sixteen months: but the *dead fœtus* is carried for many years, for there are examples of gravidity, of twenty, thirty and forty years. Yet in this state the fœtus is mostly placed without the uterus. On *dissection* it has been found in the fallopian tubes or in the ovaries; it also lodges in the cavity of the abdomen while the placenta adheres to some neighbouring part. The contexture of dead fœtuses is preserved entire, so long as they are well covered by the sound involucra; but if they are broken by a taint of the neighbouring parts, or any other cause, there arise inflammations and supurations, by which the fœtus becomes putrid: meanwhile the stagnant matter works its way through the intestinal outlet, through the umbilicus or other parts of the abdomen. There is no one that cannot see that this morbid situation of the *extra-uterine fœtus*, takes its rise from a vitiated conception: yet it sometimes happens that from bursting of the too much expanded uterus, the infant is thrust into the cavity of the abdomen. This species of gravidity is rarely protracted, but rather in a short time hurries the patient to the confines of the grave.

7. PARTURITION, although mature, is reckoned *not without danger*, if the mouth of the uterus and vagina be deprived of their usual flexibility and slipperiness; since on this account, unable to be dilated, they hinder the exit of the fœtus. To promote which, various clysters, fomentations and other external emollients and lubricants are prepared. But besides this cause familiar to aged women, there arises another more common, from the exhausted strength of the parturients, or from a debility of the fœtus itself: in which state of things roborants and cardiacs are given with benefit, namely, wine, imperial water, cinnamon water, &c. Orange flower water, tincture of castor, of amber, or other antihysterical, deserve praise. But narcotics ought not to be prescribed unless in a very urgent case. Emollient and carminative clysters do great good. But among the

trifling remedies is to be considered an epithem made of powder of laurel leaves and oil, and applied to the navel; not to mention other topicals recommended by the good women. These are the remedies usually exhibited against *difficult parturition*, which nevertheless ought to be reckoned futile, if a depraved conformation of the bones of the pelvis be in fault, or callosity of the vagina or uterus, tumours occupying the cavity of these organs, hernia of the uterus, &c. which disorders are thought altogether incurable, or require a peculiar remedy treated of elsewhere.

8. However great the fear occasioned by the weakness of the fœtus, the case is indeed of a dangerous nature if deprived of life. MARKS of the DEAD FÆTUS are derived from cessation of motion which pregnant women usually feel; from a certain cold sensation and weight in the hypogastric region, from dysury and tenesmus; from a kind of universal *horripilation* as it is called, or what is sometimes denominated *goose-skin*; from convulsive fits; and lastly, from the discharge of a fœted matter. The exit of the dead fœtus is mostly committed to the powers of nature, for the auxiliary medicines, usually exhibited by many, such as diuretics and emmenagogues, are superfluous and hurtful. Concerning the virtues of fern lately much recommended, there is doubt. When the involucra of fœtuses dead in the uterus, are broken, the water issues forth, and all are detruded in a short time: but the infant, while these membranes remain entire, preventing putridity, is not removed from its situation: hence we must recur to the *obstetric art*; which not succeeding, there remains but one hope of safety to the mothers, namely, the *Cæsarian operation*, very dangerous to be sure, but yet, if performed early, and with a dextrous hand, it has snatched many that were reduced to the last extremity, from the jaws of death. This section is frequently performed *after the death of the mother*, namely, in the last months of gestation, to preserve the life of the infant, which otherwise could not escape death. But *even in difficult labour*, surgeons ought to set about this operation, *while the mother and fœtus are living*, if all the other means of art have been tried in vain, and nothing is to be expected from the powers of nature; for then the life of both can be saved by no other method. But it is not lawful to perform this very cruel and dangerous operation about the legitimate term of parturition, until all things have been first rightly considered by the most skilful practitioners.

Many accurate and very celebrated observations on this subject, are to be seen in the two first volumes of the SURGICAL ACADEMY OF PARIS.

DISEASES OF PUERPERAL OR CHILD-BED WOMEN.

IT is almost universally known that the *health of puerperal women* is often miserable, for no error in the manner of living is of little moment in this state: Indeed cold imprudently taken, anger, terror, excessive joy, and other great perturbations of the mind, the too free use of meats and delicacies, bring on very alarming symptoms. Hence proceed innumerable diseases, affecting the breasts and uterus, which often endanger the life of the patient. Among the more frequent are, a stupendous flow of blood from the uterus, diarrhæa, gripings, retention of the placenta, suppression of the lochia, or its immoderate flow, various injuries connected with the milk or breasts, hysteric or convulsive fits, miliary fever, &c. not to mention various misfortunes which take their rise during delivery; which, as being altogether foreign from our design, we will not take time to enumerate, lest we should seem to interfere with the province of another.

1. Plethoric women are considered prone to HÆMORRHAGE of the UTERUS, especially if venesections have been omitted, in the course of gestation. This plentiful discharge of blood is also occasioned by the exit of a very tall fœtus, by incautiously pulling away the placenta, by the tearing of it while a portion remains fixed to the uterus, by grumous blood confined within the uterus, by false conception, or mole, &c. When therefore the blood issues in a full stream, endeavours must be used to repress its impetus to the uterus: blood-letting from the arm has this effect, if the strength will bear. Otherwise let her fix herself in a horizontal situation with her haunches a little elevated, and keep herself quiet; let her beware of air that is too warm, or tainted by a number of bystanders; and indeed it is often necessary to open the windows and renew the air of the chamber. Meanwhile cloths wet with vinegar and water may be laid on the loins, and parts about the genitals. Pursley juice is advantageously given internally, not to mention other remedies of both kinds, concerning which above. But it is proper to remark that all these are thought futile, if any substance be contained in the uterus, since the hinge of cure turns altogether upon its extraction.

2. DIARRHÆA OF PUERPERAL WOMEN occasions no small fear, on account of threatening suppression of the lochia, which usually follows it when it becomes obstinate or exceeds the limits of nature: wherefore the attention of physicians ought to be turned to this. In this case benefit is derived from clysters

prepared of milk and white of egg, of tripe broth, &c. Hypnotics often do great service, provided they be given with caution, for it is not to be concealed that these have been altogether forbidden by many who follow in the footsteps of VEDELIUS; because, as they suppose, they stop the lochia; but experience contradicts this. Concerning venesection, extolled by many, we may justly doubt of its efficacy; since if this remedy may have appeared to do good, we think that less ought to be attributed to it than to nature and time. It is also necessary to deal cautiously with astringent medicines, since experience proves that they often hinder the excretion of the lochia: yet if there be very frequent endeavours to stool, which are also forerunners of this misfortune, it is proper to relieve the urgency.

3. AFTER PAINS, are usually comprehended within two or three days with some intermissions, and rarely last beyond the seventh or eighth day. It is commonly said that women with their first child are free from this symptom, but experience contradicts this. Pains following parturition, are sometimes complicated with genuine colic, so that these pains are often scarcely distinguished. If after-pains be kept within certain bounds and do not recede from the constituted law of nature, they require no remedy, since they seem to solicit the uterus to a healthy excretion; but if they exceed measure they ought to be relieved. The custom has prevailed among good women to exhibit oil of sweet almonds with syrup of maiden-hair, to prevent or abate them. The flowers of althea and camomile have the same effect, as also spermaceti, &c. The efficacy of tincture of castor or amber, or other antihysterical medicine, is well known in this case. Nor are diacodium, laudanum, anodyne tincture, or other hypnotics forbidden, which under due restrictions may be of great service.

Meanwhile let the patients be placed a little erect in bed, that the uterus being situated in the descent, may more easily be cleared out. But it is of the greatest moment that during the first days the diet be sparing. Besides, *warm cloths* are usually applied to the abdomen or hypogastric region. Many anoint this part with oil of sweet almonds; others prepare a friction of eggs beaten up, applied to the belly, not to mention others approved by the female sex, which are not always to be despised. Moreover, emollient and demulcent clysters afford present relief, to which may be added oil or butter; nor does there appear any better way of keeping the bowels open, since during the flow of the lochia all cathartics ought to be banished, which, nevertheless may be prescribed after the term of their purgation is fulfilled, if the case demand; provided the forerunners of future

catamenia do not hinder, which often appear before the third month after parturition, during which nothing can be done without danger.

4. After the happy exclusion of the fetus, another care is incumbent on nature, or the midwife, namely, the *ejection* or *extraction of the secundines*: for from the retention of these, every one knows that grievous diseases arise. Indeed this misfortune is very soon followed by violent fever, pains invading all parts of the body, and especially the neighbourhood of the uterus; great hæmorrhage not to be repressed by art; tightness of the breast, faintings, convulsions, &c. If the lochia be unusually fetid, we may suspect *putridity of the secundines*, by which the greatest danger is threatened, namely exulceration of the uterus. Yet there are not wanting examples of various puerperal women who have safely parted with this burden, after many weeks, and indeed months. This is indeed committed to the powers of nature; if these however, are deficient, some remedies usually prescribed against difficult parturition are not forbidden; such as saffron, castor, amber, borax, savin, &c. which not succeeding, it is necessary to recur to *the hand of the midwife*, before the mouth of the uterus be closed. But when marks of putridity are present, we may with advantage use detergent injections with barley, red roses, tops of St. John's wort, water-germander, lesser wormwood, honey, &c. for by the cautious administration of these detergents, a threatening ulcer of the uterus may be prevented.

5. Every practitioner is aware that the **FLOW** of the **LOCHIA** lasts from eight to fifteen days in most cases; yet sometimes it ceases in two or three days, all other things turning out well; or is continued twenty, thirty or even forty days. The quantity of this flow cannot easily be defined, it is in some very sparing, in others abundant, nor are there wanting women who are altogether without this purgation, as well as the catamenia. These divers states of puerperal women, happening beyond the usual degree, excite the greatest terror, but little is to be feared if they complain of no other symptom. Mere blood is first excreted, then this purgation gradually grows white, and changes into a thicker matter somewhat like milk. In the same ratio the flow of this evacuation is diminished by little and little, according to the accustomed law of nature, until it be quite exhausted. Physicians ought to retain these vicissitudes deeply in mind, lest they be deceived by the species of the disease, and set about imprudent remedies; than which nothing can be thought more fatal.

Suppression of the Lochia ought to be reckoned among serious disorders, on account of the severe symptoms which follow it; namely, very troublesome swelling of the abdomen, inflammation of the breasts, loins, groins, and very violent pains of the intermediate parts, a sensation of pulsation in the uterus, anxieties, most cruel tormina, iliac passion, fever with previous chill, sometimes inflammatory, sometimes scarlet or miliary, dreadful hysteric fits, delirium, convulsions, apoplexy, suffocation, cold sweats, syncope, &c. Congestions are also formed, or stagnations of milk or pus, which ought to be considered as forerunners of death, unless by the salutary efforts of nature they find an outlet through some other way. Hence it clearly appears that there is no flow, the suppression of which excites so much terror, since by this, of which we are now treating, the sick are mostly taken off before the fourteenth day of the disease. A plentiful flow of sweat, diarrhœa, and other evacuations sometimes occasion the *suppression of these purgations*, which again sometimes answer the purpose of them. Moreover, cold carelessly received, anger, terror, and other violent passions of the mind; hysteric fits, disagreeable odours, errors in diet, &c. bring on this melancholy disease, which threatens a fatal injury to the viscera: for dissections exhibit a milky or purulent dropsy, encysted tumours filled with the same matter, the uterus obstructed, inflamed or beset with tubercles; to which we may add, inflammation, putridity and gangrene of the omentum, intestinal tube, peritoneum, &c.

No person of experience is ignorant that *the cure* of this disease is very intricate; much controversy exists concerning blood-letting, for some think that a vein should be often opened, while others are averse from drawing the smallest quantity of blood. Nor do the first differ less about the vein to be cut; many declare that blood should be drawn from both arms, but others recommend the opening of the saphena. No one does not see that these contrary sentiments are supported more by hypothesis, than genuine practice, for this teaches that phlebotomy ought not to be practised except in a very urgent case, and with the greatest caution, according to the condition of things, sometimes in the arm, sometimes in the foot. But there are many things wittily, and clearly set forth by writers on this subject, which nevertheless are found to be very intricate in practice: so that judicious physicians remain in anxious doubt, who well know that venesection in the greater part of patients has had a fatal termination, whether the misfortune be attributed to the disease or the remedy.

Among these difficulties, remedies *exciting the menses*, are sometimes exhibited with advantage, namely, birthwort, saffron, zedoary, castor, borax, elixir proprietatis; but they are forbidden during an acute or inflammatory fever; in which condition demulcents, temperants and mild aperients are more safely prescribed; namely, chicken water, or whey, oil of sweet almonds and spermaceti, grass, succory, asparagus, the root of reed, nitre, &c. Sometimes, unless the heat of the blood forbid, the kermes mineral, diaphoretic antimony, or other remedies promoting perspiration are of service. Hypnotics often do great good, although they are forbidden by many, induced by these reasons, that narcotics check all secretions, except diaphoresis, which maxim of VEDELIUS I have often found to be false in my practice. Clysters of whey, or milk and sugar, and other emollients and antihysterics, are of no little use in this case. Fomentations and emollient cataplasms applied to the hypogastric region, also merit praise; bladders filled with warm milk laid to the same part; plasters and antihysterical epithems to the navel; and lastly, cups put on the inside of the thighs. Besides frictions on the lower limbs, emollient decoctions injected into the uterus, &c.

We come now to the *contrary state* of the lochia, or *too free a discharge*, which is much less dangerous, and at first view is scarcely distinguished from the natural, since many women, on account of age, temperament and manner of living, suffer a stupendous flow of the lochia without harm, while others can scarcely bear the loss; nor is this species of sickness known by any other mode, than by attending well to the symptoms which follow it, among the more common of which are reckoned, swelling of the lower belly, with resistance and pain, beclouded vision, faintings, convulsions, œdematous swelling of the legs, &c. This great profusion of the lochia is obviated by heat, rest, and suitable diet, namely, by food that is easy of digestion and thickening, yolks of eggs, &c. which indeed answer almost every purpose. Temperants and demulcents are also prescribed with advantage, namely, succory, pimpinella and borage, emulsions, barley and rice gruels, &c. In many cases antihysterics and anodynes perform wonders; nor are astringents forbidden in a very urgent case, with which nevertheless it is necessary to deal cautiously, lest by its imprudent suppression, the patients, become worse. It is proper to remark, that the abundant flow of the lochia, like hæmorrhage, is sometimes caused by a piece of placenta, or some other substance contained in the uterus, which is to be removed by the hand of the midwife.

6. The infant when brought to light, treated in the usual manner, and refreshed by sleep, is put to the mother's breast after fifteen or twenty hours, that it may draw from thence the aliment prepared by the bounty of nature alone, which being excreted in the usual quantity, all things go well. But sometimes it becomes too abundant, or more sparing, or altogether deficient.

When the breasts swell with *too great a flow of milk*, not without trouble to the mother, so that they cannot be depleted even by the strongest infants; a low diet is to be prescribed, that a less quantity of chyle, forming milk, may enter these organs. There are some who in this case use evacuants of different sorts, nor is this an unsuccessful method; whereby the humours rushing to the breasts are invited elsewhere. Certain topical astringents also merit praise, and the cautious compression of the breasts to prevent any further secretion of milk. *The too sparing quantity of milk* is remedied by removing the cause by which this secretion is obstructed, but sometimes this is hard to discover. It is known that plentiful food will restore a nurse who had been debilitated by penury of aliment: The seeds of anise and fennel, and others of this kind, approved as it were by daily use, might be of some service. Lastly, friction of the breasts with a rough cloth sometimes does good: to say nothing of other arts practised by the ignorant vulgar.

From the motion of the milk towards the breasts there arises a kind of febricula about the third or fourth day after parturition, which is called the *milk fever*, and in most cases ends in a slight sweat about the second or third day. It requires no cure *if the lochia flow well*, otherwise it is protracted longer, and puts on a different appearance; and medicine becomes necessary. *Milk*, as above noticed, often rushes with such impetus to the breasts, that these organs undergo a very troublesome expansion, not rarely ending in genuine inflammation; to which it is well known that those women are more prone, who deny the native food to their own infants. A very low diet, and the evacuation of the alvine feces by the use of suitable clysters, prevent this morbid condition of the breasts, which auxiliaries also very much favour the natural flow of the lochia. Meanwhile warm cloths are applied to the breasts, renewed from time to time with caution: nor must these organs be exposed to the cold air. There are not wanting topicals highly recommended by the good women, such as parsley, celery, mint, chervil, cabbage, the flour of beans, seeds of cummin, and coriander, honey, dregs of wine, unsalted butter dissolved in spirit of wine, oil of mint, poplar ointment, diachylon, or spermaceti plaster, &c. all which we think ought never to be despised.

Yet there is not much confidence to be put in these helps, although they are approved by daily use; for which reason more efficacious remedies ought to be prescribed: namely, *diuretics* which may carry off the milk from the breasts, by directing the motion of the devious fluid to the kidneys. The China turpentine with powder of millepedes, answer this purpose very well, provided too great heat of the blood do not forbid; in which case the more common are to be prescribed; which we think it superfluous to mention. The juice of mint or chervil, or the decoction of these plants merit praise. It has been the custom among some women, to prepare a drink of oats, or dock root, the efficacy of which seems to be proved by multiplied experience. But when the breasts are dry and *swell* beyond measure, and are *painful*, a vein is to be opened, to prevent inflammation. Much benefit also is derived, (if all things agree,) from mild cathartics, the best of which seem to be, arcanum duplicatum, Rupell salt, with the natural mineral waters. If all these have been used in vain, the breast's are to be given to a child, or any one that will suck them, and thus in a short time the obstructions are removed, until other remedies have their effect.

7. It often happens whether any remedy be used or not, that MILK REMIXED WITH THE BLOOD, taints the mass of humours, from which source proceed numberless very intricate diseases, the more to be feared the more slowly they become manifest, and the more obscure their character. This kind of sickness is called by us, *Lait épanché*, in which matters of a milky nature shew themselves, sometimes collected within a follicle, sometimes affecting the texture of the solids, and falling upon this or that part: at other times there appear leucophlegmasia, ascites, dropsy of the breast, very obstinate looseness of the bowels, very plentiful fetid sweats, with turbid urine, asthmatic fits or suffocations, tubercles of the lungs, or other defecations; obstructions of the viscera, furuncles or other eruptions, pains of uncertain seat, and hidden nature, unmanageable fevers, tremors, and convulsions, stupor and paralysis, &c. Hence it is understood what evil this state of the body portends, unless it be early prevented. The long continued use of the variety of evacuants, and a suitable manner of living may *prevent* and *remove* this; therefore, having premised venesections, laxatives, diuretics, and sudorifics are prescribed with benefit, that the morbid matter may be carried to the various emunctories of the body. Whey, nitre, sal de duobus, magnesia, mineral waters, &c. do great good. We add nothing concerning paretics, or other remedies suited to each disease, as occasion requires.

Although these misfortunes especially threaten puerperal women, who with the worst intention, recede from the constituted law of nature, and refuse to perform the duties of a mother; yet those *who give suck*, or nurses ought not to be thought free from them, who, in consequence of the stagnation of milk within the tubes of the breasts, do not not rarely suffer inflammation, affecting some part or other of these organs. *Inflammatory obstruction of the breasts*, attended with heat and pain, is sometimes associated with vehement fever, thirst, head-ach, difficulty of breathing, &c. It is promoted by contusions, grievous affections of the mind, cold incautiously admitted, &c. That species of inflammation is with difficulty scattered, arising from what is called curdled milk; but rather urges to suppuration. Wherefore, the purulent humour is collected into an abscess, sometimes deep, sometimes breaking outwardly, which almost never *backens*, if the inflammation continue beyond the fifth or sixth day: and not rarely runs into a very obstinate fistula from the long retention of the pus. Moreover, another misfortune threatens from this stagnation of the blood, namely, schirrus and cancer, of which we shall treat by and bye.

Inflammation of the breasts is to be reduced as other inflammations, by venesections, both in the upper and lower limbs, moreover, various topicals are usually applied prepared of resolvers, emollients, and anodynes; among the best and most approved are fomentations of spirit of wine or lime water, with sal ammoniac, the steam of hot vinegar, cataplasms made of flour, rice, wheat, or rye, and honey; the *earth of cutlers* mixed with oil, red cabbage leaves smeared with honey, the leaves of henbane dressed under the ashes, emplastrum diachylon with gums, or plaster of spermaceti, bags filled with hot salt, sulphur, elder or camomile flowers, bladders half filled with decoctions of these flowers, the skin of a sheep recently killed, &c. Lastly, the bowels must be kept loose with the well known auxiliaries. But it seems best in this condition of things to prevent the access of milk to the breasts, otherwise the *cure* of the disease is procrastinated: with this view are commonly applied to them the leaves of both kinds of parsley, chervil, and mint, the seeds of anise and fennel, honey, serpents fat, oil of camomile, ointment of althea, &c. Meanwhile we must attend especially to the flow of the lochia, which is surprizingly promoted by the remedies directed. Lastly, when about the fifth day, no marks of resolution appear, it is expedient to have recourse to the maturants directed hereafter.

Chops and fissures of the breasts and nipples, are to be reckoned among the slighter diseases of nurses, with which neverthe-

less some are tormented, on account of the very exquisite sense with which these parts are endued ; and indeed sometimes this species of sickness is very obstinate, unless the course of the milk to the breasts be prevented, and the sources of this fluid exhausted. But first we must try another method of cure, which consists in topical demulcents and anodynes. Butter and cream, oil of eggs, mucilage of quince seeds, &c. possess these virtues which may be followed by detergents and exsiccants, namely, honey of roses, oil of myrrh per deliquium, white ointment of rhasis, of white tutty, plaster of ceruss, &c. But these remedies, as already hinted, are often futile, if nurses continue to give their full breasts to the infants, since there is no doubt that from this repeated suction, not only the disease is kept up, but often exasperated.

7. Concerning the time at which the **PUERPERAL MILIARY FEVER** manifests itself, nothing certain can be said, but mostly it is complicated with the milk fever, presenting the usual type ; severe pain of the head with tinitus aurium, is thought ominous, also suffocation, a weak and unequal pulse, &c. Looseness of the bowels in this condition of things, excites no little fear, because of threatening suppression of the lochia. Delirium is fatal to many, the disease sometimes ends in mania, scarcely to be cured ; it is then easily understood that the case, which ever way it turns, is doubtful. As it respects the cure, temperants and depurants are much esteemed, namely, succory, borage, chervil, and nasturtium, which being premised, diaphoretics and cardiacs are often exhibited, almost the best of which is kermes mineral ; yet we must beware lest in restoring the patients, the blood should be too much disturbed, and all things become worse. Absorbents also may be called in, as occasion may require, as also hypnotics ; but these last ought to be given with a skilful hand, which often, not without danger to the patients, cast a kind of veil over the disease.

There has been much dissention among physicians about *venesections*, for many recommend opening the saphena, which nevertheless, from my own experience I can easily believe, is practised not without danger, on account of abdominal inflammation, which experience proves to have often followed this detraction of blood. Yet venesections in this disease ought not to be altogether forbidden, if the strength permit, and violent symptoms be urgent : but there is fear lest from depleting the vessels the salutary efforts of the animal œconomy should be perverted ; what evil might follow these deficiencies is easily understood. Nor are the acrid cathartics less to be feared ; but the milder laxatives are approved, as also emollient and demulcent clysters,

by the help of which the bowels are kept open, and the flow of the lochia favoured. Lastly, vesicatories to the thighs and legs, are of very great service as often as the head or brain is much affected: nor are these topicals of less use when the breast is too much impeded, so that in this state of things they ought to be numbered among the best remedies.

8. It remains briefly to treat of **HYSTERIC AFFECTION** common to **CHILD-BED WOMEN**. This proteiform disease often occasions alarm, for numberless symptoms proceed from this source, from slight attention to which, the incautious or unskilful do not rarely precipitate themselves into a fatal error, and indeed it often happens that the genuine character of this disease is clearly manifest to the patients themselves, by whose clamours sometimes even the more persevering are forced to desist from their unhappy and imprudent method of cure, deceived by the affinity. Nor does the hysteric fit of puerperal women in this state of things demand a different treatment from that above mentioned, wherefore we have thought it not amiss to omit it, lest we incur the blame of needless repetition.



DISEASES OF THE BREASTS.

BESIDES the causes derived from the above-mentioned faults of the milk, others occur which are common to virgins and married women, which may promote similar affections, namely, inflammation and abscess, schirrus and cancer. Concerning which for the sake of order, we have thought it worth while briefly to treat; but before we proceed further, it will not be amiss to premise some observations concerning the *plump breasts of virgins*, although the encrease of these organs at puberty, as consistent with the accustomed order of nature, ought to be expunged from the list of diseases. The humours rush to the breasts of those who are of mature or marriageable age, so that from this cause arises a pain of which some very delicate virgins are forced to complain; this is obviated by suitable regimen, and by properly covering the affected parts. Venesections may be used if the pain of the growing breasts become very acute, and cathartics are of no small use in this case. We may remark as we go along, that *some boys* are met with, who about the same time, suffer almost a similar expansion in the breasts, attended also with a certain pain, which is relieved by the same means, Having premised these observations, it is expedient to prosecute our plan.

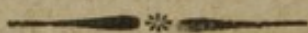
1. **O**STRUCTION or **I**NFLAMMATION of the **B**REASTS, besides the retention and concretion of milk in puerperal women, rarely admits of an internal cause; but very often this species of inflammation is contracted by some contusion, which is accompanied by heat, pain, and resistance to the touch; and indeed fever oftentimes rages. It is with difficulty terminated by resolution, and mostly runs into suppuration, unless it put on the nature of schirrus and cancer. *The cure* is for the most part commenced with venesection; afterwards endeavours must be used to temper the blood by the remedies mentioned elsewhere. But the principal case consists in topicals, the best of which are, plaster of spermaceti, which seems to possess the virtues of a demulcent or resolvent; marine salt impregnated with urine and enclosed within a little bag; cataplasms made of elder flowers, crumb of bread, rye meal, or other both resolvents and maturants, such as we have directed against inflammation caused by stagnation of milk. But when an abscess discovers itself, by a certain prominence, fluctuation or other signs, mere emollients and maturants ought to be applied: besides the more common cataplasms, the Basilicon plaster, divine plaster, &c. are recommended. When it appears that pus is duly formed, the abscess ought to be opened immediately with a lancet, lest the matter by retention, working itself cavities, occasion fistula: lastly, the ulcer is treated by the common method. Some prefer applying the cautery to the abscess, but this doubtful mode of cure is rejected by experienced practitioners.

2. Among the more frequent and fatal diseases, is reckoned, **S**CHIRRUS of the **B**REASTS; namely, on account of threatening cancer, nor is this tumour entirely safe, when moveable and indolent and of the same colour with the skin, since many cancers are observed, which at first put on the same appearance. And indeed the case has so turned out, that many of no mean order have taken every obstinate tumour of the Breast for cancer, which seems consonant neither with reason, nor experience. Since there occur numberless women, who have borne this obstruction of the breast, when confined within certain limits, and occasioning little inconvenience, through the whole course of life; which affection we denominate, *Glande au sein*. Schirrus of the breast coming on about the forty-fifth or fiftieth year of age, usually takes it *rise* from suppression of the menses; or is caused by contusion. The melancholic and those who are tossed with cares and afflictions, are especially considered obnoxious to this. It is commonly thought that every *external cure is dangerous*, which nevertheless, does not hinder the application by many, of various emollients and resolvents, namely, plaster of

mucilages, of spermaceti, of cicuta, de vigo, diabotanium, &c. Nor is this method unsuccessful, after premising generals, namely, *internal demulcents* and *temperants*, among which, the best are milk, whey, succory and borage, water-nasturtium, and dock, &c. Aperients and incidents also are of no small use, exhibited in very small doses and with caution, such as birthwort, woodlice, martial flowers of sal ammoniac, prepared mercurials, &c. We cannot doubt that recent schirrus often yields to these remedies; but when of long standing it baffles them all, and submits to extirpation alone. In the cure of both kinds, maturants are to be avoided as worse than a snake, which daily experience testifies to bring on fatal consequences.

3. OCCULT CANCER, or one not yet open, differs little from schirrus. It is confessed by almost all, that both are sometimes borne without trouble for thirty years and more. But if cancer be tampered with by imprudent topicals, it soon *degenerates into a horrid ulcer*. Suppression of the menses in many cases, also promotes this unhappy event. Unusual itching, acute and pulsating pains, livid colour of the tumour, the swelling veins becoming knotty about the surface, and the coming on of fever, threaten the fatal expansion of the cancer. Meanwhile a very acrid and virulent ichor exudes from the tumour, and a sordid and phagædenic ulcer is gradually hollowed out, from the sides of which proceeds fungous flesh, which being consumed by putridity, soon repullulates. Moreover, the edges of the ulcer are inverted and become callous, and sometimes hæmorrhage break out scarcely to be repressed. Lastly, from the stupendous increase of this dire disease, its character becomes more manifest. Although experience proves that cancer of the breast is altogether incurable, yet we may try some *remedies*. Namely, a milk diet, or one similar to it, is of great benefit; whey, and what are called acidulated mineral waters, merit praise: temperants, hepatics, diaphoretics, &c. do some good, which although they seldom promote a cure, yet are of no little service, namely, by bringing on remissions, and procrastinating fate. But of all other internal remedies *antiseptics* are the best, and especially the Peruvian Bark, has been deservedly recommended by the illustrious DE HAEN, a most diligent cultivator of medical practice. There are not wanting other very celebrated internal remedies, above-mentioned, when treating generally of cancer, the efficacy of which, however, may be doubted: among which CICUTA so highly extolled by the most celebrated practitioners, takes the first rank. Concerning its virtues however in our climate nothing certain has been discovered.

There are also numberless *topicals*, which, if used in time, after premising generals, have often happily succeeded. Of this class are carduus benedictus, deadly nightshade, hemlock, henbane, herb Robert, and tobacco, the root of comfrey and birthwort, honey diluted with water of red-poppies, plantain or roses, savin, white or red percipitate, arsenic, verdigris, corrosive sublimate, and other cathæretics sold by mountebanks, which nevertheless, may do much harm, unless used with a skilful hand. Moreover, if all these have been used without success, the only hope of curing the tumour consists in its *extirpation* from every connection with the neighbouring parts. But this operation has an unhappy issue, if the tumour adhere to the subjacent muscles, if the axillary glands be obstructed and tumid; nor does it rightly succeed if the mass of blood and humours be tainted with any virus; since this latent cause, sooner or later after the tumour is removed, promotes the formation of another: this misfortune is prevented by a suitable manner of living; by the cautious use of mild cathartics, temperants, depurants, diaphoretics and other remedies mentioned elsewhere, which usually subdue the seeds of the disease.



DISEASES OF THE GENITALS.

TO this class belong *fluor albus*, satyriasis, or *furor uterinus*, inflammation and schirrus of the uterus, *ulcer* and *cancer* of the same, *prolapsus of the same viscus* and of the vagina; and lastly, *false pregnancy*, which not only comprehends the different species of solid moles, but also a collection of air, water or blood, which often so nearly resembles gravidity or pregnancy, that even the most experienced are deceived, especially if the first view afford belief in the deception. We have above treated of hernia of the uterus during gravidity, of fissures or chops, warts, condylomata, &c. affecting both sexes. We have also omitted depraved conformation of the uterus and vagina, tumours, and other obstructions of these parts, which hinder the free flow of the catamenia, and impede the offices of generation, since all these organic lesions ought to be reckoned among the causes of sterility, treated of in its place.

1. FLUOR ALBUS, among us, *Fleur blanches*, affects virgins and women living either in wedlock or unmarried, or pregnant. It rarely comes on before puberty, yet little girls of four years of age are not altogether free from it. Sometimes continued, sometimes intermittent, milky, or lymphatic, it is mostly stopped

during the flow of the catamenia. Sometimes it breaks out at stated seasons, before and after the menstrual flux, at other times it recurs without order. Like the gonorrhæa, this affection is attended with itching and strangury, but mild; it participates of a cachexy, discovered in most cases by spontaneous lassitudes, heavy pains of the loins, restlessness of the legs, loathing of food, paleness of the face, swelling of the eyelids and of the lower limbs. Fluor albus is often promoted by a scorbutic taint, or it takes its rise from the venereal disease itself; but it differs from genuine gonorrhæa, both in respect of its seat, and of its character, although these affections nearly resemble each other at first view, so that even the most vigilant are deceived. Nevertheless, the matter in fluor albus, breaking out more abundantly after the catamenia, shews itself at first mild and inodorous; but in process of time it contracts such a fetid and acrid nature, as to erode the neighbouring parts; whence arise ulcers, which are propagated in every direction, and do not spare the uterus itself.

Hence it appears with what difficulties the *diagnosis* of this disease is surrounded; add to this that the custom has almost prevailed among women of the first rank, to mistake virulent gonorrhæa, an indecent and obscene disease, for fluor albus, an affection not ignoble; so that they, who from the very intricate and rarely candid relation of these females, set themselves about extricating truth from falsehood, hunt for light in the dark. But when, as often happens, these affections are implicated, the thing requires deeper investigation. Nevertheless each disease is known by its peculiar marks, provided the sick conceal nothing from enquiry. Besides the signs of cachexy already described, we must attend closely to the matter exuded, which in the first stage of fluor albus, is like a mucous pituita, mild and inodorous, of a whitish colour, or pale yellow; but as the disease advances, it becomes, as already hinted, more acrid and fetid. Besides, the fluor albus suffers an intermission, while the catamenia are flowing, and is sometimes exasperated by their approach; but an itching and strangury attend gonorrhæa which is at first sparing and whitish, then puts on a yellowish green colour, and has the appearance of acrid pus, sometimes fetid. Moreover, gonorrhæa does not cease while the menses are flowing, because it has its seat about the surface of the urethra, while the vagina and uterus supply the fluor albus. The gonorrhæa becomes manifest soon after coition with an infected man, and treated with proper remedies, gradually terminates within forty or fifty days. But fluor albus is more obstinate, and lasts for years. Lastly, ulcer of the uterus supplies a discharge scarcely

differing from fluor albus, is known by very severe pains, and a matter of a worse kind, besides the signs mentioned elsewhere.

Fluor albus is justly numbered among the most *obstinate* diseases, and most difficult of cure, especially in lustful women, who thereby become barren: yet recent fluor albus is void of danger, if attended with no pain, distilling in small quantity, and subject to some intermissions. But the case is otherwise when of long standing, and breaking out with a continued, troublesome and plentiful discharge; in which state of things, it is commonly supposed that women may impart to men a certain species of gonorrhæa terminating in about seven days; which indeed, although it appears not inconsistent with reason, yet we think ought to be submitted to the more accurate examination of experienced practitioners. Fluor albus becomes almost incurable about the forty-fifth or fiftieth year of age, namely, after the close of the menstrual period, and especially in advanced age, and in cachectics: for often at that time it threatens marasmus and ulcer of the uterus, in which unhappy case hæmorrhages sometimes break out, scarcely to be restrained, which reduce some women to the last extremity.

Fluor albus is subject to almost innumerable *causes*, mostly immersed in thick darkness; women are obnoxious to it who are tossed with cares, oppressed with grief, and who drag on a life of great afflictions, as is proved by experience. Various taints of the blood and humours, difficult parturition, abortion, hæmorrhage of the uterus, &c. also promote it. *The examination of dead bodies* but faintly elucidates the character of this very intricate disease, for whatever be presented to view on dissection it is nothing else than a morbid effect, differing much from the genuine cause, of this kind are lesions of the uterus, ovaries, tubes and other parts of generation; namely, obstruction of these organs, or unusual thickness, exulcerations, gangrene, &c. Nor does greater light appear from inspecting the viscera, which present to view diversely injured; the liver especially among the abdominal, is often found contaminated; various taints are also noticed in the omentum and kidneys, to say nothing of the rest.

The *method of cure*, as above inculcated, is arduous and intricate, and no wonder if it succeed unhappily, since the roots of this disease are with difficulty cut up. Venesection rarely suits unless there be marks of plethora. At the commencement of the cure an emetic is proper, ipecacoana in this case seems to excel the rest. The use of cathartics ought to be cautious, the most approved are rhubarb and calomel. But the principal cure depends on temperants and depurants, namely, succory, agrimony

liver wort, hartstongue, dock, nasturtium, ladies mantle, and St. John's wort, river crabs, whey, or milk itself, &c. but beyond doubt, the various natural mineral waters take the palm from these. Stomachics and absorbents are also given with advantage, if digestion be not rightly performed, as very often happens in very brittle health, and after acute diseases. Of this class are chervil, balm, southern-wood, wild germander, flowers of camomile, and rosemary, elecampane, rhubarb, juniper berries, catechu, coral, &c. Sudorifics and aperients, as occasion requires, also merit no small praise; namely, sarsaparilla and China root, camphor, gum ammoniac, woodlice, Glauber's salt, arcanum duplicatum, lime water mixed with milk, martials, antimonials, &c. Lastly, antivenereals, antiscorbutics, &c. are of use, if there be any suspicion of a taint of the humours.

To these remedies, whatever may be their efficacy, the fluor albus rarely yields, so that this discharge is with difficulty exhausted, unless internal astringents and tonics effect a cure, which by strengthening the powers of the vessels, overcome the atony of the organs. But these medicines cannot be safely administered until after the long continued use of the others, lest by its untimely suppression, the situation of the patients should become worse. Nor are *external* astringents forbidden in this state of things, namely, the vulnerary herbs, agrimony, plantain, greater comfrey, honey, &c. from which are prepared decoctions to be applied by means of injections, to the affected part. Some are fond of fumigations with olibanum, amber, tacamahaca, mastich, &c. but they ought not to be exhibited without the greatest caution in fluor albus of long standing: for it is confessed by all who are conversant with practice, that quinsy, inflammation of the breast or abdomen, purple or slow fever, gout, dropsy, phthisis, &c. are often promoted by the imprudent suppression of this disease.

2. **FUROR UTERINUS** or Satyriasis, as every one knows, is an insatiable desire of coition, in which both virgins and women who have entered the camp of Venus, rush intemperately to the embraces of men, which being denied, they suffer frequent pollutions, as well waking as sleeping, or sport in imaginary gratification. That species of salacity differs much from furor uterinus, which depends on the amazing size of the clitoris, (which when excited by lust, or affected with stiffness, seems to resemble the male organ; whence those lascivious women, called *tribades*, endeavour to force others of the same sex with whom they are in love, and not without abominable pleasure, are able to perform an addle species of the office of a man. To return to our subject: furor uterinus is not always manifested by obscene dis-

course and indelicate actions, since many who are not free from shame and bashfulness, endeavour to conceal this most vile situation, and conscious of its turpitude, try to repress this abominable lust. Women of a sanguineous temperament are thought *prone* to satyriasis, virgins who are ripe for husbands, or women living in gratification of their lusts, and in luxury; widows, or those who are married to frigid old men; nevertheless this affection spares not other ages, since there are examples of some women about the sixtieth or seventieth year of their age, seized with this most filthy disease: mention is also made of a little girl three years of age, afflicted with this hereditary affection. Obscene books, conversations, or thoughts promote this disease; very nutritious and acrid food, and especially the frequent use of *mastupration*; (a practice similar to *onanism*.) Satyriasis is rarely dangerous, and yet often suffers such great exacerbations, that women who cannot be gratified with venery are seized with fury; they solicit all whom they meet to venereal embraces, and attack those that refuse with fists and nails; perpetually handling their privates with their wanton fingers, until they become maniac, and are forced to be confined with chains lest they do violence to themselves or the by-standers. The dead bodies exhibit the uterus inflamed, the clitoris much enlarged, the tubes and ovaries variously diseased, namely, inflamed, suppurated, having fatty excrescences, hydatids, schirri, &c. The kidneys are also found of stupendous magnitude, &c.

Having premised a suitable diet, *venesections* afford present relief, both in the arms and in the feet. For by repeated observation it is proved, that this disease is removed, and the sense of venery blunted by the plentiful flow of the menses or piles. Having depleted the vessels, emetics may be used with advantage, the milder cathartics are also given from time to time with benefit, but refrigerants ought to be exhibited with a bounteous hand, namely, lettuce, succory, pursley, violet and water lilly, emulsions, whey, sal prunell, and other antiaphrodisiacs. Sedative narcotics do very little good, but camphor, amber, castor, sedative salt, &c. are much esteemed. Tartar, martials, chalybeate waters and other emmenagogues do good, if the menses be suppressed; sometimes also absorbents are of service. Lastly, many auxiliaries against phrenitis and mania, merit praise. Nor among *external remedies* are clysters to be despised, prepared of vinegar and water, or other refrigerant, but the domestic cool baths excel the rest, in which they ought frequently to sit, as their strength will admit. Not to mention advice and exhortations, reproofs and threats, and all the remedies brought from the treasury of *Ethics*, which are of excellent use

in many cases, provided the disease have not yet reached its acme.

3. Among the severe diseases is reckoned **INFLAMMATION OF THE UTERUS**, more frequent indeed than is commonly thought among physicians from whose notice it mostly escapes, although its history is given by many authors. Yet there are not wanting evident *signs* of this disease: namely, a most troublesome heat of the hypogastrium, a resisting prominence of that region often occupying the whole abdomen, pains of the loins, groins and thighs, which are exasperated by the slightest motion of the body, are propagated to the back, scapulæ and further, an ardent fever with unequal pulse, irregular shiverings, a dry mouth, difficulty of breathing, heart-burn, faintings, pain of the head, most severe in the bottom of the orbit, gritting of the teeth, delirium and convulsions; to which may be added strangury, tenesmus, nausea, hiccup, pains of the tumid breasts, suppression of the menses, and lochia, &c.

But this dreadful disease shews itself under various grades: namely, in the ratio of inflammation, now occupying the whole uterus, now but a very small part of this viscus. This dire disease very rarely ends by resolution, but in most cases by the coming on of gangrene, has a fatal termination within about a week: if this obstruction be protracted longer it goes into supuration, or degenerates into schirrus or ulcerous cancer, concerning which below. The *examination of dead bodies* exhibits this; the ovaries, tubes and neighbouring parts are also found contaminated with disease, not to mention other viscera infected in various ways. Women of florid age and sanguine temperament are thought to be prone to inflammation of the uterus. It is usually promoted by a fall from a height or any other contusion, violent passions of the mind, the sudden suppression of the catamenia, abortion, suppression of the lochia, retention of the secundines, and other diseases arising from difficult or unfortunate labour, and treated of above.

The principal *point of cure* consists in the timely depletion of the blood vessels, wherefore without delay let a vein be opened, and venesections often repeated, which nevertheless ought not to be protracted beyond the three or four first days of the disease. Meanwhile let diluents and demulcents be largely drank: namely, whey or chicken water, infusion of the flowers of mallows, of flaxseed, &c. Oil of sweet almonds, spermaceti and others of that nature also merit praise. The milder laxatives are useful, but other cathartics are forbidden. Antihysterics and paretics are of service in some cases, but we must deal cautiously with paretics. We omit other remedies which may be

used as occasion requires, or in the ratio of the complicated diseases. As to externals, refrigerant and demulcent clysters afford present help; made of broths of tripe, whey, chicken water, emulsions, &c. Lastly, to this place belong whatever auxiliaries are usually given against other internal inflammations.

4. The plan of order demands that we come to SCHIRRUS of the UTERUS, the consequence of obstruction or inflammation. This affection occasions much trouble to physicians, and is often traced as it were by mere conjecture. Yet there want not *marks*, which if rightly attended to, may give some certain diagnosis: namely, when it depends on previous obstruction or inflammation. The character of the disorder is exhibited by a weight in the hypogastric region, of which some patients complain, obscure pain of the loins, hips and legs, sparing or irregular flow of the menses, their suppression, or surprizing flow. Moreover, schirrus of the uterus, as of the other viscera, brings on ascites or leucophlegmasia. We cannot doubt that in the first stage this disease may be attacked and overcome; but it is mostly wrapped as above hinted, in great obscurity, and lastly, it shews itself after it has become *incurable*, and very often in this condition puts on the nature of cancerous ulcer.

It is well known from the histories of anatomists that schirrus of the uterus is much more common than is generally supposed; to which I assent, being confirmed therein more than sufficiently by my own observations. For dissections exhibit the uterus not only thicker and more firm, or having the appearance of cartilage, but even almost equalling the hardness of bones or stones, so that they can scarcely be cut with the scalpel. Moreover, the schirrous uterus is found of various size, for instance it recedes little or none from its natural size, and indeed is sometimes contracted; again it occurs deformed and of stupendous magnitude; so that there are examples of uteri which have equalled thirty or forty pounds in weight. The ovaries are also obnoxious to schirrous obstruction, and this disease is very clearly discovered, being very familiar, as is well known, but having a different termination.

Cancer of the Uterus is with difficulty distinguished from ulcer, unless they are properly to be considered one and the same disease, as has been the judgement of some. *Ulcer of the Uterus* is brought on by long continued fluor albus, violent extraction of the placenta, a wound inflicted by the nails or instruments of the midwife, putrid fœtus, &c. It is promoted by lues venerea, scrophula, scurvy, &c. The progress of this dire disease is more speedy during menstruation than after the period is closed: very severe and lancinating pains discover it, which

not only rage in the hypogastric region, but also beset the neighbouring parts, and spread widely. They are attended by sanious, purulent and very fetid matter, which often contracts so acrid a nature that it erodes the vulva and neighbouring parts. Besides hæmorrhages break out, and frequently recur; tenesmus and strangury, slow fever rises, with irregular exacerbations, &c. Lastly, we learn from *dissections* that the uterus is tainted with ulcer and cancer, and is very often infected with putridity and gangrene. This disease is propagated to the surrounding parts, which is closely followed by ascites, mostly sanious and purulent or very fetid, and as it were excludes all hope of cure.

Schirrus and *cancer* of the *uterus* baffle all the arts of physicians, for they labour in vain with aperients and incidents, vulneraries and the choicest detergents, internal or external, because, as above remarked, they are brought into use too late. Yet there are not wanting examples of various cures, among authors of inferior rank, in whom we may place confidence. Wherefore nothing hinders with due caution, the trial of these *remedies*, which, according to custom, being exhibited in vain, we must persist in a *palliative cure* altogether. This consists in a milk diet, barley and rice gruels, emulsions and other detergents with the same view are also profitably given, the cold mineral waters, which may be associated with milk. Absorbents are of advantage, as occasion requires: namely, magnesia, crabs' claws, &c. But hypnotics answer every purpose, which by procuring a remission, cast a kind of veil over this dire disease. There is also some ease procured by baths and semicupia, emollient clysters, demulcent injections, anodynes, vulneraries and detergents, fumigations of storax, amber, and other such like, &c.

5. **PROLAPSUS** of the **VAGINA** is very frequent, and mostly follows difficult parturition. Strong efforts of the body downwards, disturb this part, also the lifting of heavy weights, dancing, violent cough, and great clamor. Lastly, it is promoted by dropsy, fluor albus, calculus of the bladder, &c. The vagina removed from its situation protrudes but little at first; but this tumour gradually encreases, so that sometimes it hangs in very great size from the pudenda, having a curious foramen at the base, it not rarely reaches to the middle of the thighs, or resembles a man's head. Procidentia of the vagina respects married women, yet virgins are not altogether free from this inconvenience; which even, if authors may be credited, does not spare little girls of three or four years old. There was a very great error among the ancients about the part displaced, which they mistook for the uterus; and so much did these prejudicate

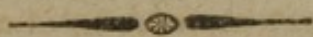
opinions prevail, that many relate that *they have seen women impregnated, and having a happy delivery, after the amputation of the uterus!* But it is tiresome to follow such trifles and old wives' fables. *Procidentia uteri* is indeed *rare*, and pertains only to puerperal women, labouring under tenesmus and diarrhæa, especially after difficult labour, or the midwife incautiously dragging away the secundines.

Besides the impediment of conception, this pendulous tumour occasions various inconveniences: namely, tensive pain of the loins, dysury and costiveness. Also blood issues from the tumid vessels, or from too great handling, and the access of cold air, there take place inflammations and exulcerations, with an efflux sanious and of intolerable fetor, and often with threatening gangrene and sphacelus. Meanwhile their arise fever, delirium, convulsions, and other dreadful symptoms, which are considered as forerunners of death. Yet this disease when recent, is easily cured, especially in the young; but is otherwise when of long standing and at an advanced age. The vagina at that time is contaminated with a very fetid collection of humours, and being thrust out, exhales a putrid mephitic. The *descent* of the *uterus* is indeed much *more dangerous*; for if this viscus should be dragged and *inverted* in difficult labour, the patient is little better than dead, and truly very few escape death from this misfortune.

The vagina projecting outwards ought to be restored to its pristine and natural situation if nothing forbid, and retained there, which is a very difficult task. Yet there requires nothing else than rest and a recumbent posture, for recent procidentia of young patients: or let a *pessary* be introduced, or a uterine circle made of cork, and covered with wax, which ought to be left there for some time. Roborant injections and fomentations also contribute their share. Nor are *astringents* and internal tonics, bitters and martials to be despised, provided the menstrual flow be not at hand. But when the vagina thrust from its situation, is inflamed and ulcerated, the replacement ought not to be attempted until these injuries are treated in the usual method. In this state of things let venesection be the chief remedy, and use emollient and refrigerent clysters, fomentations of tepid wine diluted with water, and of elder flower water, &c. Lastly, by the above-mentioned remedies, and scarifications, gangrene is prevented; which however not succeeding, we must have recourse to extirpation of the part, nor is this operation always unsuccessful, provided it be performed in time.

It will not be amiss, in concluding this chapter, to add something about *polypi*, as well of the uterus as of the vagina. These

fungous excrescences usually attach themselves to ulcerated parts, and so luxuriate in those moist places, that they close the natural passage. Whereby the customs of women being impeded, not only entrance is denied to the male organ, but even the menses flow with difficulty, or are altogether retained. Sometimes these excrescences are hid within the vulva, sometimes they project out, so that by the incautious or unskilful they are taken for procidentia of the vagina or uterus. Yet these affections are very easily distinguished, since the tumour from prolapse of the vagina has a base pervious by a foramen, this orifice is altogether wanting in inverted uterus; but this misfortune respects only parturient women, and appears as it were suddenly, *while the encrease of polypus is very slow.* These fungous excrescences when implanted deeply, can scarcely be extracted or eradicated; but in these difficulties what projects ought to be cut off, that the remainder may be consumed by exsiccant and cathartic powders. But these things are not to be done without the greatest caution, lest by too much irritation they should excite inflammation and gangrene, which cause great trouble to the physician.



FALSE (PREGNANCY, GRAVIDITY, OR) CONCEPTION.

NO one is ignorant that there are various diseases, invading women of a suitable age, which usually resemble legitimate pregnancy: namely, *fleshy* and *vesicular moles*, collection of *menstrual blood, serum* and *flatus* in the uterus, and lastly, *tumours* affecting the *ovaries* and *fallopian tubes*, which it will be well, singly to weigh in the even ballance, beginning with the *mole*. The *magnitude of the fleshy mole is diverse*, it occupies alone the cavity of the uterus, or is associated with genuine pregnancy. It affords a fibrous texture, sometimes soft, sometimes thick and firm, and again by reason of age, resembles the hardness of cartilages or bones. It is rightly conjectured to arise from False Conception, so that this disease affects those only, who have had connection with men, concerning which nevertheless some doubt, who assert that virgins and very chaste widows, altogether without the commerce of men, have been afflicted with this disease. This opinion seems opposed to reason and experience, which nevertheless it would not be amiss to admit with this design, that the crime of virgins and some widows might be extorted,

or their character be preserved safe ; unless it should be more agreeable to refer these fleshy masses, to polypous excrescences of the uterus, differing altogether from genuine mole.

1. **THE FLESHY MOLE** is with difficulty distinguished, not only from other substances contained in the uterus, but also from true Pregnancy. Yet the uterus containing the mole seems more moveable and weighty in the motions of women lying down, and more easily yields to the pressure of the hands ; the abdomen in legitimate gestation, as if pointed, projects more about the navel ; but this in *mole*, is more equally distended in a circle : the tumour of the abdomen shews itself sooner, from mole of any sort, than from the fœtus. Besides the symptoms with which Pregnant women are afflicted, are more violent in the first months but become milder about the last months, or altogether cease : but in *mole* they remain in the same state and indeed are exasperated. The splendor of the face is not obscure in Pregnant women, but the case is otherwise in False Gravidity. The catamenia of those labouring under mole, usually break out inordinately, about the fifth or sixth month, which never or rarely happens to those who are with child. But the principal sign of natural Gravidity, is derived from the motion of the infant, very manifest about the fourth or fifth month, which it is certain must be altogether wanting in any spurious Gravidity. Lastly, the mole is protracted beyond the legitimate time of parturition, and indeed is borne for many years, or through the whole course of life, and occasions but little inconvenience, if we except the tedious trouble from its weight. The excretion of moles is not without danger, especially if they be slowly expelled ; for then hæmorrhages break out, scarcely to be restrained, and very serious symptoms arise, from which are taken the omens of death.

We cannot doubt that the uterus sometimes retains a *certain portion of the placenta*, when torn away by the careless hand of the midwife : which is afterwards taken *for a mole*, and indeed, it seems proved by some observations, that these remains of the secundines become cellular substance, differing nevertheless, from genuine vesicular mole : the encrease of which is so great, that the uterus swells as in the last months of gestation. The uterus also contains certain masses of grumous blood, rendered thick and firm by retention and unceasing pressure, which afterwards are excluded in the form of moles. The exit of these bodies hid in the uterus, is mostly committed to the sole powers of nature : venesections are of little use for this purpose, but great advantage is derived from baths, semicupia, fomentations, injections, and liniments prepared of emollients. Re-

medies usually prescribed for promoting the menses, and against the death of the fetus, are also given with advantage. Emetics and drastic cathartics may afford some help, as also *stimulant clysters*, and pessaries made of hellebore, savin, colocynth, and other acrid materials. But we ought not to omit, that these remedies are not only often inadequate to produce this effect, but become even very hurtful. Lastly, the obstetric hand is rarely applied by judicious practitioners, unless hæmorrhage be very urgent.

2. THE VESICULAR, or watery MOLE, to which cachectic women are liable, is nothing else than a congeries of hydatids, connected in bunches, sometimes floating in the uterus, sometimes covered with a peculiar and manifold follicle: so that this affection bears no small resemblance to a certain species of cystic dropsy, which is rarely known before the ejection of these hydatids, by the sole benefit of nature, brought about, a little after the usual term of parturition. Uterine hydatids are often excluded in such quantity, as to fill the whole pelvis, which practioners have noticed sometimes to have happened. A hæmorrhage follows this excretion, never to be checked before the exit of these vesiculæ. When this affection is implicated with genuine Pregnancy, it mostly comes away with the true birth, otherwise it is not without danger. Its cure is performed by simples, unless it be better to abstain from all remedies. Wherefore endeavours must be used, that by a suitable diet the strength of the patient be recruited, and indeed sometimes we may use roborant medicines, provided the too free flow of blood do not hinder. There are moreover found in the uterus, sarcoses, anomalous tumours, stony concretions, &c. These are discovered in *dissections after death*, which during life, were altogether hidden.

3. Inflation of the uterus takes the unmeaning name of MOLA VENTOSA; this is a collection of air within its cavity, which like the other species, also resembles Gravidity, but the abdomen is uniformly prominent. The patients do not complain of the weight of the uterus being troublesome, and this viscus is observed to be more stable, which indeed is consistent with reason. Besides, when the abdomen is submitted to more accurate examination, it subsides at certain times, while at others it appears more tumid. There is no certainty concerning the stage of this disease, but sooner or later it terminates with the explosion of flatus. Yet this eruption, by which the abdomen immediately flattens, usually comes on about the legitimate term of parturition, so that many women, deluded by this appearance of impregnation, at the stated time, while the midwife was wait-

ing to receive the fetus, have closed the comic scene, by an event unexpected to be sure, that is, by the loud explosion of wind through the genitals. Yet this affection for the most part, is of longer continuance, and lasts sometimes for many years. *Mola flatulenta* may be removed, by simple *dilatation of the os uteri*, but this remedy is futile against the disease when obscure, which for the most part is not at all suspected. Acrid cathartics are useful in some cases, and stimulating clysters, which when given with another view, have been known to have the best effect in this affection. We add nothing concerning carminatives imprudently recommended by authors. Lastly, that condition of the body ought not to be referred to flatulent mole, which promotes the generation of flatus in the uterus, from time to time discharged, with some noise as from the anus; yet with this difference, that its exit is never subject to the will, which indeed torments well bred women, who are constantly anxious about this disgraceful noise.

4. OF THE MENSES RETAINED in the UTERUS we have treated above, and have noticed that this affection as to the protuberance of the abdomen, very accurately resembles gravidity, so that even the more skilful are not free from this error. Yet when the case is more accurately considered, the difference of both states is manifest: for the belly projects more about the fourth or fifth month, from sanguineous mole, as they call it, than in genuine gravidity, about which time the motion of the fetus, which women with child experience, is altogether wanting in these patients. This experiment is also satisfactorily made by applying the hand when cold, or wet with water. We have already declared that the solution of this disease is the mere work of nature, yet some remedies are not wanting, which may be brought into use, either for restoring the strength of the sick, or for relaxing and opening the uterine passages: but we will not dwell longer on these which have been treated of already, nor appear to incur the blame of needless repetition.

5. The diagnosis of DROPSY OF THE UTERUS, is surrounded with no less difficulties; to this the barren are thought to be prone; also the cachectic and scorbutic. Like the above mentioned diseases, it also puts on the appearance of gravidity, which it also very often attends, as in ascites. There is no knowledge derived from the flow of the menses, which may break out in both these conditions of the body; the fluctuation of water in this disease, is not perceived, as in ascites; the abdomen, as we have often inculcated, swells in a round figure, the breasts subside, and the brightness of the countenance is obscured by paleness; and lastly, the sick complain of a certain weight of the

uterus, from which the gravid are altogether free. The uterus from this species of dropsy rises also to such a size as to contain forty or fifty pints of water: and indeed VESALIUS makes mention of a uterus, the water of which exceeded in quantity one hundred and fifty pints. It is proper to remark that the involucri of the uterus when morbidly expanded, are made thinner in proportion to the size, but every one knows that the case is otherwise in genuine gravidity.

The *remedies* directed for ascites and leucophlegmasia, or to obviate a vitiated hæmatorrhæa, are also given with advantage against dropsy of the uterus; but when the character of the disease is ascertained, the cure is more simple and expeditious, which consists in the evacuation of the stagnant liquid, promoted by throwing up emollient injections or fumigations, dilating the os uteri, either by the help of a catheter or the finger. Nature mostly performs this office, especially if legitimate pregnancy be implicated with it, under which circumstances, the water rushes out immediately after the birth, or this evacuation takes place sooner; so that the gravid patients sometimes do not bring forth until after a month from this event, and have a safe delivery. Nor is the plentiful flow of this water void of danger, which at whatever time it happens, occasions the death of some; wherefore if the strength of the pregnant women be exhausted by the discharge of this fluid, or by labour being procrastinated, emetics are given with advantage, as also drastic cathartics, and stimulant clysters, nor are borax, saffron, or other emmenagogues useless in this case. Sometimes *this disease* is terminated by vomiting, sneezing, violent cough, dancing, a fall from a height, a stroke, &c. which by agitating the uterus may expel the stagnant water. Lastly, for any collection in the uterus, baths, semicupia, the vapour of warm water, emollient injections, and fomentations, are of service; by the help of which, the mouth of the uterus being relaxed, sometimes gives exit to the fluid lodged therein.

We have above inculcated that *dropsy besets the ovaries and tubes*; this disease very frequently attacks the ovaries, but very rarely invades the tubes. The ovaries sometimes grow to such a size, as to contain one hundred pints of water, as examination testifies. These species of dropsy, also resembling gravidity, and of which we have treated above, ought to be reckoned difficult to be ascertained and cured; so that they are often with difficulty distinguished, not only from legitimate pregnancy, but also from any other spurious kind. The fluctuation of the liquid therein contained is obscure; although sometimes very abundant, but in genuine ascites, as is known to all, this is manifest;

because it contracts a thickness and viscidty, or is collected within various follicles. It is expedient to remark that the membranes of the uterus, as just noticed, when expanded with colluvies become thinner; but *anatomical observation* teaches, that the case is very different with the ovaries, for their texture on the contrary becomes thicker, so that sometimes, after the entire evacuation of the stagnant liquid, there remains a weight of twenty or thirty pounds. Nor do these organs always swell with water, but they not rarely contain a matter of a gelatinous, buttery, fatty, honey-like nature, &c. These diseases are with difficulty known, and are only brought to view in dissections of the bodies. If however, the commencement, and process be more accurately examined, their *diagnosis* may be extricated.

Among tedious diseases may be reckoned *dropsy of the ovaries and tubes*, for examples are not wanting of virgins and married women, who for thirty, forty, and even fifty years have carried these tumours without much inconvenience, except from their size and weight. This species of sickness is thought incurable, to which barren and aged women are thought to be prone. Whether physicians, by repeated and well timed attempts, as was proper, have prepared themselves a way to cure it, or whether they have treated the disease carelessly, we leave for the determination of the skilful. We cannot doubt that all the remedies indicated for ascites, may be given, but they mostly have a trifling effect: hence we think that recourse should be had to the evacuation of the stagnant fluid, by means of a suitable instrument. The most common method of puncturing is practised in vain, if the concealed humour be too viscid, or contained in many follicles. For there is a history of a certain woman, who within the space of four years had suffered this operation fifty times, with unhappy success, from whom it is said that two thousand pints and more of water had been drawn. Section is indeed safer, by which a wound sufficiently open is inflicted, to allow egress for the thick matter, and gradually to exhaust the tumour. And indeed it is said that a woman fifty-five years of age had been cured by this method.

There are other diseases of the ovaries, which present to *anatomical examination* alone, for besides inflammation and schirrus, of which in their place, these organs do not rarely degenerate into abscesses of stupendous size, or into folliculated and anomalous tumours, which also contain the bodies of fetuses of every age, even to the tenth month, sometimes entire, sometimes putrid; bones, hairs, stony concretions, and numberless other matters, the production of which is obscure and intricate. From

these defecations of the ovaries, of what kind soever, often arise putridities, which by spreading far and wide, contaminate the neighbouring parts, and draw them into consent. Whence it is little wonder if these diverse matters should not seldom find an outlet through the intestinal canal. Almost in a *similar manner*, but less frequently, the *fallopian tubes* are diseased, which, like the ovaries, are sometimes altogether consumed. But this affection is with difficulty distinguished from the rest, and terminates also much in the same manner. We have thought it would be superfluous to add more concerning the *diseases of women*, since on this subject there has lately been published a treatise very elaborate and of unexhausted erudition, which nevertheless being perhaps too full of things merely physical, will not please all physicians; the author of which, the very celebrated ASTRUC, has consumed an age in experiments, and is justly numbered among the honourable fathers of medical science.

SECTION THE SECOND.

OF THE DISEASES OF INFANTS,

GENERAL OBSERVATIONS.

OF how much importance it is that the infant be nourished with pure milk, it is easy to understand. It would indeed be desirable that the honest mothers might suckle their own children, who are otherwise given over to mercenary nurses, very often impure, passionate, drunken, and salacious. But since the custom has almost prevailed, that women who are very delicate and unable to bear any care, commit their maternal duties to others, endeavours must be used to make choice of a *suitable nurse*. She is thought to be the best who can be procured after her growth has been perfected, that is, between the twenty-fifth and thirty-fifth year of her age, regard being had to the age of the mother. The milk is thought to be fit after the first or second month from a happy delivery, if coming in a full stream to breasts that are firm, pyramidal, and of a middle size, it be *white, cool, sweet, buttery*, and of a *middle consistence*: wherefore that which is yellowish, hot, and salty, thick and watery, ought to be rejected. It must be applied to the tongue or eyes, that the kind of sharpness may be ascertained: the degree of thickness is discovered, if a drop taken on the nail or in a tea spoon, do not presently flow like water, but remain firm. But these proofs are uncertain, since milk of the best appearance, as it would seem, often conceals a taint, only to be known by its noxious effects. Those who have brown hair are preferable to others who have red or yellow, as these mostly emit an ungrateful perspirable odour: women that are very corpulent, or have large breasts, do not please, nor do those that are too lean. Such as, on examining the mouth, have lost the splendour of the teeth, and rosy colour of the gums, are to be rejected. Of more value are the florid, (setting aside their beauty,) cheerful, well-bred, and free from the commerce of men, neat and clean, and who are not in straitened circumstances at home. But valetudinaries, or those oppressed with anxious cares and afflictions, or inflamed with love, dirty, poor, &c. are refused. Those cannot be chosen without danger who have had the menses or fluor albus about the *first time* of lactation, but these flows do not affect the health,

near the *end*. Lastly, experienced nurses are best, namely, such as have already nursed other children.

When the infant has been ushered into the world, the umbilical cord is to be carefully tied, lest hæmorrhage follow, which we have known to have often happened, through the carelessness or unskilfulness of midwives. By means of warm washes, the infant is to be cleansed from its impurities, before it is defended from the cold by soft clothes and bands. It begins life with wailings, which seem to be occasioned by *gripings*, excited by retained meconium, which is obviated by soliciting the excretion of this feculent and blackish matter. This is best effected by the *colostrum*, or the milk itself, recently distilling from the breasts of the mother; this is the remedy prepared by provident nature, which possesses the virtue of cleansing the impurities of the stomach and intestines. But when the proper mother denies the genuine nourishment to her offspring, and there is need of a hired nurse, medical aid is to be called in, namely, about the sixth hour from nativity, to wit, honey of roses, manna, syrup of pale roses, of succory with rhubarb, of peach blossoms, &c. by which *slight* catharsis is excited, or suppositories are introduced, by the irritation of which the hurtful retention of the meconium is prevented.

Some advise that the *nurse give the breasts to the infant*, six hours after birth, but this method has almost become obsolete, since it seems more advisable to purge out the foulness of the first passages, before the milk is committed to the stomach of the infant; so that this aliment is not allowed by the more experienced, until after twenty-four hours or thereabouts. Infants ought to be nourished by milk alone, during the four or six first months of their age; then a pap made of very white bread, or of flour and milk is given by most; while others wait until the end of a whole year. About the fifteenth or eighteenth month of their age, children are usually taken from the breasts, nevertheless, *weaning* must be practised earlier or later, according to circumstances, and the various state of infants: but it is best gradually to accustom infants before this time, to bread, broths, meats, creams, or other approved aliment; for by change of diet they grow lean, and are affected with various cutaneous eruptions, not however dangerous. We might inquire in this place, whether infants might be safely nourished by goat's or cows's milk; some assent, while others deny. The first, recommend the milk of animals, as being free from the virus of venerea, scrophula, &c. and as being uncontaminated by luxury; others as is proved by the experience of some, contend that infants acquire thereby the manners of these animals. But we

leave this dispute to be settled by persons who have more leisure than ourselves.

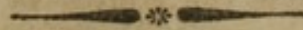
The diseases of infants are very intricate, since they can express their complaints by cries alone ; but much may be gathered from the relation of the good women or bystanders, namely, whether they puke, and what kind of matters they throw up ; whether the bowels be loose, and what is the nature of the stools ; whether they cough, are too wakeful, are affected with convulsions, &c. Among the diseases of infants ought not to be numbered the rejection of the milk with which they fill their stomach, nor do those greenish stools belong to this class, which are very familiar during the first four months ; which colour, it is well to remark, is occasioned by oils, which are often exhibited to infants, to quiet the cough, or to mitigate the gripings. But the case is otherwise in those *griseous*, or clayey stools, which denote an impediment to the secretion of bile. The pulse of infants is with difficulty felt, not only because of its great velocity or celerity, but also on account of the unceasing motions of their arms. So that from most infants the judgment derived on this subject is uncertain. Besides, we must attend to the mouth, which exhibits aphæ, and certain marks of dentition ; to the manner of breathing ; the abdomen often resisting the touch : and lastly, to various eruptions of the skin.

No practitioner is ignorant, that various *diseases are transmitted from parents to children*, namely, epilepsy, lues venerea, scrophula, gout, stone, phthisis, &c. All these are to be brought to recollection, that they may be elucidated by various examinations : since these congenital and very familiar diseases often appear obscurely. As respects the *mother*, we must enquire whether aliments of a bad kind have been eaten during pregnancy, or absurd things indulged in ; whether at that time she had given way to violent passions of the mind. The *nurse* ought also to be subjected to her examination, respecting her morals, mode of living, and accidental diseases. Lastly, the character of the disease may be extricated, by the *epidemic constitution* being known, namely, that of measles, small-pox, catarrh, &c. Moreover, it ought to be well remembered that a host of acute diseases are produced by *dentition* and *worms* ; and in chronic affections we must think of *lues venerea*, *scurvy*, *scrophula*, and *ricketts* ; from close attention to which the character of the disease is made manifest, which is otherwise inextricable. It remains now that we add some general observations respecting the cure, that we may avoid the frequent and fastidious repetition of the same things.

The treatment of diseases, at this tender age, is performed by simples, the principal point of which consists in the manner of living alone; there is no necessity for any other remedy in most cases, either before or after weaning: this is taught by reason and experience. Nor can we doubt, as BAGLIVI observes, that many infants, especially in the houses of the opulent, are destroyed rather by the great apparatus of remedies, than by the diseases themselves. To begin with *venesection*, we must let blood if difficulty of breathing be urgent; in convulsive cough and inflammatory fever, in serious contusions, &c. but the lancet ought not to be repeated without the greatest caution; nor do numerous venesections portend less danger than frequent hæmorrhages, to which some infants are obnoxious, who after puberty become prone to peripneumony, bloody spit, and phthisis; and in advanced age they become subject to hæmorrhoidal flow, spasmodic fits, gout, stone, &c. Emetics are rarely given, but the *use of cathartics* is very extensive, the best of which are rhubarb, jalap, mechoacan, peach blossoms, pulvis *cornachini*, calomel, syrup of succory with rhubarb, syrup of apples, &c. Saline cathartics do not succeed well, nor do manna and the other fat materials answer the desired effect, hence it is that they are not used, unless in cogent necessity, that is, when others are forbidden. Absorbents at this age are much esteemed, which have the virtues of sedatives; for by their aid the pains are quieted, restlessness abated, and sleep procured: but it is necessary while using absorbents, to preserve the bowels open, otherwise many inconveniences threaten: wherefore *magnesia*, which usually opens the bowels, is preferable to others.

To prosecute our plan: acids ought to be banished, especially while in the use of milk. Narcotics are disapproved by the judicious, unless in urgent wakefulness; although its use is very familiar among the incautious, and some good women, in spite of experience. But paretics are given with more safety, namely, emulsions prepared of white poppy seeds, syrup of red poppies, &c. *Antivenereals* or other specifics, which cannot without danger be given to infants in the first months, are exhibited to the nurse, that the impregnated milk may fulfil the virtues of these medicines. In concluding these general remarks, it may be right to subjoin somewhat concerning the *doses of remedies*; respecting which sciolists and inexperienced persons, strike on dangerous rocks. No one is ignorant that this ought to be proportioned to the age; yet the proportion is not required to be arithmetical or geometrical; but derived from experience alone, always having regard to the temperament, or other circumstances. From observations therefore, we learn that a tenth

or eighth part of a dose of any medicine is sufficient a little after birth; that the sixth answers after the first year; the fourth after three years; and lastly, the half, about the seventh year; and so on.



COLOSTRATION. DISEASE FROM SUCKING THE FIRST MILK.

WE shall say nothing concerning hare lip, the too broad frænum of the tongue, closing of the anus, and other infantile affections, which require only the hand of the surgeon, lest we should seem to interfere with the province of another; and therefore shall mention those diseases only which respect the science of medicine; among which many occur that are common to every age, and some invade infants alone, to which last belongs *Colostration*, from which it is necessary to take the exordium.

Colostrum, unless there be error in the word, has a two-fold meaning; namely, by this name is designated the milk recently distilled from the breasts of the paturient mother, resembling on account of its thin consistence, the most common whey, which indeed, as already hinted, has virtue to cleanse the stomach and intestines of the sordes lodged there, and to open the bowels. There is another *Colostrum*, namely, *milk infected by a new impregnation of the nurse*, which, especially in the first months of lactation, affords the worst of aliments: from this source proceed numberless diseases, with which tender infants are harrassed. *We may suspect this cause*, in obscure affections, although concealed with care by hired nurses, if the infants are afflicted with more than usual gripings, or labour under very obstinate looseness of the belly, by which they are gradually emaciated, until there arise very violent symptoms portending premature death, which if they escape, they usually drag on a brittle health through the whole course of life. Yet some who are endued with a strong constitution, suffer afterwards no inconvenience, if we except *a dread of milk and cheese*. When therefore we have ascertained the genus of the disease, *new milk* ought to be exhibited immediately, nor is there mostly need of any other medicine. Yet sometimes in this condition of things the milder *cathartics* are of service, by the help of which the remains of depraved digestion are eradicated, which otherwise might taint the very best milk. We may add over and above, that infants tainted by this misfortune are called by the Occitani and

Provincial Gauls *inganas*, from the Italian verb *ingannere*, which signifies *fallere*, to deceive, because the miserable infants are as it were, deceived, who draw from the breasts unwholesome and adulterated milk, in the place of genuine and suitable.

FEVER.

THE fever of infants is scarcely known by examination of the pulse alone, but it is *manifested* by intense heat of the skin, redness of the face, thirst and constant restlessness. The various species of fevers at this age, both acute and slow, are merely symptomatic. Among the acute more frequently occur *ephemeral fever*, a very familiar forerunner or attendant of cutaneous efflorescence. *Ardent fever* promoted by bad digestion, *catarrhal fever*, *worm fever*; that which proceeds from *dentition*, and others often ending in critical tumours.

Slow fevers are caused by the scorbutic taint, schrophulous virus, rickety diathesis, obstructions of the mesentery very familiar to infants, and lesions of the other viscera, &c. Nor are infants free from intermittent fevers, even while sucking, which easily yield to the usual remedies; in these the swelled belly usually excites false terror, which in most cases ought to be considered a sign of health: there is the same judgment concerning pustules infesting the lips and neighbouring parts, as also of cutaneous eruptions breaking out every where, which ever promise the departure of the fever.

Venesection is rarely used in the *cure of the continued fever* of infants, unless very dangerous symptoms be urgent. Sometimes emetics are useful, but cathartics afford surprizing relief, if other circumstances admit; meanwhile the febrile heat is to be repressed, and thirst allayed by large draughts of chicken water, decoction of rice, emulsions, or other diluents and demulcents. Absorbents are given with benefit against acid and the very familiar saburra of the first passages. Worms are destroyed by calomel, æthiops mineral, and other anthelmintics. The milder diaphoretics merit their own praise, if the recession of cutaneous eruptions be in fault. Meanwhile the belly is to be kept loose by the usual remedies: but as respects *intermittent fever*, it is usually mastered by suitable regimen, and the prudent use of cathartics. The Peruvian Bark or other febrifuge is also administered; but at this age, the syrup of this bark, and the dry extract, commonly called *de la garraye*, are the best, the

dose of which in proportion to the age, is given according to the method prescribed. Lastly, febrifuge clysters are much esteemed, if tender infants are averse from remedies too ungrateful to the palate.

SMALL-POX AND MEASLES.

SEEING that these kindred affections are usually treated in infancy almost in the same manner, we have thought it would not be unsuitable for those who study brevity, to comprehend them in one and the same chapter. The *premonitory signs* of these diseases are obscure, because infants are obnoxious to diverse species of efflorescences and cutaneous eruptions, which at first view seem to differ none from the breaking out of small-pox and measles; so that even the experienced are at a loss to judge between them: but the progress and termination of these removes all doubt, although many sciolists or those who are blinded by prejudice, as also various scoundrels gaping after a little glory, and unwilling to confess their error, are determined in their first opinion. No wonder therefore if some should occur who might think they had suffered small-pox often. With no greater clearness are the *marks* discovered, by which, at the commencement of the eruption, *small-pox* may be distinguished from *measles*: but since we have already treated over and above on this subject, we will avoid repetition. Only we thought that it would not be amiss to bring forward some observations concerning the prognosis and method of cure, having regard to the age.

The small-pox and measles threaten less danger in infancy, than at any other age, although some symptoms excite fear of death, which not unfrequently manifest themselves in the course of these diseases, especially with regard to the brain and lungs; yet hæmorrhages familiar to infants are thought less dangerous than in advanced age. Diarrhæa, fatal in adults, is reckoned among the salutary phænomena of infants; because it answers in place of ptyalism, attending the small-pox of adults: wherefore costiveness excites greater fear. But which way soever the case turns, we must predict with caution, since many infants who seemed to be contending with death, have recovered, while others have been snatched away during the fallacious halcyon state.

Venesection is rarely to be practised in the cure of small-pox and measles, especially during lactation (or suckling) unless difficult breathing should be urgent, and inflammation of the lungs threaten. I am aware, that many falsely arrogating to themselves the name of physician, are beside themselves on this subject; against which audacious fellows, frequently prescribing blood-letting in this condition, RIVERIUS, a man of great eminence in medical practice, has opposed himself with much keenness. Although a loose belly is of service, yet cathartics ought very rarely to be exhibited as the disorder advances; they are however thought highly beneficial near the end, and indeed ought often to be repeated, to carry off the remains of the disease. Nevertheless clysters and suppositories are not forbidden during the course of the disease, if the belly be costive. Narcotics are to be avoided as worse than a snake, although sciologists are not wanting, who use them familiarly. Moreover, through the whole course of the disease, diluents and demulcents are freely administered with advantage. As to other remedies, treated of elsewhere, when on the small-pox and measles of adults, they may be chosen as occasion requires, and used with caution.



ATROPHY. WASTING OF THE FLESH.

ESSENTIAL *Atrophy* is rightly to be distinguished from that emaciation which is the consequence of lues venerea, scurvy, or other chronic disease. *Marasmus*, at present treated of, is attended by an elastic prominence of the belly, loathing of food, and dry cough, also by a slow fever, which is exasperated during the digestion of food. A more sparing flow of milk to the breasts, or its depraved nature, the imprudent use of absorbents or saline medicines, thicker or hotter aliments, &c. are so many *causes* which may bring on this disease; in which the more noble organs are affected. For in *dissecting the bodies* there are brought to view, obstructions of the lacteal veins, and schirrous infarctions of the mesenteric glands; the liver deformed and discoloured, thick and of great size, the lungs of various colour and adhering to the pleura, full of tubercles, tainted with purulence, and putrid, &c. from which we may learn that this species of Atrophy is mostly fatal.

Yet, by timely *cure*, that is, before it be deeply rooted, this disorder may yield, otherwise it is quite incurable: no one can be ignorant that the treatment must be varied according to the variety of the cause. Therefore if a defect of milk be in fault

another nurse must be chosen immediately, but other causes are mostly very obscure, which nevertheless, do not hinder the cautious trial of various remedies. Wherefore there is much benefit derived from the use of diluents and mild aperients, as well for sucklings, as for infants that are weaned. In this state of things, rhubarb and other laxatives, are highly recommended, but we must abstain from strong cathartics. Bitters cautiously exhibited are of no little service, nor after weaning are martials forbidden, given in small doses. Meanwhile, terra foliata tartari, arcanum duplicatum, oil of tartar per deliquium, &c. merit praise. Lastly, the mineral anodyne liquor is sometimes exhibited with advantage. External remedies also possess their own virtues: namely, lubricants, liniments, emollient fomentations, and the more simple clysters; to which we may add baths, which especially excel the rest, if marasmus arise from *Crimones* irritating the skin of infants, concerning which hereafter.

DROPSY AND JAUNDICE.

INFANTS are not free from leucophlegmasia, ascites, œdematous swelling of the belly and scrotum, and other species of Dropsy: but these disorders ought to be considered rare at this age. *Anasarca* portends little bad, if treated with timely remedies, and often terminates in a plentiful flow of urine, or spontaneous diarrhœa. The cure of *ascites* is more difficult and tedious, but mostly yields to the usual remedies. *œdematous tumour of the abdomen and scrotum* partake of no danger when originating from an acute disease. But it is considered fatal, if it attend marasmus and diarrhœa. As to the *Jaundice*, the congenital is thought incurable, nor is that contracted after birth thought free from danger, since it threatens a collection of serum in some part, and gives the physician great trouble. *The bodies* subjected to the anatomical knife discover the greatest destruction of the viscera, nearly approaching to that which is commonly observed in adults who die of this disease. We may add moreover, that a certain history is extant, of too hydropic infants, from the dissection of which there presented to view, an inverted and confused state of the viscera; namely, the apex of the heart occupied the right side, as also the spleen; the liver being translated to the left: in the same ratio the stomach and intestines, pancreas, &c. obtained a contrary situation. But whether this transposition of the viscera may be taken for the cause of the disease, is justly to be doubted.

In *both disorders*, cathartics are of the greatest use, to wit, rhubarb, jalap, pulvis cornachinus, &c. Nor are *stomachics* and bitters thought inefficacious, namely, root of elecampane, juniper berries, leaves of wild germander, wormwood, and lesser centaury; during the use of which temperants are beneficial, as sucory, agrimony, dandelion, and other capillary herbs, &c. Aperients and diuretics may profitably succeed these, such as harts-tongue, the roots of asparagus, broom, both kinds of parsley, salts of tamarisk and wormwood, woodlice, &c. But we have above noticed that martials suit children that are weaned. As to the salt of amber and powder of vipers, recommended by some, they respect *jaundice* only. In dropsy vesicatories merit praise, for by inflicting this little wound, the serum stagnating in any part, may find itself an outlet, and from this flow there may be no little hope of health.

With remedies almost similar, is *œdematous scrotum* treated, but in this disease, especially from contusion in the birth, *topical roborants* and resolvents perform great things, namely, fomentations of the vinous decoction of red roses, camomile flowers, rue, fennel, &c. to these we may add spirit of wine, lime-water, alum water, and other saline and spirituous substances which possess the virtues of these fomentations. Many are fond of a cataplasm made of the meal of beans; others recommend a liniment prepared of oil of bays, not to mention numberless other remedies approved by the good women, and not to be despised at all times: which being administered in vain, vesicatories or scarifications, as already hinted, may afford outlet to the stagnant serum. But these remedies ought to be skillfully dealt with, otherwise they are not administered without danger. We may add concerning sucklings, that new milk often removes both diseases: nor is any practitioner ignorant that equal efficacy is ascribed to change of air.



VENEREAL DISEASE.

THE venereal virus is communicated by the mother or nurse to infants, which manifests itself by cutaneous spots or efflorescences, eruptions of a tettery nature, pustules and tubercles occurring every where, *acores* and *favi* of a bad kind, apthæ befouling the mouth, ulcers occupying some part or other which sometimes infects the bones themselves, purulent inflammation of the eyes, atrophy, &c. to which we may add a kind of uni-

versal erysipelas, which respects only those just born. We may conjecture from the lesions of the skin, that this disease was contracted in the uterus, but if the mouth be infected we may suspect the nurse to be diseased. The venereal disease is dangerous in infants, because at their tender age it is with difficulty known, and with more difficulty cured. Nor can the cure be undertaken, even in the most urgent case, before the second month from nativity, which requires the greatest caution, otherwise it is left until the fourth year, that the infants being stronger may be able to bear it without risk of life.

The venereal disease in children is treated by the same method as in adults, having regard to the age, that a suitable dose of the specific may be adapted. For instance, having premised generals, *antivenereal sudorifics* are used, or *mercurial* medicines; namely, ptisans are prepared of guaiacum, the powder of sarsaparilla is directed to be mixed with panada, &c. or let a few grains of panacea be exhibited daily for twenty days, or let frictions be kept up with half a drachm of Neapolitan ointment, containing an eighth or tenth part of mercury. Infants ought to lie on either side during the use of mercury, both internal and external, that the saliva secreted in great abundance may flow out of the depending place, lest during sleep it might enter the œsophagus or pharynx, not without imminent risk of life. Ulcers of the mouth are washed out with honey and water, &c. But in weaker sucklings, to whom mercury cannot be exhibited without danger, it has been customary to impregnate the nurse's milk, as already hinted, with this remedy: this method however, has its difficulties, and ought to be considered doubtful, and often occasions harm to the innocent and reluctant nurse.

SCURVY.

THIS disorder, the history of which we have given elsewhere, sometimes attacks infants, but more rarely than is commonly supposed: so prevalent is preconceived opinion, that it often gives credit to a lie. Some infants *contract* the scurvy in the mother's womb, it also proceeds from bad milk or aliment, yet it more frequently takes its rise from some other chronic disease. The scurvy *manifests itself* if the gums are affected, and the skin is marked with well known efflorescences, but these signs shew themselves more slowly in some, so that other marks are to be sought after, from the concurrence of which nevertheless, are derived for the most part but mere conjectures, until

from the appearance of what are called pathognomonic signs, there is more certainty of the nature of the disease.

Infants labouring under scurvy are slothful, and hate their toys: their stomach is inflated during digestion, they are often tormented with gripings; they suffer wandering pains, and lose their sleep. The pulse undergoes various changes, until the fever rises; the lungs and abdominal viscera, as the disorder advances, are often diseased. Nevertheless, numerous as these signs are, and common to almost all chronic diseases, they chiefly excite suspicion of latent scurvy. But the character of the disorder is more clearly manifested by swelling of the gums, disfigured by ulceration, bloody and sanious, and emitting a fetid smell; by dark coloured ecchymoses occurring every where; by pustulous eruptions of a certain kind, by very small and indolent tumours, which vanish spontaneously after a few days. Meanwhile the children becoming weaker can scarcely walk, the knees swell in most cases, until the legs become quite unable to perform their offices. When the scurvy attains to this grade, it usually brings on marasmus, hæmorrhages and epileptic fits, unless prevented by timely remedies.

The method of cure is almost the same in infancy as in advanced age, provided the dose of medicine be exhibited in proportion to the age. Therefore having premised general remedies and diluents, the best of which is whey, the common and most approved *antiscorbutics* are called into use: viz. the juice of water cress and scurvy grass, antiscorbutic syrup, and wine of the same kind. Other specifics which may be taken from the inexhaustible sources of the *Materia Medica*, and are very rarely used against the scurvy of children, we have purposely omitted. But there are other medicines of another sort, which may lend their aid as occasion requires, namely, fumitory, water germander, Peruvian Bark, and other bitter stomachics. Nor must we neglect the frequent repetition of mild cathartics. But all these, even the most exquisite, would be futile, without a suitable regimen, into which usually enter the radish, mustard, orange, lemon, and other aliments of this kind, taken from the order of antiscorbutics.

SCROPHULA. KING'S EVIL.

WE have above noticed that this disorder rather respects infants than adults. No one is ignorant that scrophula, at the juvenile age, has its principal *seat* in the cervical and mesenteric glands, and does not spare the other lymphatics. Scrophula also usually attacks the hands and feet, and other connections of the limbs; and moreover besets the eyes, nose, lips, &c. Scrophulous tumours, which seem to partake of inflammation and schirrus, very often burst, and run into sordid ulcers, differing little from cancerous. Meanwhile the miserable patients are affected with slow fever, soon followed by marasmus: in which condition of things, the lower belly is raised into a tumour: namely, from obstruction of the mesentery.

There occurs perhaps no disease in practice, *more obstinate* than Scrophula, and indeed it is often considered quite incurable. The *genuine lineage* of Scrophula is indeed obscure, for many take it for a disease *sui generis*; but others contend that the venereal disease and scurvy, diseases transmitted by the parents, or nurse, to the children, put on the appearance of Scrophula.

It is often expedient to promote vomiting at the commencement of the cure, to which end ipecacoanha is exhibited with advantage; and cathartics often repeated do good. Meanwhile let diluents, temperants and demulcents be liberally given, that the way may be prepared for more efficacious remedies. Magnesia and other absorbents are of service, bitters are also given with success, and especially the Peruvian Bark. Antiscorbutics often do wonders. Sudorifics merit praise: but *specifics*, such as are called aperients and *incidents*, which by penetrating the inmost recesses of the body, may open the obstructed vessels, bring off the matter confined there, and determine it to the usual strainers: this is best effected by the various natural mineral waters, the saponaceous and sulphureous waters. Some recommend frictions with Neapolitan ointment, but this remedy cannot be given without danger: although, to confess the truth, it has often happily succeeded. Cauteries and setons are of no small benefit, since very often the Scrophulous virus, together with the pus, is carried off by this drain. Lastly, plantain leaves externally applied are highly recommended, but concerning the virtues of this plant, otherwise innocent, further enquiry ought to be made.

COUGH.

THE character of infantile Cough is mostly very obscure, and therefore is traced by mere conjectures. *Catarrhal Cough*, more frequent than the rest, is more evident, this is preceeded by sneezing, coryza and slight fever, remarkable rather for heat of the body than for frequency of pulse. Expectoration which usually terminates catarrh in adults, is quite wanting, or with difficulty exercised in infants, but other excretions supply the place of this evacuation. Catarrhal Cough of infants, when *more violent* and epidemic, which among us is called *coqueluche*, is rightly distinguished by its exacerbations, or paroxysms from the other species. For the fits of this Cough often come on with such ferocity, that the face is suffused with a blackish violet colour; and blood bursts from the mouth and nose: no wonder therefore, if at the time vomiting should be excited, the urine flow and the bowels be loose. The catarrhal Cough of infants, whether mild or troublesome, arises from simple irritation of the lungs or bronchia: but in another condition, *Cough is the consequence of another disease*, and is called *symptomatic*. For it is known that cough is promoted by peripneumony, phthisis, or other organic disease of the lungs: nor is it a secret that scurvy, venereal disease, scrophula, rickets and marasmus are mostly attended with Cough. But the *diagnosis* of these disorders is very often surrounded with the greatest difficulties, no wonder then if the genuine cause of Cough be often inextricable. It is also sometimes excited by dentition, and by worms lodging in the first passages. But *among the various symptomatic Coughs*, the *stomachal* more frequently occurs, and spares no age; although more familiar to infants. This is derived from acid foulness, or of a mucous and glutinous nature, wounding the stomach: this source of the disease manifests itself by loathing of food, fetid belchings, inflation of the stomach, &c. Lastly, when during the state of uncertainty, spontaneous vomiting comes on, or is excited by any means; it is reasonable to believe that it is kept up by foulness lodging in the stomach.

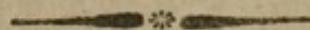
Violent and convulsive cough, has often a fatal termination, not only in small-pox and measles, but also in dentition. Besides the danger of suffocation, other evils threaten from this very severe cough; namely, hernia, prolapsus of the anus, and sometimes inflexion of the spine. The *catarrh* of infants, when arrived to a certain grade, is thought to be never free of danger; nor does it occasion false terror, if attended with very high fe-

ver, snorting and hissing. In this species of cough and epidemic constitution, there not rarely break out pustulous efflorescences or sweats, from which we may predict a happy event. Simple and recent catarrhal Cough is easily overcome, but if it be caused by any lesion of the organs of respiration, often clandestine, the case is dangerous. As to other species of symptomatic Cough, every one is aware that the prognosis is to be gathered from the character of the primary disease.

It cannot be doubted that the *treatment* is to be governed by *the laws of the disease*. But since this is often veiled in darkness, and we can derive nothing on this subject from perusing the history of this disease, given by authors; we propose only a general method of cure, which by being rightly administered in moderation, and the phenomena of the disease discovered by close attention, may suit both cases, to wit, the catarrhal and stomachal. But other symptomatic coughs do not respect this article, which ought to be treated with medicines indicated for the primary disease. We have also purposely omitted cough derived from inflammation, ulceration or other fault of the lungs; lest by repetition the work become too prolix.

To come to the *cure*: while fever and difficulty of breathing are urgent, we may let blood; otherwise *venesection* is futile and hurtful. We have already noticed that spontaneous *vomiting* is very salutary in the coughs of infants, it is plain therefore that tartarised antimony, ipecacoanha and kermes mineral may be given with advantage. Other milder and more common sorts may answer this purpose by exciting nausea; namely, spermaceti dissolved in broth, tickling the pharynx by a feather anointed with oil, &c. Cathartics often repeated are also of the greatest service; among which rhubarb and calomel are in frequent use. Meanwhile, diluents and demulcents are usually given in abundance; namely, whey, chicken water, decoction of navew, spermaceti, syrup of althea, &c. The syrup of hedge-mustard also merits praise, but other common pectorals do little or no good. The use of corals, crabs' claws, and other absorbents, is not undeservedly recommended. Antispasmodics also are happily administered; namely, pulvis de gutteta, piony, misletoe of the oak, amber, saffron, castor, &c. Hypnotics ought not to be omitted, but should be given with the greatest caution. Finally in *chronic Cough*, aperients and sudorifics are in great esteem, namely, woodlice, diaphoretic antimony, &c. But we must beware lest by these remedies imprudently exhibited, we rouse the hornets. In the same state of things, blisters, the cautery and seton are praised, especially if the cough take its rise from recession of cutaneous eruptions. Some are fond of

liniments of *animal fat* (*axungia humana*) oil of sweat almonds, of camomile, &c. applied to the breast. By some, lastly, the oil of scorpions is highly extolled, with which the loins may be anointed, if the urine be suppressed.



VOMITING.

EVERY one is aware that Vomiting arising from too full a stomach, is favourable, especially in sucklings: but if it continue long and be attended with hiccough, it is dangerous. From what has been said above, we may learn that *Vomiting* is often excited by *vehement cough*, and that cough is promoted by sor-des lodging in the stomach, which indeed shews a sympathy between the organs of respiration and digestion; from close attention to this, the true method of cure is often discovered. Besides vomiting both in infants and adults, is numbered among the forerunners of small-pox, measles, continued and intermit-tent fevers. It sometimes arises from a *mole* of the stomach and the conformation of the surrounding parts, in which case it is easy to understand that it is altogether incurable. At times it ceases either spontaneously, or yields to very simple remedies. By *regimen* alone properly adapted, the *Vomiting of weaned infants* is removed. Others who reject mere milk are cured by giving them the breast but seldom, and moderate suction. No other remedy is necessary.

In other cases, premising diluents, *mild evacuations of the bowels*, are happily used: syrup of succory with rhubarb is very familiarly prescribed with this view, especially for sucklings. Absorbents then afford present relief, unless the breath have a subacid smell, and the matters rejected by vomiting, as also the alvine feces, shew marks of acid crudities. After due evacua-tions, *stomachics* and carminatives also merit praise; namely, syrup of quinces, theriac, anise, nutmeg, oil of mace, &c. It is well to remark that it is of the greatest moment to keep the bowels open, during the use of the above remedies, by frequently washing out the intestines by the help of clysters, since we dare not give cathartics too often. Moreover, *external remedies* are not to be despised, which wonderfully assist the internal: wherefore, to the epigastric region, or pit of the stomach, cloths are happily applied wet with the vinous infusion of red roses, cinna-mon, cloves, &c. Upon the same part are laid with advantage, the pulp of quinces, theriac, toasted bread dipped in generous

wine, and sprinkled with aromatics, &c. For of what efficacy these topicals are, they well know, who are aware, that the pores of the body are more open in childhood, than at any other age.

TORMINA. GRIPINGS.

WE cannot doubt that infants are often tormented with gripings, but this affection is not *distinguished* by any mark sufficiently manifest. So that the cries of infants are not rarely without cause referred to this source. *Excruciating pains of the belly*, arise from bad milk, from too thick or unboiled pap, from early or immature fruits, from sweetmeats, as also from stimulating cathartics. They are moreover, caused by flatulence and worms, by coldness of the feet and belly, dentition, &c. But pains of the belly arising from obstinate disease of the mesentery and other viscera, are rightly to be distinguished from the gripings now treated of. We have noticed above that the marks of true gripings are doubtful, yet they are denoted by restlessness which can be quieted by no art; cries, distortions of the body, inflation of the belly, expulsion of wind, greenish stools and of various consistence, costiveness, &c. This affection is mostly void of *danger*, but at times brings on fever, difficulty of breathing, convulsions, &c.

Let *demulcents* fill every void, namely, chicken water, oil of sweet almonds, spermaceti, and such like, by the help of which the irritating and wounding matters are sheathed and blunted, and thereby the gripings assuaged. Nor are mild laxatives of less benefit during the remission of these pains, namely, cassia, manna, rhubarb, &c. But we must deal cautiously with cathartics, especially the more powerful, sometimes however, the most efficacious after the due use of diluents. *Carminatives* undeservedly despised by many, are not without their virtues, since they act the part of sedatives; the most useful of which are Florentine orris, powder and oil of anise, mint water, &c. *Absorbents* afford present relief, namely, coral and coralline, shells, &c. if an acid matter be the cause, nor is there less benefit from wormseed and other anthelmintics, when there is any suspicion of worms. The use of hypnotics should be cautious, although very familiar among some good women, who are determined on quieting the importunate cries of the infant. Every one knows the efficacy of anodyne, carminative and laxative clysters, into the composition of which usually enter milk, sugar, anise, ca-

momile flowers, oil, butter, cassia, &c. Nor are liniments of fats to be rejected, prepared with oil of rue and camomile, adding a few drops of oil of anise. Bladders half filled with warm milk also merit praise, frictions with oil of nuts rubbed with oil of eggs, and numberless others very much in use by the good women, the list of which we leave out lest we sicken the reader.



LOOSENESS OF THE BELLY.

AMONG the more common *causes* of the *dysentery*, and *diarrhæa* of *children*, are to be reckoned dentition, tainted milk, and unsuitable diet. Legitimate looseness of the belly, without fever or any other severe symptom, is void of danger, and indeed is thought salutary during dentition; but it causes fear, if it be attended with wakefulness, cough, loathing of food, vomiting, griping, with stools unusually fetid. It is deemed fatal, if with a slow fever, the elastic abdomen is much elevated; in which condition of things we can scarcely doubt of schirrous obstruction of the mesentery. There is almost the same judgment concerning a bloody flux, which infants may bear for many months without great inconvenience, nevertheless it becomes ominous, if associated with apthæ, want of appetite, swelling of the belly, tenesmus, wakefulness and slow fever. Infants, as we have noticed elsewhere, are even not free from the celiac flux, which seems to be occasioned by too plentiful a production of intestinal mucus.

Emetics and cathartics are numbered among the more efficacious remedies, against both sorts of looseness of infants, if the condition of the pulse and belly admit, concerning which it is proper to remark that Ipecacoanha, rhubarb, and other laxatives are most suitable in dysentery. Meanwhile diluents and demulcents are exhibited with advantage, namely, chicken water, or veal broth, rice ptisans, whey, oil of sweet almonds, &c. Diaphoretics do some good, namely, poppy, corn poppy, scorzonera, and others of the like kind. Absorbents also are of service, but astringents, such as syrup of quinces, of pomegranate, &c. sometimes do good, sometimes are hurtful, therefore are to be judiciously prescribed. Narcotics require no less caution, which in these cases may cause gangrene, they are notwithstanding sometimes profitable, if used at proper times. Moreover, the infants should not remain long at the breasts, but should be fre-

quently put to them, which experienced nurses know. Weaned children are subjected to a suitable diet, and must abstain especially from flesh. Meanwhile the best of all other medicines are clysters of mere milk, to which some add honey of violets, or yolk of egg, of the broth of tripe or sheep's head, of whey, decoction of rice, &c. As to fomentations or epithems prepared of astringents, they are by the greater part of practitioners, esteemed as trifling remedies.

SLUGGISHNESS, OR COSTIVENESS OF THE BELLY.

IN the first year of the infants age, the belly ought to be freed twice or three times a day, according to the laws prescribed by nature, for many evils threaten from too great costiveness, namely, inquietudes, pretending sleep, inflation of the belly, gripings, difficulty of breathing, epileptic fits, &c. During dentition especially, the belly ought to be kept loose, since its confinement might create great trouble to them while teething. This affection may take its rise from milk that is too hot, or of too thick a consistence, but it often originates from the peculiar temperament of infants, and tightness of the belly is not seldom owing to both causes. *We must have an eye to the nurses*, if the depraved state of the milk be in fault; namely, cooling ptisans or broths are to be prescribed for them, and they must be especially careful to abstain from hot meats and dainties, and refrain from wine; they must also bid farewell to business and cares; and in these precepts consists the principal stress of cure.

The *remaining cure* is performed by simples; namely, the belly is excited to evacuation by *suppositories* of onion, beet, or herb mercury, colewort; of lard, soap, or boiled honey, to which we may add for a greater stimulus, sal gem or ammoniac; jalap, agaric, aloes, colocynth, &c. and with the same view emollient clysters somewhat cathartic are injected; which being ineffectual, it is necessary to have recourse to laxatives taken by the mouth, such as oil of sweet almonds, manna, rhubarb, &c. but the long protracted use of them ought not to be considered innocent. The juice of pellitory is of use to some sucklings, for opening the bowels, given in the quantity of one or two drachms. Liniments prepared of butter, or oil of sweet almonds, and applied to the navel, also merit praise; to which we may add, if nothing forbids, colocynth, scammony, troches of alhan-

dal, &c. Ointment of sow-bread is not to be despised, which is to be had for this purpose in the shops. The use of which, nevertheless, I know not by what fatality, has almost become banished. Sometimes cold water answers an excellent purpose, applied like *fomentations* to the buttocks and thighs : we cannot doubt that the belly may mostly be opened by these means ; but it is certain that this method also inflicts gripings on some infants : which therefore is cautiously to be administered.



WORMS.

SUCKLINGS are rarely afflicted with these ; but *the race of worms* more commonly invades others, especially from the sixth year to puberty. This affection shews itself by various signs, but they are not always visible : its character therefore is often with difficulty extricated by mere conjectures. Among the *marks* of Worms lodging in the first passages, are enumerated acid belchings, a peculiar feter of the breath or mouth, ptyalism, vomiting, hiccough, cough, thirst, appetite sometimes very keen, sometimes prostrated, inflation of the belly, gripings, looseness, mucous and fetid stools, the face sometimes pale, sometimes florid, itching of the nose, frights in the nights, gritting of the teeth, &c, to which may be added the excretion of worms, by which the disease becomes no longer ambiguous. Sometimes very serious symptoms are caused by worms, namely, anxieties, faintings, acute and irregular fever, convulsions, drowsiness, &c.

In almost every affection of infants that are weaned, if of an obscure nature, there is suspicion of worms, which nevertheless *are often undeservedly accused* ; just as a suspicion is entertained of teething or griping in any disease of sucklings, that is of an intricate nature. Besides, worm fits are more rare than is commonly thought, nor does the expulsion of lumbrici themselves preserve altogether from this error, since it remains certain, that worms, both of infants and adults, very often lodge in the first passages, and are brought off by both ways, without the least previous trouble. The *worm fever* is reckoned of a bad kind, since in most cases it puts on the appearance of a putrid or malignant fever, in which difficult respiration, elastic tumour of the belly, convulsed eyes, coldness of the extremities, obliterated pulse, &c. are numbered among the fatal symptoms, as is common in other fevers. We have elsewhere noticed that worms sometimes work themselves out through the texture of the sto-

mach, intestines, muscles, and skin of the body, about the navel, groins, &c. It is proper to add that this case is familiar to infants, because the texture of these parts being more lax, is perforated with greater ease.

We cannot doubt that *cathartics*, especially *mercurials*, far excel other vermifuges; the most used are jalap, diacrydium, syrup of peach-blossoms, pulvis cornachinus, calomel, and numberless others to be taken from the treasury of the *Materia Medica*. From observation it is proved, that convulsions from Worms are sometimes subdued by the help of an *emetic*, but if this remedy prove unequal to overcoming this symptom, it may bring on sudden death; hence it is not to be used without the greatest caution. Concerning the virtues of *anthelmintics* there has been much controversy: but since it is not my province to settle such disputes, we shall adduce those settled and approved by the greater part of physicians; these are *wormseed*, and other bitters, corallines, with the other absorbents, petroleum, or other oils of diverse sorts; crude mercury, the decoction of it, or the officinal preparations, which are usefully joined with cathartics. Nor, if the case require, are antispasmodics useless, and some other remedies above treated of, in the chapter of that name. Lastly, *clysters* are called in, prepared of decoction of figs; milk and sugar, and other demulcents which allure the worms and bring them towards the lower parts. Nor ought we to despise *liniments* of petroleum, oil of camomile or wormwood, oil of bays, &c. which are profitable against the Worms of infants, since they may penetrate to the secret recesses of the intestines, through the more lax texture of the parts.

Before taking pen from paper, it will not be amiss to remark, that infants are not liable to *ascarides*, and that the *broad lumbricus* is very rare at this age, so that we never scarcely think of it, unless some pieces have been excreted by stool together with the feces. This species of worms would be found much more frequently if, as some think, it were congenital, or coeval with man: which seems to contradict reason and experience. Of the remedies usually administered against *tenia* or the *broad lumbricus*, we have elsewhere treated more than sufficiently. Since, therefore, similar are prescribed for infants, in proportion to their age, we will not tarry longer in enumerating them. Moreover, mention is also made in enumerating the diseases of infants, of umbilical worms, which are no other than lumbrici, working an outlet through the navel, as above noticed. Lastly, *crinones* and *cirones*, respect cutaneous diseases.

SWELLING AND INFLATION OF THE BELLY.

FROM a two-fold cause, for the most part, the abdomen of infants swells beyond measure, namely, from flatulence, and from obstruction of the viscera. We have purposely omitted the signs of both states, treated of elsewhere.

Flatus pent up in the intestinal tube is without *danger*, provided it be confined within certain limits, but from these being too luxuriant, *herniæ* both umbilical and inguinal may be brought on, not to mention other lesions in the abdomen, of which we have treated over and over. An elastic prominence of the abdomen from schirrous infarction of the viscera, ought to be considered *ominous*. It is well known that this disorder has its most common seat in the mesentery, on which account the lacteal vessels being obstructed or too much constricted, prevent the entrance of the chyle. No wonder therefore if the infant, deprived of this nutritious dew, should gradually become emaciated, unless the habit of body become *œdematous*; in which condition of things, a looseness of the Belly usually comes on, which is justly esteemed a symptom bordering on death.

Protuberance of the Belly from *flatus* is usually subdued by rhubarb and other mild cathartic, nor are the common *carminatives* of little benefit, whatever some recent practitioners may adduce to the contrary: namely, powder of camomile flowers, or of anise seeds, the oil of the same seed, and others of that sort, which by acting the part of sedatives, surprisingly favour the expulsion of flatus. Meanwhile diluents are not to be omitted, which seem to second the other remedies. Moreover, emollient fomentations are of advantage, as also clysters prepared of the same plants. As it respects *abdominal swelling* arising from schirrous *obstruction* of the viscera, *another mode of cure* is requisite: namely, the remedies treated of elsewhere are prescribed, for opening obstructions, the best of which in infancy, is the sal martis of RIVERIUS. Emollient and resolvent fomentations are also beneficially applied. Epithems prepared with beef's gall, soot and aloes, various officinal plasters endued with the virtue of incidents, &c. Nor must we omit with sucklings to examine the hired nurse, since this affection mostly takes its rise from milk of a bad kind.

HERNIAL PROMINENCE OF THE NAVEL.

FROM crying and complaining, from cough, flatulence, &c. The intestines, at the infantile age, are often removed from their

proper situation as already inculcated. *Falling down of the intestines* portends nothing bad, as this tube is easily returned and secured by the very common bandages, but there is need of other help, to prevent another descent. With this view a cataplasm is with advantage applied, prepared of flour of beans, honey and vinegar. No one is ignorant that there was a plaster formerly very much celebrated, in this state of things, called, *du Prieur de Cabrieres*, nor are there wanting other astringents which possess equal virtues. But these topicals, even the best, are to be considered inefficacious, unless the infants lie down, for a whole month and longer, as much as possible. Formerly the muriatic acid (spirit of salt) was much esteemed, mixed in the quantity of a few drops, with the drink, while it was sold as a *secret* by the said author, (*the Friar of Cabrieres*,) but when by the munificence of the KING it was made public, it in a short time, wonderful to relate, sunk into disuse.

No one is ignorant that new born infants are prone to *Prominence of the navel*, especially if the umbilical cord, through the carelessness of the midwife, have not been properly tied. This tumour arising from a prolapsus of the intestine, is not rarely congenital, so that it happens in this case, that some portion of the intestinal tube is tied with the ligature by ignorant women, which falls off with the putrid cord: hence arises *a wide opening* which affords an outlet to the feces, which misfortune can scarcely be remedied by surgery in early infancy. But when after the lapse of years, the infants become more robust, they are easily freed from this tedious disease, by irritating and renewing this wound, that it may run into suppuration, and then by the usual helps, be healed by the accession of nutritious gluten. When however, to return to the subject, *the tumour of the navel is seized with inflammation*, the common emollient cataplasms are applied with advantage, also the plaster of spermaceti, ointment of roses, album rhasis, poplar ointment, cerate, &c. If this Prominence run into an ulcer, washes of lime water, alluminated plantain water, &c. are used. The ointment of white tutty, plaster of ceruss, powder of rotten wood, and other exsiccants, are also applied. And as in umbilical hernia, the part protruding is to be defended by a suitable bandage.

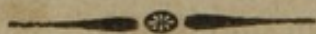


STONE AND ISCHURY.

IT is proved by multiplied experience, that sucklings themselves are not free from Stone, and that this dire disease is trans-

mitted from parents to their offspring, is proved by multiplied experience. But this species of sickness is with difficulty known at this tender age, unless the *catheter* be used or the *finger* be introduced *into the anus*. We may conjecture that calculus is lurking in the bladder, if infants be tormented with strangury, and the urine discharged only in drops amidst cries and shrieks. Children of six years, and older, pull and twist their penis with their hands, so long as the pains continue violent, so that by this *mark* the affection very often manifests itself. It is otherwise obscure and of a hidden character, unless the sick submit to the above-mentioned examination. The choicest lithontriptics are of no avail in infancy, this most cruel disease can be subdued by *lithotomy* alone: but when the calculus is brought away by this art, the children are not placed beyond danger, since the formation of another stone threatens, unless it be especially guarded against by suitable regimen, and plentiful draughts of water.

It does not escape the most inexperienced, that calculus of the bladder often brings on *Ischury*: what is to be done in that case we have above declared. But urine is suppressed by various other causes requiring deeper investigation, which we cannot often trace: wherefore until these be extricated, the judgment of cure cannot be directed. In these difficulties, physicians usually prepare the way for cure by various experiments. In most infants afflicted with difficulty of making water, demulcents are clearly of use, but large draughts of water may do harm, if the obstruction be not thereby overcome: in which state the catheter alone can obviate the excruciating pains of the infants. A cataplasm made of pellitory is highly recommended, and not undeservedly. Onions also, bruised and applied to the hypogastric region, possess eminent virtues. Some are fond of a liniment prepared of the oil of scorpions, not to mention innumerable other remedies above treated of, both internal and external.

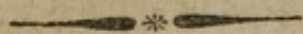


PROLAPSE OF THE ANUS AND PILES.

NO one is ignorant that infants are obnoxious to *procidencia ani*, (vulgarly *the body coming down*,) nor is it a secret that the intestine is easily reduced to its pristine situation, namely, by compression of the buttocks alone, or by the help of the finger anointed with butter or oil. But another duty is incumbent,

namely, entirely to restore the tone of the relaxed parts. The vinous infusion of red roses, decoction of plantain and wormwood, of galls and pomegranate shells, answer this purpose, to which we may add alum. Or let a *suppository* be introduced, made of cotton sprinkled with dragon's blood, mastich, and other astringent matters, reduced to powder. Lastly, it is required that infants should sit up out of their cradles, and relieve the bowels as much as possible in an erect posture. These are the helps usually administered against this disease of the anus; the cure of which nevertheless is mostly committed by experienced physicians, to nature, since there is no doubt that after a few years this affection spontaneously ceases, although otherwise it spares no age.

Piles are sometimes reckoned among hereditary diseases; it is no wonder therefore, if some infants are seized with this disease. The piles very rarely appear outward at this age, but mostly have an internal situation; they are therefore with difficulty known, unless they pour out blood during a stool. Nor does this flow of blood always shew the character of the disease, which the incautious or unskilful usually mistake for dysenteric flux. This disorder requires no other than a dietetic cure; wherefore having adapted a suitable regimen, care must be taken to keep the infants as quiet as their age will admit. Nevertheless *external demulcents* are not forbidden, if the sick be vexed with itching and pains, as happens in most cases. In which condition fomentations are applied of warm water, emollient decoction, or milk. We may also allay this troublesome sensation with butter and oil of eggs, ointment of althea, of poplar, &c. Let these observations suffice concerning slight affections, that we may come to those of a more serious nature.



EPILEPSY AND CONVULSION.

WHETHER these affections in infants are to be distinguished, many authors of the first rank have justly doubted. Yet the custom has prevailed to denominate that species of convulsion *Epilepsy*, known among the Occitani and Gallo Provincials by the name of *Goutteto*, which recurs periodically within the first seven years from nativity, and seems to depend on an obstinate cause; while *simple convulsion* acknowledges a temporary cause, and respects all ages. To this belong *nocturnal frights*, little differing perhaps from incubus, to which sucklings are liable;

for it remains an established maxim among all, that this affection is merely spasmodic, although it relate to the breast or stomach, or arise from any lesion of the nerves. It is moreover evident that *nocturnal frights* are numbered among the forerunners of Epilepsy, as well as yawnings, wakefulness, &c. Tremor, shaking and stiffness of the arms, strange motion of the eyes, with an entire abolition of the senses, *manifest Epilepsy*; which rarely invades those of seven years: but if it come on before this age, it is usually protracted to puberty. There are some who think that the stage of this disorder is comprehended in seven months, or so many years.

Dentition, worms, and other matters wounding the intestines, promote Epilepsy and Convulsions: but acrid cathartics, violent gripings, acute and severe diseases excite Convulsions only. It is not falsely conjectured that both these spasmodic diseases originate from the production of teeth, if infants vomit, and with a looseness discharge greenish stools, &c. Infants delicately brought up, and whose bowels are too costive, seem to be more prone to epilepsy. This affection also takes its rise from an irregular manner of living of the mother, during pregnancy. Lastly, it is contracted from hysterical nurses, those with child, worn down with grief, excited by anger, &c. It is well to remark that many infants fall into this disease from the terror which the good women impress on them by fictions and fables. Children labouring under *acores* and *favae* are rarely seized with Epilepsy, unless this eruption be repelled. Lastly, Epilepsy is thought the more dangerous, the further from birth, especially when the paroxysms frequently recur.

From attending well to the evident causes, as is customary in other diseases, the *mode of cure* may be directed. We learn from the foregoing that this affection is very often promoted, or kept up by foulness lodging in the first passages, it is plain therefore why *emetics* should be reckoned among the most excellent remedies, namely, tartarised antimony, kermes mineral, and *Ipecacoanha*; but they ought to be exhibited when the paroxysm is off unless necessity urge, and there be danger in delay. It is evident that the dose is to be proportioned to the age; wherefore the 4th 3d, half of a grain, &c. of the mineral emetics are prescribed; or a few grains of *Ipecacoanha*.

Cathartics are much esteemed, and also are to be used during the intermissions: among which are diacrydium, jalap, pulvis cornachinus, calomel; for laxatives seem inadequate to root out the remains of depraved digestion, which usually pass too speedily through the slippery passages of the intestines. Lastly, venesection sometimes succeeds well during the fit; and no won-

der, since convulsions often cease by spontaneous hæmorrhage ; yet this remedy is very seldom used for sucklings.

Absorbents and *anthelmintics*, to proceed with the subject, usually do great things ; the best are shells, corals, and coral-lines, crabs' claws, calcined egg shells, and magnesia. Concerning the use of these remedies, it is proper to remark, that although they possess the virtue of confining the bowels, yet they have a contrary effect in infancy, which phænomenon seems to depend on a kind of *neutral salt* formed by the union of the absorbents with the acid materials lodging in the first passages of children. The prudent use of evacuants and absorbents is profitably followed by the common *antispasmodics* : namely, flowers of the lime tree and yellow madder ; the root of wild valerian, castor, amber, and theriac, but the pulvis de gutteta kept in all the shops, seems to excel the rest. It is well to remark concerning these last remedies, that they should sometimes be given to the nurses, for infants who are debilitated by tender age, temperament, or any sickness, or by any other medicines, as already inculcated.

These are the helps which may keep off a threatening accession : but we must labour, *during the paroxysm*, to remove or mitigate it. In this state the spirit of amber or of hartshorn is *useful*, given inwardly with any cephalic water, but *external remedies* seem more efficacious : namely, let powder of lime tree flowers be blown up the nostrils, or of the root of lilly of the valley, the leaves of betony, sage, lavender, &c. Acrid and purgative clysters are advantageously administered, or anti-epileptics ; cups are happily applied, nor is the liniment prepared of castor's fat, to be omitted, which is to be rubbed along the series of the vertebræ, &c. As to vesicatories, cautery and seton, they are considered futile during the paroxysm, because they exert their effects too slowly : but they are of great service in the intermissions, and nothing is discovered perhaps of greater efficacy.

APTHÆ.

LITTLE *ulcers* occurring here and there *in the mouth*, are thus called, which succeed pustules of a whitish and vesicular kind. Apthæ are also propagated further, sometimes invading the œsophagus, stomach and intestines, as also the trachea and bronchia, not without present risk of life. These ulcers, to

which new born children are principally *obnoxius*, are to be considered free of danger, if they be red about the border, but of a very bad kind, if they be blackish and spread wide, and work themselves very deep pits, so that they sometimes reach the bones themselves, in which state of things gangrene threatens, by which the infants are soon hurried off. Aphthæ therefore, of the common kind and confined to the mouth, are not *dangerous*, and are easily subdued; but when they affect the *æsophagus*, they usually spread to the stomach and intestines: hence arise fever, gripings, diarrhæa, dysentery, and other severe diseases. But if they enter the larynx, and be diffused to the trachea, bronchia, and lungs, they excite violent cough, difficulty of breathing, and other terrible symptoms. Wine taken too freely by the nurses, great cares, and grievous perturbations of their mind, sordes lodged in the stomach of the infants, worms, &c. are so many causes of this milder disease. But it ought to be considered more dangerous, if it owe its rise to the venereal disease, scurvy, &c.

Having premised these remarks, the way to *the cure* is plain; therefore having properly directed the nurses, we must use our endeavours to carry off the sordes of the first passages. Emetics perform this office, if administered when the strength will bear. The mild *cathartics* also do wonders, among which rhubarb, or syrup prepared from its root, seems to excel the rest. Absorbents do much good, in acid saburra of the first passages, hypnotics cautiously administered may be of some service; and on occasion, or attending well to the phænomena of the disease, diaphoretics, antivenereals, antiscorbutics, &c. may be brought in. But to confess the truth, these remedies are rarely given against the affection, which either ceases spontaneously, or is easily subdued by a few topicals, these consist of *detergents* and *exsiccants*. A wash therefore is prepared of tepid wine, barley water, or decoction of the leaves of pervinca; to which are profitably added, honey of roses, syrup of dried roses, spirit of vitriol, &c. Also these little ulcers are touched with the spirit, or essence of rabel, by means of a pencil. But when gangrene threatens, the balsam of myrrh, oil of tartar per deliquium, &c. are to be applied in the same manner. Lastly, tincture of lacc is to be exhibited against scorbutic Aphthæ. Concerning gangrenous quinsy, following Aphthæ of a bad kind, to which infants also are subject, see more than enough in its place.

DENTITION.

IT IS well known that the teeth called *incisores*, *canine*, and the two following *molares*, in both jaws, come out, twenty in number, within the space of about two years, under the name of *milk teeth*, among us, *dents de lait* ; that each *second molar* protrudes about the seventh year ; but that the others make their appearance about the eleventh to the twelfth year of age, and indeed later, and there are even cases, in which they are altogether wanting through the whole course of life. It is known also that the twenty first teeth, are renewed from the seventh to the fourteenth or fifteenth year. They appear about the sixth or seventh month from birth, in most cases the *incisores* first, and then the rest in order, from which nevertheless the canine sometimes vary ; it is well moreover to remark, that the teeth of the lower jaw commonly come out before those of the upper. This is the *genuine process of nature*, which also sports in a variety of ways with the eruption of the teeth, so that we can say nothing certain on this subject. Nor are the phenomena of Dentition more certain, for this effort of nature is in many cases very troublesome, while in others it is performed happily and easily, even without the knowledge of the nurses.

Infants are mostly tormented with very severe pains, while the *rudiments of the teeth* take on a growth in the sockets, in which state of things *the gums are sometimes swelled*. Yet the infants are not constantly plagued with these pains, since they abate and go off from time to time, until the teeth are quite free of the gums. The *canine* especially of the upper jaw, exert the greatest severity, whence it is no wonder if in some cases the most violent symptoms arise, for three or four months before the eruption of them is conspicuous : under which circumstances the gums swell and are painful, the mouth is hot, and the thirst intense. By the spontaneous motion of nature, infants put their fingers to the gums or bite their playthings ; nor do they spare the nurses nipples. The saliva during *Dentition* flows in great abundance, vomiting is occasioned, gripings are excited ; the belly becomes loose with greenish stools. In some a fever rises, the gums and almonds, are seized with inflammation, and not rarely run into suppuration : pustules break out which end in apthæ, the lips swell and are disfigured with chops, and a cough rises : to which we may add screaming not to be appeased, startings in sleep, wakefulness, convulsions, &c. While things

are thus, it is obvious that the *case is dangerous*; but that fat and plethoric infants are in greater hazard of life, whose head is larger and bowels more confined, experience proves.

Every one understands that Dentition is the work of nature, which may not be disturbed without danger; but *auxiliaries* are not forbidden which may promote it. Our first study must be to relax and soften the gums; with which view butter, the marrow of a calf, and chickens' fat are to be used, which answer instead of them all. Some good women more nice than wise, recommend the *brain of a hare*. Honey and water, and decoction of figs, as a wash for the mouth, merit praise. The gum is cautiously pressed at times with the finger; or a piece of liquorice is given to the infants to be chewed, or the root of althea, or wax, playthings, &c. Some prefer cutting the gums in an urgent case, and then applying honey and water as a wash. But this operation only suits about the last stage of Dentition, namely, when the tooth is near coming out; otherwise gangrene threatens; nor are there wanting rash surgeons who by unadvisedly setting about the scarification, bring on this misfortune. Meanwhile if the fever be violent and the symptoms alarming, it is proper to let blood. *The milder cathartics* are useful *when the pains have ceased*. An emetic may also be of service in an urgent case: but these remedies are not to be brought into use without the greatest caution, and except in the intermissions; which otherwise may do great damage. Narcotics so highly praised by some, are quite forbidden by judicious practitioners: hence it follows that they are to be cautiously administered. But the syrup of red poppies is prescribed with more safety, which may answer the purpose of hypnotics. The spirit of hartshorn is not a favourite medicine among us, although SYDENHAM and BOERHAAVE gave it in this case very familiarly, in the dose of two or three drops: concerning which remedy however we think there ought to be further enquiry.



HYDROCEPHALUS. DROPSY OF THE BRAIN.

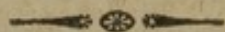
THIS is nothing else than a *serous colluvies* which swells the head, to a great, and sometimes to a stupendous size. This affection principally respects infants, although adults and even old persons are not altogether free from it. But common dropsy of the brain ought not to be designated by this name, in which the head never attains a larger size. *Hydrocephalus* usually

arises from contusion of the head in difficult birth, or from some other cause, and also takes its rise from dentition, worms, convulsions, &c. This stagnation of serum *has various seats*, collecting now under the hairy scalp, now within the skull, namely, between the cranium and dura mater, or is confined within the involucra of the brain, fluctuating about the viscus or filling all its recesses. Weak and languid infants are seized with this disease, their face becomes pale; the teeth are slow in making their appearance, the eyes are prominent, with the pupil enlarged; the mouth and eyelids suffer certain spasmodic motions, and often they grit their teeth. Lastly, drowsiness follows all these, which denotes stagnation diffused through the brain.

Dissection exhibits various destruction of the head; for the connections of the vacillating bones are discovered to be separated; it happens not rarely that some bones may be easily extracted, being quite freed from the adherence of the dura mater and cranium. The meninges are found thicker than usual, and the falciform partition, as also the enclosure of the cerebellum altogether callous. The cerebrum is presented to view sometimes moist and flaccid, sometimes dense and so firmly contracted by circumambient water, as scarcely to exceed the size of an apple: the ventricles also dilated beyond measure by the water collected here, each hemisphere of the brain is raised up to such a point that its measurement around the surface scarcely equals the thickness of six lines, and the depressed medulla oblongata is, as it were, obliterated. Nor does dropsy spare the spinal marrow, being extended even to the os sacrum. Moreover, the plexus choroides is found contracted into a ball, and filled with hydatids. The pineal gland presents to view mucilaginous and falling asunder, being torn from its seat, and the pituitary gland compact and schirrous, &c. From which it appears clear as day that this affection is dangerous and indeed fatal. It is proved by multiplied experience, that infants seized with this disease in the mother's womb, are mostly killed in the birth. To comprise all in one: Hydrocephalus is incurable, when the cerebrum is overwhelmed with water; but if it have an external seat, it may be attacked and subdued with suitable remedies.

The cure of any species of dropsy, as elsewhere largely treated of, consists in the use of evacuants, aperients and roborants. By a method not unsimilar hydrocephalus is treated: Among the cathartics most used in this case are rhubarb, jalap, diacrydium, and calomel. We add nothing of diuretics, aperients, hepatics, and roborants, of which we have treated more than sufficiently above. Nor are some *external medicines* to be dis-

approved: namely, let resolvents and discutients be applied, fomentations of pure lime water possess these virtues, or mixed with spirit of wine, of decoctions of camomile flowers, elder, base horehound, betony, &c. Ointment made of oil of camomile and sulphur is highly recommended by many, not to mention numberless others, to be gathered from medical writers. But, to confess the truth, these topicals afford little or no benefit: vesicatories, cauteries and setons excel them, which, having premised suitable internal remedies, may have a powerful effect.

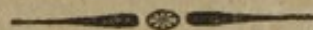


RICKETS.

INFANTS from the ninth month to the third year of their age, are liable to this disorder, for it rarely comes on sooner or later: wherefore they are considered altogether free, who have safely attained their fourth year. The Rickets, known among us by the name of *Noëure*, is denoted by debility of the legs, a certain torpor of all parts, premature genius, great size of the head, falling away of the limbs, troublesome and slow eruption of the teeth, which, when they do appear, soon decay. *This affection is known* by nodes, or prominences of the joints, protuberant apophyses of the vertebræ, tumour in the connections of the ribs with the sternum; crooking of the thighs and legs, and bad conformation of the breast. Meanwhile the lungs become infected, a cough takes place, difficulty of breathing is urgent, a fever rises, the bowels become loose, the bones are affected with caries, the patient becomes emaciated, falls into dropsy, and hastens to death. These misfortunes however, do not always attend Rickets, but it rather occasions little inconvenience in many cases; and ceases spontaneously after the usual term, or easily yields to medicine. But infants who do not get over this affection before the seventh year, drag on a kind of brittle health through the whole course of their life, and remain deformed or distorted. It is conjectured on various accounts, that this species of sickness takes its rise from scrophulous, venereal, or scorbutic virus in parents or nurses, nor does experience contradict this. Lastly, it is contracted by the recession of *acores* and *fava*, and similar cutaneous eruptions, and from the preposterous treatment of small pox or other severe disorder. *Dissections* manifest multiplied destruction; namely, the viscera both of the breast and abdomen are found obstructed, inflamed, schirrous, and putrid. The lungs especially manifest this disorder.

der, being grown to the pleura, and filled with tubercles: stag-nations are found in the cerebrum, spinal marrow, thorax, &c. the intestines are to be seen distended beyond measure, mutually grown together, &c.

Rickets rarely demands venesection, but emetics and cathar-tics from time to time repeated, afford great relief; rhubarb especially seems to take the lead among these last. *Aperients* are much esteemed, namely, madder, turmeric, woodlice and martials. *Incidents* often advantageously follow these, namely, antimonials and mercurials. Cassia lignea, elixir proprietatis and other *roborants*, possess considerable virtues. Speedwell, coltsfoot, the capillary herbs, and other pectorals, are occasion-ally used. Nasturtium, water cress, and other antiscorbutics merit praise. Nor are diaphoretics to be despised if nothing forbid, such as guaiacum, China root, &c. *External* remedies second these: emollient and demulcent clysters also are of ser-vice if the elastic abdomen be much elevated. Frictions are kept up, on the back and limbs, with cloths impregnated with aromatic fumes. Fomentations and baths are profitably exhib-ited, prepared of decoction of sage, thyme, rosemary, lavender, juniper berries and bay-berries. Liniments also made of oil of bays, martiated ointment, and other roborants, possess their own virtues. Lastly, among the best topicals, are reckoned caute-ries and vesicatories to the occiput or back. To these we may add cold baths celebrated by many, but experience proves that they have sometimes done harm. It is moreover of great con-sequence in the cure of Rickets, that infants be subjected to suitable regimen, and exercise themselves in various excursions in public and airy places, &c.



THE HIP DISEASE.

UNDER this title we wish to be understood that *Affection of the Hip*, sparing no age, which was first discovered by the cele-brated and very experienced DE HAEN. It especially respects infants and not rarely brings on *lameness* or *impotency of the legs*, and even deprives many of life. The Hip disease is threatened by contusion, a fall from a height, a stroke, or some other cause. Imprudent exertion of strength, dancing and other sportive ex-ercises of the body. Pains affecting the limbs denote this mis-fortune, which sometimes is followed by swelling of the part. This disease is also subject to *internal causes*, for an afflux of

humours to this part, in acute diseases, produces it, nor is this translation rare in small-pox, rickets, scrophula, scurvy and venerea, and lastly, in advanced age, the gouty and rheumatic diathesis; it is also promoted by an external cause, excited by dyscrasy of the humours. It is obvious that acute pain arises from contusion, collision, tearing, or any violent elongation of the ligaments, as also from luxation and fracture, which is followed by a defluxion of humours or genuine inflammation. This affection is often terminated by resolution, provided unsuitable remedies do not oppose the efforts of nature. Pus is also formed there, whence very severe pains, slow fever, and consumption. This defluxion of humours is thought more difficult of resolution, from the translation of morbid matter in acute diseases, namely, small-pox, malignant fever, putrid fever, &c. or from rickets, scrophula, or other virus; whence arises a tumour, more or less conspicuous, which sooner or later promotes suppuration tending outwardly. No wonder, therefore, if a large abscess should in most cases occasion the greatest damage to the connection of the bone, and parts subservient to it. The ligaments being loosened by this putridity, the head of the thigh bone is gradually removed from its situation, and the leg from this luxation is usually at first a little elongated, to become afterwards shorter. It is easily seen that a lameness arises from the shortest leg; but there is another cause, namely, pain, on account of which, the sick cannot lean upon the affected leg.

This genuine organic disease which is brought to view after death, is obscure and very intricate during life: for *dissections* exhibit the luxation of the the thigh; the head, on account of the too great extension or rupture of the round ligament, thrust from the acetabulum, obtains a variety of situation, superior or inferior, anterior or posterior. The head of the bone mostly adheres to the brim of the cavity; and by ankylosis, coalesces into one body with the acetabulum. Sometimes a substance appearing like a gland, fills this cavity. From the collection of purulent matter on these parts, the bones are deprived of their cartilages and periosteum, become carious, and not rarely very offensively putrid. In the same manner are the ligaments affected, of which very often, there is not even a vestige found. This contamination spreads far and wide in most cases, by which the whole thigh bone is not rarely infected. Yet it is expedient to remark that pus sometimes stagnates there without erosion of the neighbouring parts, perhaps by reason of the mild nature of the matter, or its short retention. Lastly, besides the above described injuries, the thigh bone is found fractured at the neck, the head remaining in the acetabulum. But more frequently, in the

bodies of young subjects, the epiphysis is met with, loosed from the bone. We have purposely omitted injuries of the lungs, liver, pancreas, omentum, mesentery, and other viscera, arising as it would seem, from pus mixed with the blood.

This disorder when arrived to a certain pitch, baffles all the industry of physicians, namely, when there is purulence and caries of the bones. In which case the miserable patients gradually waste away, until they are released by death. But there is no small *hope of recovery* in the first stage, while the part does not recede from its natural form, and the sick complain only of pain in moving the leg. Yet they need no medicine, if they be kept quiet, and indeed lie still for one or two months and longer if the case require. But when after cautiously trying the strength of the leg, they continue to limp, or there remain any pain in moving the leg, it must be obvious that suitable regimen is to be called in to our aid. But as to *medical* or *surgical* treatment, we do not hesitate to assert, from multiplied experience, that all even the most exquisite topical resolvents, and especially the much used pouring of them from a height, not only do never remove this afflux of humours, but rather seem to invite them to the part. These things are not hid from the fathers of medicine, who usually commit the whole business to nature, while sciolists, in their absurd and impertinent security, attack the disease by their borrowed remedies, until having reduced the patients to the most wretched situation, they are forced to desist from their unhappy cure.

But all hope of health is almost shut out, if there be marks of suppuration, since from the long stagnation of pus, the cartilages and bones are consumed with caries, or contaminated by the foulest putrefaction. In which case nothing is to be left undone, to invite the matter to the skin, which is promoted by emollients and maturants. But when the cause of the disease is noticed by fluctuation or other signs, an extensive incision must be made without delay, to let out the pus. Some prefer applying the cautery for this purpose, but the exit of the pus is promoted too slowly by this burning, and the too narrow outlet hinders the due cleansing of this very sordid fistulous ulcer. Yet either method in most cases has an unhappy issue, unless the surrounding parts be free from abscess, which, we have above noticed, happens very rarely. In these difficulties we know of few *internal remedies*, excepting a milk diet. Yet we must not conceal that the Peruvian Bark affords the most exquisite *antiseptic* in this case; which in the dose of half an ounce every day, with goats' milk, has cured this desperate affection in four months, when administered by the above-mentioned excellent

practitioner DE HAEN. But persons subject to cough cannot bear this bark, given in any dose whatever. The said author advises shirts impregnated with a decoction of this bark to be worn, which it is reasonable to believe might be tried without danger. We add nothing of other internal remedies, respecting the different taints of the humours.

DISEASES OF THE SKIN.

1. THE nature of cutaneous eruptions and efflorescences, is no less obscure and intricate in children than at any other age. Among the more familiar is reckoned *TINEA*, called among us, *la Teigne*, which is known by various titles among authors: for it is sometimes called, *crusta lactea*, sometimes *ignis volaticus*, *porrigo*, *furfuracio*, *scabies capitis*, *achores et favi*, &c. *Tinea* appears to be nothing else than a certain species of scaly and corroding herpes, emitting a bad smell in most cases, not only invading the hairy scalp and face of infants, but also spreading on other parts. The face of children that are weaned is very rarely disfigured by this eruption, which exhibits the principal seat of the disease in more tender age; in which condition it is called among us, *rache au feu volage*: but the parts next to the ears are very often exulcerated in both cases, and perpetually ooze out an ichor. It is expedient to remark that these greasy and humid foulnesses are by some taken for *crusta lactea*, adhering to the head of new born children, which gradually end in a deciduous scurf, relieved in some measure by a liniment of oil or butter.

The *Tinea* which comprehends all these cutaneous affections, mostly occupies only the surface, and is altogether without danger. It is commonly subject to many changes, affecting one or other part, and seems not rarely to be governed by the lunar period, or remits and returns irregularly. Besetting the hairy scalp, it often works itself cavities even to the cranium, which is then affected with caries. This misfortune especially threatens if the *Tinea* be caused by the scorbutic, venereal, or scrophulous virus, which otherwise ought to be reckoned among the salutary diseases; during the prevalency of which, infants are free from other more serious affections, and indeed thrive very well. On which account its cure ought to be committed to nature, and all topical exsiccants forbidden. Its sudden or spontaneous recession excites greater fear, since many dangers threaten from hence, namely, violent coughs, acute fever, griping, diarrhæa, convulsive fits, &c.

From the foregoing it is collected that Tinea only of a bad kind, which the Gallo Provincials call *rascofino*, ought to be attacked with medical auxiliaries. Wherefore, having premised generals, if need be, hepatics and depurants ought to be prescribed; as agrimony, dock, fumitory, speed well, water cress, &c. nor is sulphur forbidden, which, as every one knows, has a specific virtue, against the various chronic cutaneous diseases of adults. The mild cathartics do good, namely, epithymum, syrup of succory with rhubarb, calomel, &c. After the cautious and long continued use of these medicines, we may take to the more select, namely, *diaphoretics* and incidents: the scabious, carduus benedictus, vipers, kermes mineral, diaphoretic antimony, volatile salt of hartshorn, æthiops mineral, and others suited to the varied taint of the blood and humours, may answer these purposes. Absorbents also belong here, if acrid saburra lodge in the first passages. Moreover, whatever remedies may be given against Tinea, the cure is to be procrastinated, lest this affection disappear sooner than is proper; in which case, no endeavours are to be spared for bringing it back; among these difficulties vesicatories ought to be applied, that the noxious humours remixed with the blood, may be invited to the skin, and fill the place of the Tinea.

In the cure of this disease, *topicals* ought to be cautiously applied; repercutients of any kind ought to be altogether banished; but emollients and demulcents may be safely applied, if the itching be severe, and the crusts adhere obstinately; the water of althea may be profitably used with this view, as also the oil of sweet almonds, cream, unsalted butter, beet leaves smeared with oil of roses, &c. Moreover, we ought not to reject lotions prepared of decoction of fumitory, dock, speed well, and celandine. Some advise ointment of sweet almonds, and oil of tartar per deliquium, well mixed together. Lastly, there are in the shops various ointments prepared of sulphur and mercury, which when given with a skilful and cautious hand, merit their share of praise. It is proper to remark, that fat and oily matters are commonly used by rash old women, as applications to the face, not without danger, if we except cream and butter. While these things are doing, the nurses ought to attend to the infants' hands, lest the little wounds made by scratching during the itching, should bleed too much.

There is a very common plaster in various hospitals, made of pure *pitch*, which is applied to the head after the hair is shaved off, and pulled away after twenty-four hours, not without the greatest cries of the infant, since the hairs agglutinated to it are eradicated by this violence. Afterwards the wound while bleed-

ing is to be anointed with oil of eggs, and then dried up by the usual method. This plaster is put on again if necessary, and perhaps, having premised generals, it takes the palm from other topicals. If the Tinea work itself deep pits, and yield a plentiful flow of sanies, it is proper to apply chalk, tutty, ceruss, lapis calaminaris, and other drying powders; otherwise every drying medicine ought to be avoided as worse than a snake. But if the *lousy disease* be associated with Tinea, as often happens, the head may be sprinkled with powder of stavesacre, Indian caustic barley, cocculi of the shops, &c. which powders are also mixed with lard, or the pulp of boiled apples, that thereby an ointment may be prepared for both uses. Lastly, some prefer a decoction of stavesacre prepared with common ley, with which the head is well washed.

2. Having concluded what respects tinea, it remains that we comprehend in a few words the other cutaneous diseases of infants. They labour under a certain species of sickness, very commonly, which as to character, comes very near to tinea, this is, *a distilling of pus or sanies, through the meatus auditorius*; which sometimes proceeds from simple defluxion of humours, or from a cause common to tinea; sometimes from genuine inflammation, vehement at the first, and known by most severe pains, convulsions, &c. This flow in the first case portends very little danger: but in the other a caries of the little bones of the tympanum is to be feared. This disease succeeding inflammation, at first very troublesome, is *obviated* by milk, or oil of sweet almonds dropped into the meatus auditorius, attention is then to be paid to the lurking little ulcers, by injections of urine, bitter infusions, detergents and antiputrids. As it respects internal remedies, they differ little from those which were above directed against tinea; wherefore we have thought it not amiss to forego the mentioning of them.

3. The **ESSERA** of **INFANTS**, by us called *la Gale des enfants*, differs little as to character from *porrigo* of the head, but it comes on under other circumstances, and occupies some part or other of the surface of the body. This species of Essera is usually reckoned a very salutary disease, differing vastly from the scabies of adults; it ought especially to be considered useful in those that are nursed on milk that is hot or of a bad kind. This cutaneous affection mostly shews itself after weaning, unless infants be seized at that time with looseness of the belly. In some cases it invades the whole skin, so that in appearance it does not illy resemble the eruption of the measles: nor can physicians, even the most judicious, escape the error, unless they attend to the previous signs.

Very small pustules, sometimes thinly scattered, sometimes very numerous, somewhat larger in places that are warmer, more obstinate about the navel, often occasion very great itching, with which the infants are tormented; they otherwise create little trouble, and do not injure the health. The whole business of cure is mostly committed to nature; every topical resolvent taken from sulphur and mercury, is forbidden, although they are prescribed by some incautious ones, or sciolists, not without present danger. Besides it is proper to note, that this eruption is very often promoted by dentition, which then does not cease until after this is completed.

This timely eruption is of so great moment for purging the blood and humours, that many misfortunes threaten children of seven years old, who are free from this disorder; hence if it continue in its usual state, nothing is rashly to be attempted, but rather we should aid this salutary effort of nature, by suitable regimen, until near the end, the *milder cathartics*, namely, infusion of rhubarb, syrup of succory compound, and others of that kind usually directed for children, may be prescribed. If nevertheless itching should be very troublesome, and sleep prevented thereby, *demulcents* may be applied, namely, whey, fresh butter, oil of sweet almonds, simple cerate, &c. otherwise it is best to abstain from all cure. Yet we should assist in urgent cases, if the *Essera* put on a bad appearance, and occasion very serious symptoms; in which state of things the mild cathartics, often repeated, are of service; nor are stomachics and bitters of trifling efficacy. We must then restore the blood by the cautious use of *depurants* and *diaphoretics*, aperients and *incidents*, elsewhere directed to fulsomeness. Nor after the due administration of these remedies, are mercurial ointments to be forbidden, or those prepared of sulphur and the powder of dock root, but this method of cure always demands the utmost caution.

4. Infants in the cradle are subject to another cutaneous affection which taints ALL THE PARTS WET WITH URINE, OR DIRTIED WITH THE ALVINE FECES. At first a *redness* appears from this filthiness, shewing itself in very broad areolæ, and not rarely putting on the appearance of erysipelas. Afterwards *pustules* break out, sometimes resembling herpes, sometimes a burn. In this case the acrimony of the urine, and too great heat of the blood are justly accused. But this disease has also another origin, derived from the bad state of the milk. The cure is performed in both cases, by the more simple remedies, attention in the first place is to be paid to cleanliness, by frequently applying a wash of althea water or warm milk, demulcents are then to be used, such as cream, butter, &c. Sometimes also

detergent lotions are advantageously used, among which, plantain water with a fourth part of lime water is preferred by many. But cerates, album rhasis, and other ointments approved by the good women, seem to be of little service.

5. INTERTRIGO, commonly called *écorchure*, very common in infancy, not only occupies between the labia pudendi, and the neighbouring sordid parts, but also invades the arm-pits, neck and other parts which suffer any *rubbing of the tender skin*. Although this species of excoriation is reckoned a very slight disease, yet in some cases it creates no little trouble, but is usually allayed by demulcents. Since this affection especially depends on the use of dirty cloths, every one must be sensible, that attention must first of all be paid to cleanliness. Then the part affected, after being well washed with althea water, or warm wine, is sprinkled with the powder of rotten wood, and for the most part there is need of no other *remedy*. The same effect is produced by chalk, tutty, lapis calaminaris, and other absorbents and exsiccants reduced to powder. If infants be tormented with pain, while labouring under Intertrigo, the white ointment of rhasis, of white tutty, nutritive ointment, of ceruss, and others of that sort, possessing a demulcent and exsiccant virtue are usually administered.

6. The tender skin of infants is often disfigured with CHOPS and FISSURES, which have their principal seat in the nose, lips, and fingers. These little wounds often cause a defluxion of humours to the affected part, from which it becomes swelled, and thereby callosities are formed scarcely to be restored. Cutaneous fissures are usually produced by cold contracted in a severe winter, yet they do not rarely originate from a taint of the blood and humours. The mode of curing this very slight affection is very simple; namely, having first well washed the injured part with warm wine, let oil of sweet almonds, or of eggs be applied, preparations of lard and marrow, *Galen's* cerate, or other common pomatum, nor is there need of any other remedy; to this we must adhere, until the lips of these little wounds be brought into mutual contact. Concerning chilblains, burns, and other cutaneous diseases respecting all ages, we have more than sufficiently treated elsewhere. We shall not therefore needlessly repeat: but have thought it not amiss to add somewhat concerning *Nævi Materni*.

7. The character of NÆVI MATERNI, called by us, *Signes de Naissance*, is obscure and very intricate. These marks are commonly said to arise from the denial of things which the mothers very earnestly longed for during pregnancy. But this opinion is cumbered with many difficulties, and some moderns have

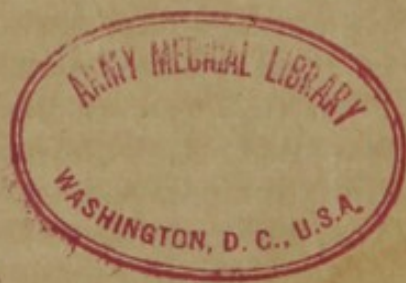
combated it with very strong arguments, so that, "*adhuc sub judice lis est.*" *Nævi Materni* appear under innumerable forms, which are expressed by spots and excrescences. There occur spots of different breadth, red, violet, purple, brown, blackish, &c. the colour of some resembles wine: these are the most common. But *sarcosæ* or *excrescences* also seem to emulate many forms, viz. strawberries, blackberries, figs, grapes, or other fruits, as also a piece of hog's liver, cake, cheese, and numberless other eatables, with which the imagination of pregnant women had been worried. Nor are there wanting those that resemble a cock's comb, a mouse, *mentulam virilem*, &c. These spots are so fixed, that hitherto no art has been able to eradicate them, unless the skin which affords the base be altogether extirpated, whence a scar follows, after a tedious cure, which deforms the part more perhaps than the spot. *Sarcomata* may admit of a more easy cure; which may be tied with a tight ligature, taken off with a knife, or consumed with a caustic; but these surgical remedies please very few, unless the face be very much disfigured with the marks. Nevertheless these operations are not without danger, if the tumour be seated on a nerve, artery, aponeurosis, pericranium and peritoneum; in which conditions this remedy becomes hurtful or fatal; otherwise it is suited to all ages, but it is thought safer in youth.

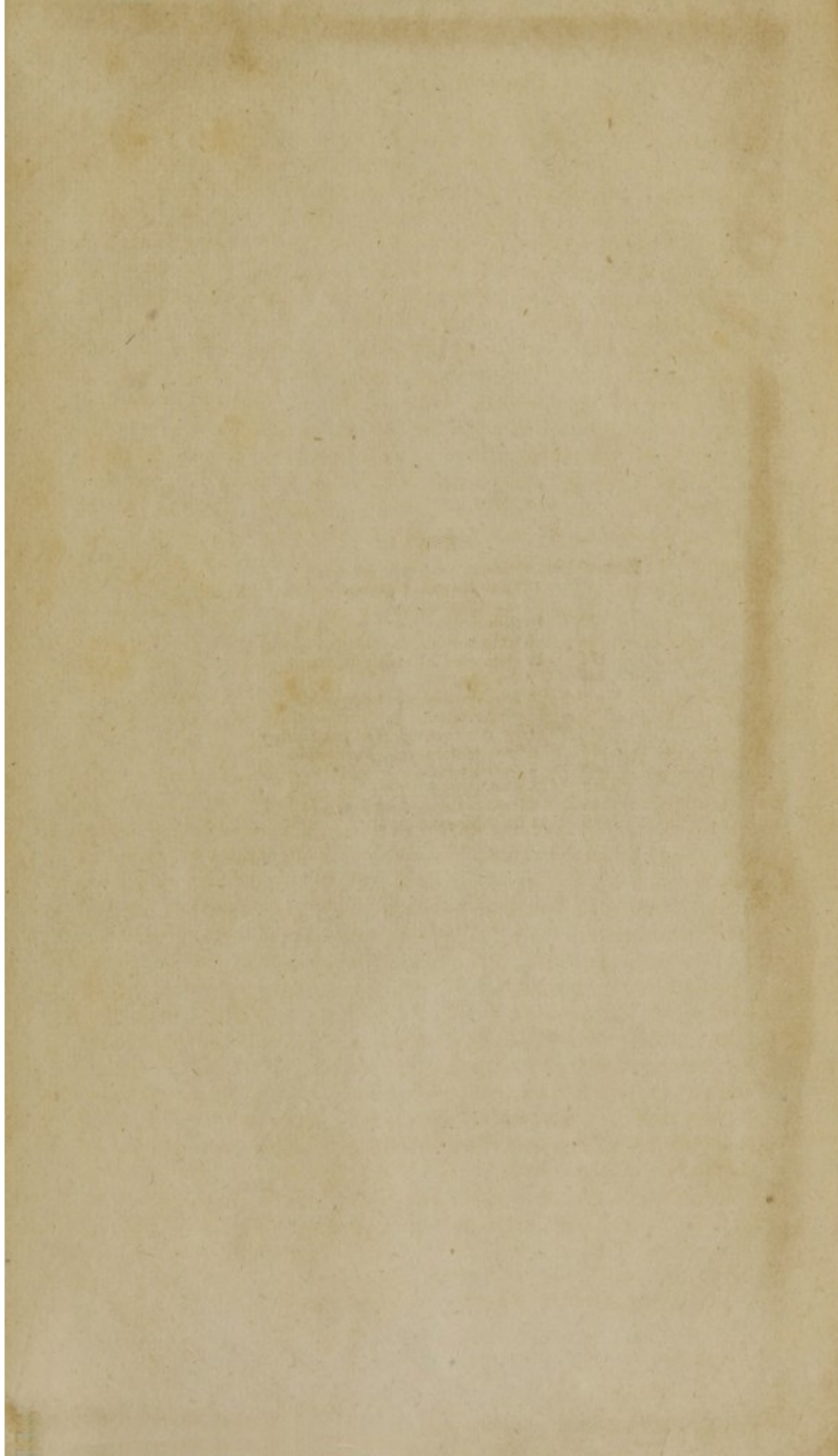
8. It remains in putting the last hand to this work, that we briefly treat of a certain *exotic disease*, produced by peculiar worms irritating the skin of infants. By many they are called **DRACUNCULI**, by some *crinones*, on account of their surprizing smallness, like *hairs*. It is said that they are also furnished with a black head; which nevertheless **LEUWENHOECK** contends, are nothing else than hairs closely collected into a bundle, nor does **LECLERC** solve this doubt. They are produced, if we may believe the greater part of authors, in the joints and back of sucklings, who being tormented with most cruel itching, and continual wakefulness, gradually sink into atrophy. In this state of things baths are advantageously used, which by relaxing the skin favour the exit of these insects: then the affected part is smeared with honey, that they may be inticed out, and more easily rubbed off with suitable instruments; by opening as it were the vesicular pustules under which they lurk. Among the best remedies are reckoned mercurial washes or frictions, by which they are soon killed. Meanwhile, *marasmus* (which, as we have hinted, this affection draws after it,) is to be obviated by the well known method of cure. On this subject, altogether unknown in our climate, we have perhaps been too diffuse, and therefore *furl the sails*.

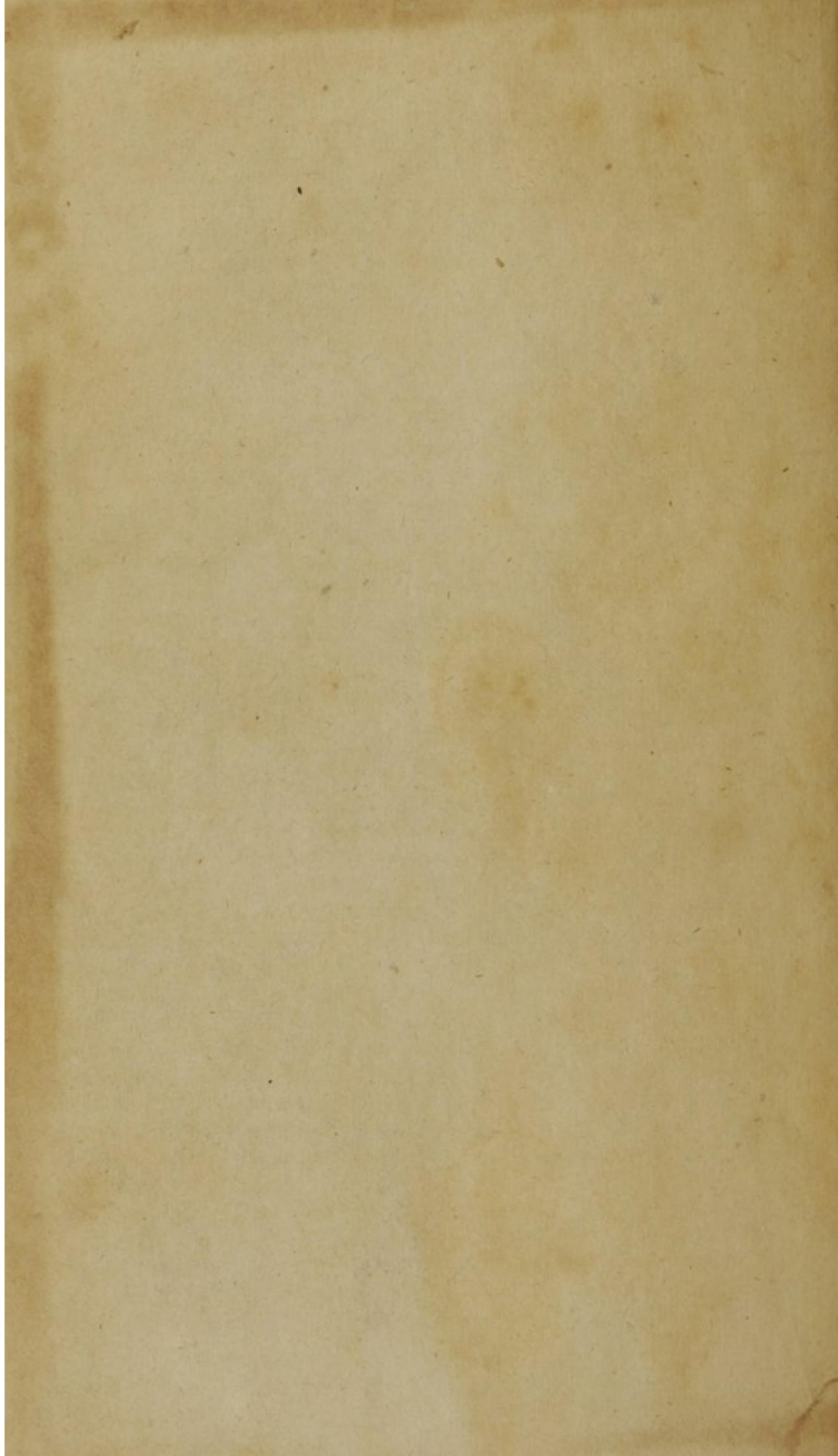
ERRATA.

Page 49 line, 26 insert *not* before *too much*

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|-----|--|
| 56 | 12 from bottom, read <i>temperants</i> |
| 66 | 3 read <i>temperants</i> |
| 76 | 10 from bottom, read <i>revulsion</i> |
| 94 | 6 from bottom, for <i>loins</i> read <i>bones</i> |
| 112 | 11 after <i>mine-al</i> read <i>waters</i> |
| 140 | 5 read <i>refluent</i> . |
| | 8 from bottom, read <i>anomalous</i> |
| 146 | 17 read <i>viscus</i> , |
| 240 | 5 for <i>protract'ng</i> , read <i>prostrating</i> |
| 343 | 2 from bottom, read <i>fluctuation</i> |
| 368 | 4 read <i>lawful</i> |
| 415 | 28 read <i>obtund</i> |
| 543 | 2 from bottom, read <i>ptyalism</i> . |
| 582 | 11 for <i>case</i> read <i>cure</i> . |







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