A familiar treatise : nervous affections, disorders of the head and chest, stomach and bowels, &c.; Also, on the means of repairing a debilitated constitution, through the establishment of a healthy digestion; including prescriptions in plain English, from the writings and private practice of eminent physicians / By J. Stevenson, M.D.

STEVENSON

ON

NERVOUS AFFECTIONS,

AND

DISORDERS

OF THE STOMACH AND BOWELS.

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Third Edition.

By J. STEVENSON, M D.

Author of the History and Treatment of Coughs, Colds, and other Winter Complaints, &c.

LONDON:

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ERRATUM.

Page 139, Prescription 15, 1st line, for *Tincture of Foxglove*, 10 *drachms*, read *Tincture of Foxglove*, 10 *drops*.

PREFATORIAL OBSERVATIONS.

THE directors of the board of health have latterly become so numerous, that it amounts to a question whether a few dissentient ideas, on certain topics, will meet with a fair hearing, particularly from the constitution-mongers of the present prolific period, without calling forth that virulence and clamour which but too frequently are substituted for calm and dispassionate investigation. Indeed, so many contrary and conflicting opinions are there on the *doctrine of health* and the principles on which human life is supported, that the goddess SALUS, herself, seems to have retired in dudgeon from the hygeian temple, and to have left her numerous priests and votaries, sickening by the very means of health, to get out of the vortex in the best manner they can; for look which way you will, such is the present state of medical practice, that—

'Dire Scylla *there* a scene of horror forms,
And *here* Charybdis fills the deep with storms.'

Long life, as the first and chief earthly blessing mortals can enjoy, has, unquestionably, irresistible charms, because life and health are necessary to every other enjoyment; and this is the reason why there are few men who have lived so long as not to wish their existence extended yet a little longer. Where we find them relinquish so natural a desire, it is generally because premature infirmities destroy all relish for life, and render them burthensome to themselves as well as troublesome to all about them. But though life and health are so desirable, the means of their preservation, simple as they are, prove too hard a task to those even who have the greatest hankering after the world; for, it is plain, by their every day practice, that they despise the enjoyment of it, in comparison with the momentary gratification of their insubordinate palates, and the riotous excesses of their conv ivia

associations and nocturnal orgies. Nor can it escape the observation of the least reflecting portion of mankind, that intemperance not only retards maturity, but brings on premature age and disease, by loading the vessels with a redundancy of juices, and increasing the rapidity of the circulation; until plethora corrupts the humours, destroys the nervous energy, and either carry off the miserable devotee by an inflammatory disease, in the prime of life, or lays the foundation of chronical infirmities, that accelerates the incapacities and distresses of old age, long before the natural term.

The greater number of our *fashionable* complaints are so closely allied in their origin and cause, that it may, as briefly as truly, be said, *ab uno disce omnes*. The gout, in fact, formerly a rare but regular disease, which attacked only the externals of persons advanced in years, has now become a constitutional indisposition, a juvenile complaint, torturing the patient in a thousand different forms, exempting neither age, rank, nor mode of life, from its dire visitations.

The next, and still more general complaint of the times, are the *fashionable* nervous and hypochondriacal diseases: these indeed are formidable tormentors, which not only invade our physical well-being, but also embitter our tranquillity and contentment, and not unfrequently shut out the fairest prospects of our happiness.

To the preceding reigning maladies may be added, indigestion, and bilious disorders. And again, the extreme sensibility to every atmospheric change, or rather a constantly sensible relation to its influence, which many people have insensibly contracted, till their feelings are become so exquisitely delicate and thermometrical, that in a close apartment, nay, even in bed, they can determine with accuracy the state of the weather, as well the direction of the wind, ought not to be forgotten.

Digestion and indigestion have occupied the pens of the moderns nearly as much, latterly, as the nature and choice

of aliment did the ancients, from the time of Moses, who was the first writer on food, down to the schola salernita, but evidently to much less advantage.

Every disease, now-a-days, is attributed, but how correctly remains to be ascertained, to indigestion; while comparatively little is known in what manner digestion is effected.

Nervous diseases and bilious complaints are other equally profitable sources of gullery; but without these, and their prototypes, it is but candour, however, to acknowledge, that neither physicians nor patients could live. It is enough, in short, for this purpose, that the one consents to be sick, that the other may condescend to prescribe. And to wheedle a man into a course of physic, that ultimately will cost him as much, before it be completed, *secundum artem*, as would support any moderate establishment for a year, it is quite enough to tell him his digestive organs are deranged, that he has a bilious complaint, or a nervous disorder; all of which, as suits the occasion, may be present conjointly or distinctly.

It is no less a singular than a strange fatuity, that, whether digestion be performed well or ill, few people like, or will consent, to have a temporary embargo laid upon their stomach against its natural claims. The stomach, in short, is the chief depôt of the victualling department, to which all the members of the body natural are subordinate—or to give the idea a more figurative turn, the stomach may be compared to the pope; the small and large intestines, lacteals, lymphatics, blood-vessels, and nerves, with all their apparatus, in the order of their importance and dependence, to his cardinals, archbishops and bishops, rectors, and unbeneficed priests, deacons, sub-deacons, monks and capuchins, in regular procession—they alike receive their livings from the supreme director. The belly is the idol at whose nod fall prostrate kings, princes, nobles, clergy and laymen—epicures and sinicures; and the ordinary occupations of mankind, high and

low, are tributary to its gratifications, whether it do its business well or ill. There are those, who, indeed, as ingeniously torment themselves to invent some hyper-epicurean stimulus to rouse the morbid palate from its sickly languor, as others to content themselves with the simple and unsophisticated products of nature, although the number of the latter bear no proportion to the former. The difference, however, is, that health, the offspring of labour and contentment, sits down to the homely board with an appetite like a Spitalfield's weaver; while disease, the child of intemperance and bloated luxury, and as costive as a clergyman*, is obliged to ransack the "Almanac des gourmands," before it can stomach a wholesome meal, simply prepared, to find out the mode of making "a good sauce to insinuate itself all round and above the maxillary glands, to awaken imperceptibly into activity, each ramification of the organs of taste," so blunted are they from debauchery and excess; so accustomed to high and unnatural stimulants, that they can neither relinquish nor provoke an appetite, if so it can be called, without them.

It has frequently been remarked, that health and long life are usually the blessings of the poor, not of the rich—and the fruits of temperance rather than of luxury and excess; and indeed these observations are so far true, that if the rich do not in many things live like the poor, they will certainly be the worse for their riches;—if they do not use exercise,

* In making the above comparison, and giving the following historical fact, the author begs leave to disclaim any thing disrespectful to the distinguished body alluded to, who, individually, come under the denomination of clergymen; and his reasons for having used it at all, are no less founded in observation than in fact. During his professional practice, the author has met with at least a dozen very respectable, and tolerably well informed of the order, all of whom, and it was singularly enough remarked by themselves, were, whatever might be the real or predisposing cause, of extremely costive habits. It is no less worthy of remark, that the patronage of the clergy and nobility, is among the first solicited to promote the sale of quack *nostra*, particularly of aperient and antibilious pills; a circumstance from which it may reasonably enough be inferred, that they are generally selected as the fittest subjects for a fair trial of their cathartic pretensions. The French also have a saying among them; viz. "*il gronde comme un cure à la chasse*," a corruption no doubt of *à la chaise*, &c. which needs no further illustration.

which is voluntary labour—if they do not curb from choice, the licentiousness of the appetite, as the other does from necessity—if they do not practice abstinence and fasting, at times, which is the last extreme of poverty and want—if their cares and their troubles increase with their riches, or their passions with their pleasures, their health will be impaired in proportion as their fortunes are improved. Since health is the best of all human possessions, and without it, the rest are neither relished nor pleasingly enjoyed, it holds good as a physical axiom, in the common course of life, that a man must either often take exercise or fast—take physic or be sick; and the choice seems left to every one to act according to his peculiar inclination. The two first are unquestionably the best means of preserving health. The use of physic is to restore and cure those diseases which are generally caused by the want or neglect of the others; although it may be neither necessary nor perhaps useful either for the confirmation of health or to the prolongation of life; it being generally a restraint made upon nature, though the end of it seems to be, rather to assist than to oppose her in her course. But the truth and short of the matter is, man frequently brings on himself the greater part of those evils he is so fond of lamenting, and for which drugging becomes in a manner necessary, by a mistaken choice of profession or employment of life, no ways adapted to the powers he may possess, or the inclinations he may experience;* and thus, while he is even acting against a natural bias, he becomes of consequence, restless and unhappy, nervous and dyspeptic.

Among those who seek subsistence and immortal fame by engaging in the dangers and fatigues of a military life, seduced, many of them, doubtless, by the charms of a "*cocked-up-hat*," and the glittering tinsel of an epaulette, how many of them have been known, whose delicate and *lady-like* con-

* It was these reflexions which induced us to insert the satirical Lecture on Heads, Craniological Reflections, and the *data* founded on the doctrine of the phren.

stitutions were far better calculated for the feminine occupations of the opposite sex; such as the distaff and spindle, embroidering or lace-making, than the rough and boisterous encounters of the hardy sons of Mars. The noisy fame and extensive reputation of a Demosthenes and a Cicero, have determined many to the toil and labours of the bar, whose lungs, nerves, and corporeal vigour, were neither adapted for exertion either of mind or body. The medical profession itself has robbed the plough-tail of many a sturdy boor who might have acquired both fortune and fame had they sacrificed to Ceres, those labours so indignantly and slovenly forced upon Æsculapius. Nor less true is it, in the language of the elegant Gray, in every condition of life: that

> Full many a gem of purest ray serene
> The dark unfathom'd caves of ocean bear;
> Full many a flower is born to blush unseen,
> And waste its frag'rance on the desert air:

for the want of a *quantum sufficit* of those means which fortune, in her ever capricious mood, has bestowed on the less gifted mind; or a portion of that patronage too often conferred on the unworthy, to the exclusion of humble and unassuming merit.

Some children, it would appear, are destined, as it were, *ab ovo*, to certain employments, without consulting either heaven or common sense in the choice; yet the freedom of our nature, seems to require that we should be left in a great measure to ourselves on some occasions; of which number is the kind of business or profession we choose for life. But then, doubtless, every possible indication should be watched, that can discover either in ourselves or others, which way real genius tends. The health of many is frequently for ever undermined by the employments they are doomed to follow; nevertheless, many of these very occupations may be pursued with little or less detriment, than the rich can wallow in luxury and excess of riot; and the apparent inconveniences attendant on honest poverty, are equalled, if not exceeded, by those that spring from the abuse of wealth.

Aware, however, that rules of health, as well as those for taking food, &c. universally applicable to the state of every individual, are not discoverable in nature, nor to be derived from any experimental knowledge we may possess of corporeal objects, we have, in the course of our work, inclined to the most generally admitted precept, namely, that, as regards these matters, every individual should study his particular constitution; choose and regulate his mode of life accordingly; and to make his own experience his guide in whatever he finds most suitable and convenient.

It is unnecessary here to detail the diversified shapes in which the *fashionable* maladies present themselves. Let it suffice to observe, that the majority of them are the effects of indolence and inattention to the natural means, all have, more or less, in their power to avert them. Neither have we been satisfied with giving a bare catalogue of these varied affections; we have attempted in an easy, and we trust in an explicit manner, to trace them to their source, and to shew that they admit of being easily prevented, and frequently remedied when they do take place; we have laid down the best means, supported by numerous testimonials, taken from the highest authorities, to effect these desirable ends; at the same time that we have voluntarily discarded all fine-spun theories, by investigating, and combatting, where it was deemed necessary, the absurdities and prejudices which hitherto have retarded rather than advanced the progress of dietetics, or that branch of knowledge which may be said to include those objects which relate to the preservation of the human body in its natural state; still, however, bearing in mind, that it is not so much the healthy as the valetudinary and infirm who stand most in need of precepts for their conduct.

In the course of the work we have endeavoured to explain in simple and correct language, the various functions of the human body, on which health depends; and in describing the

apparatus by which they are performed, a sufficient knowledge of human anatomy may be acquired by the intelligent and general reader, to enable them to comprehend the structure and functions of those parts most essential to life. The prescriptions are either taken from the MSS. or works of the distinguished practitioners whose names are appended to them. And in contradistinction to many of our cotemporaries, we have occasionally professed to be gay, cheerful and facetious, rather than melancholy, monotonous and laborious, in deference only to the varied complexions of those we address; and partially in compliance with an opinion we have before broached, that it is a much easier matter, at times, to laugh some people into reason, than to reason them out of their prejudices. If therefore the observations and opinions dispersed throughout the work, on the various subjects it embraces, should tend in the smallest degree to divert the hypochondriac from his gloomy ideas, or dispel the drossy thoughts from drying up his brains, corrupting his thoughts, and deluding the intellect,—or to dissolve that sombre melancholy which

> ‘ ——— in the soul's fair table falsely graves
> Whole squadrons of fantastical chimeras;

If, in the smallest degree, they contribute to tranquillize and soothe the feelings of the irritable and nervous, to reinvigorate the convalescent and infirm, dissuade the unwary from injurious habits, or rescue the sensualist from the precipice of ruin,—should they tend in any measure, to create a good appetite, or restore a lost one to the dyspeptic,—to bring back the frantic epicure to reason; or, last though not least, should they increase the knowledge of the inquisitive, and add to the general health and happiness of mankind, the author's best wishes will be realized, and his highest expectations as a philanthropist, amply rewarded.

London, July, 1826. *THE AUTHOR.*

TABLE OF CONTENTS.

PART I.

PART II.

PART III.

PRESCRIPTIONS FOR INDIGESTION, AND NERVOUS AFFECTIONS, &c. WITH DIRECTIONS HOW TO TAKE THEM.

Neurophobia & Gastromania,

OR

NERVINE MADNESS,

AND STOMACHIC INSANITY, &c. &c.

PART I.

A SIMILE.

THE human frame has not altogether inaptly been compared to a watch, of which the heart is the main spring, the stomach the regulator; and that which we put into it, the key by which this piece of complicated mechanism is wound up; the pulse, which is regulated by the state and contents of the stomach, the vibrations of the pendulum; the countenance, the index or dial by which one may "*tell what o'clock it is,*" and whether it be *high water* or *low water*, either with a man's health or his purse; to say nothing of his outer appendages, which may resemble the case, and which will frequently be found to correspond with the "*time o' day*" pointed out by the dial, whether it

be gold, silver, *copper* or *brass*. But the nerves, these confounded nerves! to what part of the time-keeper shall they be compared? suppose we say to the chain, which may be too slack or too tight; or, if you please, it may be neither the one nor the other, but, on the contrary, so equipoized, as to keep time with the Horse-guards to a minute. The first then, that is, whether the chain or the nerves be too slack or too tight, is an irregular or an unhealthy state; the second, a consummation devoutly to be wished for, either in a watch or a man, aye! or in a woman either, or in an animal or a machine of any description, is a regular or healthy state. Wind up the chain too tight, or relax it too much, every corresponding part is deranged; break the chain and there is an end of all movement, good or bad. Here then is health, corresponding with regularity; too fast or too slow, irregularity; but when the main spring loses its elasticity, and the chain is broken, it is then—*no go*—and all is stopped!

Without nerves what would become of us? What would we be worth? and yet we find the greatest difficulty to live with them. We are constantly complaining; of being nervous; of our nerves being unstrung. "I'm so extremely *nervish*," says one; "I'm all of a shake," and so forth, says another; that these, and similar expressions of want of tone, or rather want of confidence, are as common in the mouth of every old tea-drinking maid, rake, de-

bauchee and sensualist, as the most ordinary common place remarks that can be met with, not even excepting the state of the weather, which, whether it rain or hail, be cloudy or sun-shine, are always substituted, and, frequently, not very felicitously, as the first introduced among the topics of reciprocal salutation. In fact, nervous complaints always were, and ever will be *a-la-mode;* there is no living without them. But the truth of the matter is, such an extraordinary increase of these fiddle-string diseases, has latterly made their appearance among all classes, that the malady rages with all the virulence of a pestilence. To be brief, nervous complaints are more *the go* than ever; and there are nearly as many *cant*ological terms to express these affections, real, feigned, or imaginary, as there are beads in the rosary, or saints and holidays in the calender. It is no less strange, after all, that any serious or formal complaint should be made against any part of the human body, because, as it is not of our own forming, and, as every part was given us for the best and wisest purpose, it is at best a mark of great presumption in any one to find fault with it. Be this as it may, we have our doubts whether the subject of the present complaint be any of the works of nature; whether men and women originally were not without it; and whether it was not at first introduced as a pretended improvement on the human frame, by certain persons who, not being contented with what nature had allotted them,

are ever endeavouring to supply the supposed deficiency with something artificial.

One of the principal subjects on which it is our intention to dwell, being what is, or what are commonly called the nerves, for few, we believe, make any distinctions whether they be plural or singular, we shall not enter so technically into their anatomical origin and structure, as to puzzle our readers; neither shall we enlarge on the various opinions entertained, whether they proceed from the brain or the spinal marrow, or from both; or whether, in conformity with the experiments of M. Flourens, the nerves, the spinal marrow, and the tubercula quadrigemina be capable of exciting muscular contraction; or whether the central lobes of the brain, and the cerebellum be not capable of exciting them. We shall contradict no man's theory by a theoretical attack; and, until we unequivocally and openly disprove to the world what has been advanced as matter of fact or matter of opinion by others, we will allow every experimentalist to be more practically correct than those who have made no experiments at all. This species of disquisition, friendly reader, although candid enough, is not quite so much to our purpose as we could wish; we will therefore shortly enter upon our subject matter of discourse; premising it, nevertheless, although we disclaim the most remote acquaintance with materialism, with a short digression on the following subject: viz. some

PHILOLOGICAL REFLECTIONS ON THE NATURE AND PROPERTIES OF HUMOUR.

The nature and efficacy of humour may be thus unravelled. A just exhibition of any ardent or durable passion, excited by some adequate cause, instantly attacheth sympathy, the common tie of human souls, and thereby communicates the passions to the breast of the bearer. But when the emotion is either not violent, or not durable, and the nature not any thing real, but imaginary, or at least quite disproportionable to the effect, or when the passion displays itself preposterously, so as rather to obstruct than promote its aim. In these cases, a natural representation, instead of fellow-feeling, creates amusement, and universally awakens contempt. The portrait in the former case we call pathetic, in the latter humour. The emotion must lie either not violent, or not durable. This limitation is necessary, because a passion extreme in its degree, as well as lasting, cannot yield diversion to a well-disposed mind, but generally affects it with pity, and but seldom with a mixture of horror and indignation. The sense of the ridiculous, though invariably the same, is entirely surmounted by a principle of our nature much more powerful.

The passion which humour addresseth, as its object, is contempt. But it ought carefully to be noted that

every address, even every pertinent address to contempt, is but humourous. This passion is no less capable of being excited by the severe and tragic, than by the merry and comic manner.

The subject of humour is always character, but not every thing in character, its foibles generally, such as caprices, little extravagancies, weak anxieties, jealousies, childish fancies, pertness, vanity, and self-conceit.

One finds the greatest scope for exercising this talent in telling familiar stories, or in acting any whimsical part in an assumed character. Such a one, we say, has the talent of humouring a tale, in any queer manner which he chuseth to exhibit. Thus we speak of the passions in tragedy, but of the humourous in comedy; and even to express passion, as appearing in the most trivial occurrences of life, we commonly use the term, as when we talk of good-humour, ill-humour, peevish or pleasant humour; hence it is, that a capricious temper we call humoursome, the person possessed of it a humourist, and such facts or events as afford subjects for the humourous, we denominate humoursome or comical.—*E. G.*

NERVOUS HUMOUR.

It has jocosely been said, that there is some doubt of the probability of the nerves being derived from the brain, because it has been observed that

those who have most nerves have fewest brains, and *vice versa;* and, as to their proceeding from the spinal marrow, the question would not only be intricate, but the language too technical, at least, for our non-professional readers. It is necessary, however, to say, what we believe to agree with the experience of all grown persons, that our ancestors knew them only by name, and that they are a very modern improvement, or addition, or what you will, to our catalogue of corporeal qualifications. We have heard a venerable old maiden lady declare that there were no nerves in her day, that she had lived sixty-nine years without them, and hoped to be carried to her grave without them; and, doubtless, the same declaration has been made by sundry ancient and sage matrons of this kingdom.

The question then comes to be, at what period nerves were first introduced, and for what purpose? The latter part of this question will come to be considered hereafter. In the mean time, it is for our consideration at what period nerves were introduced? This, we must confess, is attended with some difficulties. It appears that the construction of nerves bears some analogy to the planting of oak timber; which is planted by one generation, makes it progress in a second, a farther progress in a third, and comes to perfection in a fourth. Nerves therefore were the work of a very long time, before they arrived at the perfection in which we now find them, and before

they became so general as to extend from the palace of the prince, to the hut of the peasant. Leaving however this matter somewhat undetermined, as to the exact point of time; let us consider what is the probable cause of nerves, and how they are constructed.

A very eminent chymist who was applied to on this occasion, chiefly on account of his skill in anatomy, observed that it belonged particularly to his branch of business, to determine this question of nerves. "From anatomy," said he, "you will receive very little satisfaction, but from chymistry you may expect very nearly to have your doubts removed. Nerves came in either with the distillery or with tea, and their advancement has been in a regular progression with the use of the still and the kettle. It is therefore either by boiling or by distillation that people attain a sufficient quantity of nerves to enable them to be neighbour-like, and furnish a constant theme of conversation. It is with great justice therefore, that nerves are reckoned no part of the ancient human body, but a modern addition drawn from the sugar cane and sundry other foreign vegetables by means of fire. True it is, it may not be easy to determine whether a lady or gentleman owes his or her nerves, more to one of these causes than to the other; but wherever you find a proper assortment of genteel nerves, you may certainly attribute them, to the one or the other, either to boiling or distillation. This

indeed creates a certain confusion in phrases and terms, which is not easy to get over; the fact is, that when we introduce any novelty in art or science, we are obliged to speak a figurative kind of language by borrowing the terms of one art to express another. For example, when a person complains that his *spirits* are *low* on Tuesday, we commonly say, that they must have been *overproof* on Monday; and so on of many others, with which at present we shall not trouble our readers.

NERVINE MADNESS, A PICTURE FROM REAL LIFE, &c.

Such was the substance of the learned chymist's communication on this subject, the truth of which we have been enabled, from the same source to comfirm by the following account from a family man, who was pleased to favour the world with his experience on the subject, and who writes as follows :

"I have, Sir, a wife, whom I married for love, for she had not one penny of fortune, and yet, notwithstanding this latter circumstance, she is in possession of a most watchful and irritable collection of nerves, and enjoys a perpetual state of trepidation. I had the curiosity to keep a register of her alarms for the last twelvemonths, and found they amounted to nine hundred and forty-six, very nearly three a day, a number you will think almost incredible; but your wonder will cease, when I tell you that it is the

peculiar nature of nerves to take the alarm at what occasions no kind of uneasiness to any thing, or any body else. The falling of a china cup, the barking of a dog, or the scream of a cat whose tail happens to be trod upon, are all sufficient for a most lovely trepidation, and a charming paleness of colour. And yet, Sir, she has the most careless and unmannerly servants, and is never without lap-dogs and kittens in every part of the house, not to speak of a collection of parrots, canary birds, and linnets, whose cries and disorders are regularly transferred into her frame, as if by magic, physical sympathy, or philosophical association of ideas. Nor am I safe from the misfortune of being the innocent cause of much confusion among the nerves. If I return soon from an engagement, she is shocked to think I am not well. If I stay late, she is sure some accident has befallen me. Happy would it be were our nights quiet and peaceable; but fire and thieves, are two misfortunes we are every night exposed to; and one or other of them has disturbed my sleep for the last twenty-years, although she never goes to bed without seeing all the fires out, and watching till the stoves are cold; and as to robbery, it is almost physically impossible in our situation. Were it otherwise, I should think six or eight months quiet very cheaply bought, at the price of a few spoons and butter boats."

"But this is not all; little did I think that I have been all this while propagating a race of nerves to

plague future generations. Our children inherit a most plentiful commodity. They scream in unison with their mother; and, if I but suddenly cough or *hem*, three or four times in a morning to clear my throat, (a right ancient and wholesome custom) they have such palpitations! Not one of them will venture into a dark room or passage for the world, and when they ascend the stairs to bed, the servants guard them on all sides, lest one thief should be before and another behind them. Should but a cat jump hastily out of a room on this occasion, we are all in fits, and even the neighbours begin to complain that there is more noise and frightful cries in our house, than in any other in the whole street. About a month ago we performed our respective parts in a very admirable scene. A cousin of mine took up his residence with us for a few days. One day I happened to breakfast abroad, and on returning about twelve o'clock, found my family in the utmost confusion. My wife almost distracted, my daughter and son, altogether so. For some time I remained ignorant of the cause, when at length it turned out to be a very lamentable business indeed. Our cousin had not come down at the usual hour to breakfast. The maid had knocked again and again at his door; no answer; the mistress had knocked; my daughter had knocked, and my son had knocked, and John the footman had knocked, but all remained still as the grave. The conclusion therefore was, that he was dead, and it was equally

plain that he had been murdered. What confirmed them in this opinion was, first, that he was a young man, and had gone to bed in good health; and, secondly, that daylight was seen under his door. The thief, (for we are never without them on such occasions) had entered by the window, performed the bloody deed, and departed by the same way; and they *dared* say he had taken my cousin's watch and money, and what else he could get. I was not very much alarmed at this account, it being nothing new, for I recollected I had been twice murdered in the same manner before. But, said I, have any of you been in the room? This was answered by a *no!* expressive of the greatest horror, and some surprise that I should expect they would encounter so shocking a sight. I then observed that it did not signify; and as none of them had been in the chamber, that I should go myself. I will, said I, have no dead bodies in this house, without providing a decent burial for them, and was just on the point of rising, when the whole family clung fast about me, and implored for heaven's sake, that I would not go unarmed.

"Why what occasion is there for arms?"

'You don't know, my dear, what may happen.'

"What *can* happen my dear, the man's dead, and there's an end to his power; and if he is not dead, what can we fear from him?"

'Then we will all go with you, I am determined on that.'

"As you please, my dear; but you, John, you cowardly blockhead, why did you not go? You know my cousin never sleeps with the door bolted."

"Why, my dear, it is not John's fault, indeed: I—I would not let him go."

"And pray, why would you not let him go?"

"Because you know, my dear, people might say it was he that did it."

"Pshaw! come along."

"The procession began, myself in front, my wife and children, supported on each side by the servants; the door was opened by my adventerous hand, when lo! no cousin, dead or alive, was to be found! I know not how long their confusion would have lasted, nor whether they would not have concluded that the devil had run away with the murdered man, if my cousin had not made his appearance booted and spurred, and just returned from an early ride, which he had been induced to take from the fineness of the morning, and for that purpose had stolen out of the house before the family were up. It was to no purpose I took this opportunity to throw out some reflexions upon the nerves, not much to their credit. My wife was not much pleased that her favourite apprehensions were disappointed; such things had often happened, and they had all heard the death watch the night before."

"My cousin expressed his regret for having been the innocent cause of this confusion, but I know not

how it was, the family looked as cool upon him for some time after, as if they had doubted whether he was dead or alive."

"Those who consult their *nerves* do not like to be disappointed. If they hear a noise, and determine that it proceeds from murder, a thief, or a fire engine, they are generally chagrined to find it is only a cart, a cat, or a stage-coach. Now as I am a lover of peace and concord, I have long ceased my opposition to the nervous starts and alarms of my family, however inconvenient. In summer, indeed, I am much less exposed to them than in winter, because they commence regularly at sun-set, and therefore we have for some years been strangers to the comforts of long nights, and fire-side merriment. What human wisdom could do, has indeed been done; the house is as regular a fortification as the laws of the city will permit. We have no bastions nor outworks, nothing that Cœhorn or Vauban could derive credit from; but all that bolts and bars can do, has been constantly attended to. Our very cats, if they wish to carry on an intrigue without doors, must repair to the place of assignation before sun-set, however disagreeable it may be to wait; for after the doors and windows are shut, all egress and ingress is denied to the whole animal creation. Every room door is double barred and locked; bells communicate from one room to another, which has this happy advantage, that any sleepless individual may disturb the whole house by

a single pull. I once proposed fire arms, but that must on no account be allowed, for as my wife very properly observes, no one can know what may happen, and they may go off of themselves, *loaded or not loaded.* As to danger from fire, beside being amply insured, every bed room is provided with a fire escape, upon a new construction, and which from the state of nerves in my house, I am certain would answer very little purpose, for they who are too nervous to walk down stairs, in case of alarm, would not do the business much better by going out at the window.

"Such, Sir, are some of the inconveniences I am subjected to from my family being possessed of nerves; I could encrease the catalogue very considerably, were I not afraid of swelling my letter to an unwarrantable size. I shall only add, therefore, that it would not be amiss, if, after providing for our own safety by every proper means which human skill or wisdom can suggest, we were to go to sleep in quiet, trusting that all other protection shall be extended to us by the giver of every good. Let us add too, that vain fears, and continual apprehensions, are by no means the best proofs of christian philosophy, nor of christian resignation; that the day of evil will come, if ordained, without it being in our power to avert it; and that the loss of a few moveables, which could be easily replaced, is nothing, and less than nothing, when compared with the miseries of a life

spent in the anticipation, in the presages of evil.—Proceed we now to describe the

WANDERINGS OF THE BRAIN, &c.

To the disgrace of the medical profession, in nothing has their own want of brains been so clearly demonstrated, as their liking the different parts of the brain to every thing which they do not resemble; fortunately, however, to prevent detection and exposure, this superlative nonsense, seemed to wear the garb of learning, by being wrapt up in worse than gallipot-latin, of which the following correct translation, which we gather from an eminent antiquary*, to save our own brains the trouble, may be presumed to have been the first attempt at its correct elucidation.

To this moment we are ignorant of any intellectual operation performed by any particular portion of the brain†, and are equally at a loss to discern any rela-

* Dr. Stukely.

† We should now, however, make some allowance for the rational and ingenious doctrine of the Phrenologists, which, until it can be refuted, ought not to be rejected upon speculations, as long as it can safely maintain its ground. This doctrine, viz. that of Drs. Gall and Spurtzheim, which, on the possibility of it being founded on the moral and intellectual functions of the brain, supposes: 1. That the moral qualities and intellectual faculties are innate. 2. That the exercise or manifestation of them depends on organization. 3. That the brain is the organ of every propensity, good or bad, of every sentiment, and of all

tion which the whole mass bears to thought or sentiment. Our embarrassment is rather increased than relieved by the terms applied to the topography of the organ, which are not only arbitrary, but absurdly inconsistent. The latinity often defies translation, and presents figures as whimsical as that of a barber-surgeon, with his lather and pewter basin, surmounted by a Roman helmet.

The human head bears considerable similarity to a cocoa nut, which, by general consent is supposed to exhibit the countenance at least of the monkey. After stripping off the tough integuments, you come to the shell or skull; and when this has been cracked, or more scientifically speaking, sawn through, you arrive at the internal covering, which being removed, discloses the kernel, or intellectual nucleus, enveloped in membranes, or tunics, which have strange uncouth names; for although, according to the anatomical nomenclature, the brain is, to use an expression of Milton,

"The brood of folly, without father bred,"

the male parent, being *non inventus;* yet it has two membranous mothers, ladies of very different tempers;

the faculties. 4. That the brain is composed of as many particular organs as there are propensities, sentiments, and faculties, differing essentially among themselves. Hence the several inequalities in its structure, claim each a respective function, as an independent or collateral organ.

one being extremely obdurate, is called the *dura mater;* the other, more closely in contact with the brain, highly indulgent, and of course frequently spoiling it, is denominated the *pia mater.* That no petty contentions respecting cleanliness or domestic economy may arise, a cobweb shawl *(tunica arachnoides)* is interposed between them. Many philosophers have imagined, that in this filmy veil may be traced those fine-spun theories, which in all ages have irritated and agitated mankind to no useful purpose. This gossamer mantle is the medium of discrimination, the thin partition that separates wit from madness; verifying the words of the poet;

> "Great wit to madness, nearly is allied,
> And thin partitions do their bounds divide;"

it distinguishes poetry from cant, and dramatic excellence from ranting and buffoonery. In the healthy state, this flimsy covering is pellucid, clear starched by nature, resembling those delicately attenuated fabrics, that in former times screened the necks and shoulders of personable females, and which does not wholly prevent the eye from penetrating through the covering intended for concealment.

There are some peculiarities of the obdurate lady *(dura mater)* which merit attention. By a strange metamorphosis, she is doubled into the shape of a sickle, *(falx)* which seems intended not to reap any intellectual harvest, the usual destination of such in-

struments, but to separate the hemispheres of the brain; and the pointed part of this sickle is attached to a cock's comb *(crista galli.)* In other instances, this tough and nominally intractable lady is converted into canals *(sinus)*, probably the invention of some Dutch anatomist; then into the wine-press (*torcor*) of Herophilus; and, finally into a tent or marquee, (*tentorium*), which, in the opinion of many sagacious persons, is supposed to refer to the Nomadei origin of the human race, the vestiges of which still remain among the pastoral tribes of Tartary, and nearer home in the families of gypsies.

Come we now to the third coat, which, notwithstanding the vulgar adage about keeping the head cool, shews that the brain likes a warm birth, and enables us to trace to a natural instinct the practice of wearing nightcaps, and false hair. In all powerful exertions of the mind, the head requires comfortable clothing. This truth we find exemplified in our courts of law, where judges and barristers carefully protect the temple of thought with a wig, full-bottom-cauliflower, or tie; the courage of our brave soldiers becomes more animated by a helmet; quakers, a polite and decent enough kind of people, always keep their hats on; and criminals on the gallows, whose exit is a matter of importance, are furnished with a night-cap, while the blue-coat boys, in Christ's Hospital, a seminary that has rarely produced any considerable philosophers, usually walk about bare-

headed. This third coat is called the *pia mater*, which means the kind and indulgent mother of the membranes; but this is evidently a misnomer, for when it becomes inflamed, the patient is disposed to all sorts of mischief, violence, and devilish tricks. This kind mother may be traced into the sinnosities, contortions and mysterious cavities of the brain, which it lines like tapestry or paper hangings.

To survey the entire topography of the brain, would be a task equal to the examination of the compartments and furniture of an Egyptian pyramid; a bewildering operation, like that of taking the stock of a general shopkeeper in a country town; especially as many parts have half a dozen names. We shall therefore only enumerate an abridged catalogue of the rarities to be found in this type of Noah's ark, to use a simile adopted by the learned Goltz*, with

* Mr. Herman Goltz, who passed many years in anatomical examinations of that delicate viscus, the brain, endeavouring to discover some coincidence between its marvellous structure and its important uses. To this end the whole concentrated force of his acute intellect was directed. Sometimes he was elevated by the hope that he had ascertained the source of the reasoning faculty, and the seat in which the passions are hatched; but these gleams of success were transient, and were succeeded by total obscurity. At one period he conceived that he had actually drawn aside the curtain, and beheld the mysterious processes that are performed in the occult labaratory of nature; but he confessed himself deceived, and afterwards candidly acknowledged

great propriety, as the brain is supposed to be a double organ, all the nerves going in by pairs.

The substance of the brain is likened to wood ;

that the curtain itself was a mere delusion. Exhausted by these alienations of hope and disappointment, the fabric of his understanding gave way, and in a moment of despondency he hanged himself in his dessecting room, and was nearly devoured by the rats, before his loss was discovered and his fate deplored. His work on the topography and nomenclature of the cerebral mass is still extant, though of the utmost rarity; and, as he may literally be said to have worked his brain to an oil, this treatise may justly be considered as a brightly burning lamp, to assist the lucubrations of future anatomists. Before he accomplished his rash resolve, he wrote on a slip of paper the following impressive words. "For more than twenty tedious years I have pursued a phantom, an *ignis fatuus*, that has decoyed me into misery and ruin. My vision has become so dim that I can no longer distinguish the objects of my research ; my hand is too tremulous to hold the scalpel. Confined in this charnel-house, I have been estranged from nature's fair and inviting prospects ; I have cultivated no man's friendship, nor sought for the affection of woman. I have indeed read of the charms of society, the exhilirations of wine, the delights of a domestic partner, and the blessedness of children : but I have been a solitary student; water has been my only beverage ; no female can reproach me with attachment, nor can a child curse me for its existence. To live longer is useless ; the past has been unemployed, the present is wearisome, and I will anticipate the future." Thus terminated the uneventful life of Herman Goltz, whose duration in this world, may be considered to have been merely a protracted incarceration, aloof from any participation of its enjoyments.

and indeed the heads of many gentlemen bear out this comparison: the external part is supposed to be the bark, the internal the pith; and for all intellectual purposes, the latter is esteemed vastly superior, though no reasons are offered for this preference. This cerebral wood is divided into hemispheres and lobes; after separating these, you arrive at a callous substance. Strange unmathematical figures also occur in the shape of oval and semicircular centres. In this unthinking apparatus there are stomachs, (*ventricles*), a provision of nature strikingly consonant with the remark of Rabelais, "*tout pour la tripe.*" The superior stomachs are furnished with horns, and these perhaps are the only weapons now left for the defence of literary property. The superior or lateral stomachs are separated by a transparent partition, called *septum lucidum.* In its fore part is found the cleft of sylvius, underneath the vault or arch, (*fornix*, a term also used to designate certain mansions to be shunned by those who dislike late hours and bad company), which vault, after the fashion of quadrupeds, has four legs, of which the two hinder are denominated the feet of the sea-horse (*pedes Hippocampi*), and by some dissectors, from their mutual dissimilitude, Ammon's horns; (*cornua Ammonis*) shortly afterwards you arrive at Monro's hole, (*foramen Monroianum*) and the interest now begins to thicken: a funnel conducts to the third stomach, and this contrivance has evidently led to the practice of

drenching, employed when man or beast is averse to taking physic. Next in order comes a psalm book, or lyre, (*psalterium or lyra*), it not being determined which comparison is most applicable. The funnel leads to the pituitary, or snivelling gland, which is situated in the turks saddle (*sella turcica*). In this third stomach, which resembles a chink, there is a passage to the fourth stomach, termed the aqueduct of sylvius, and in this passage from the third to the fourth stomach, are certain parts, (*nates et testes*) which more decent anatomists term the four doubled little tubercles; and the pine apple gland, which Descartes* imagined to be the seat of the soul. It usually con-

* Descartes, the father of transcendant geometry, was the first who resorted to analysis, that immense step towards accurate investigation, and one much bolder than any, not excepting Newton and others, pursued after him. Had he remained here, or had this great philosopher been better acquainted with his own strength, he would most unquestionably have been the greatest man that ever lived; but like the sun that can obscure itself among the clouds which it dissipates, Descartes waded beyond his depth; he lost himself and dishonoured reason, by carrying his *speculativeness*, far beyond the horizon of either truth or probability. Addicted (like many of our great system-mongers, innovators, and hunters after needles in a pottle of hay, of the present time), to the most frivolous and wire drawn theories, he considerably retarded the progress of physic, even after having divested it of the dust of the schools. A dupe to his own opinions, which experience seldom had enlightened, he died, it may be said, a philosophical death for the want of philosophy. The pruriency of Descartes for hypothetical reasoning,

tains, besides this immortal and immaterial *Je ne sais quoi*, a quantity of hard gritty matter, which has exceedingly gravelled the disciples of our learned psychologist.

This specimen of erudite jargon respecting the brain, will, it is hoped, be fully sufficient to the general and professional reader; it may however, be added, that there is, snugly situated under the tent, a little brain, bearing the appropriate name of *cerebellum*, which, when cut in a particular direction, presents an arborescent appearance. Thence it has been called the tree of life; it likewise contains the fourth stomach, the interior part of which is called the *pen*, for a reason to us undiscoverable; we may therefore as well take it as a hint to drop that with which we are now writing, as far as regards the

or rather for hypothetical quibbling, was a death blow to medicine; since then physicians have only been employed in chimerical speculations and arbitrary explanations, believing it sublime to aspire to first causes, and Phæton-like, to lose their hold and drop into the other extreme. Descartes, it is said, died from excessive drinking of brandy, to relieve a severe shivering fit, occasioned by intense cold; on which he reasoned in the following manner: "cold condenses fluids and all other bodies—heat rarifies them; brandy consequently in this case must be a specific, let us drink." He drank largely and died. Goris however asserts that his death was occasioned by drinking his favourite rarifier, brandy, contrary to the advice of his physicians, during a hot fever, under which he obstinately refused to be blooded; under the persuasion, that like cures its like.

structure and function of this no less mysterious than important organ*.

Having now surveyed the topography of the brain, it may not be irrelevant to our subject, if we point out, or lay down certain *data*, for the direction of the heads of large families, in which, it is said, there are always one or more blockheads or boobies, how they may dispose of this species of live stock to the best advantage, and with the most credit to themselves.

CRANIOLOGICAL REFLECTIONS†, &c.

In the human system, the head is appointed as supreme governor of the other members; and upon examination we shall find that few faults happen in

* There can be no doubt that the brain, when properly developed and dissected, according to the mode of the celebrated phrenologists, Drs. Gall and Spurtzheim, might be accurately described in language intelligible to every one; that its separate parts may be appropriately and more satisfactorily explained, is equally certain; and that this may be accomplished in such a manner as to aid the student as well as the amateur in acquiring a knowledge of its topography, is clearly evident. But, to realise these very desirable advantages, we must utterly and unanimously renounce the unphilosophical, incongruous, and fantastical nomenclature, which has for ages been suffered to disgrace this important part of physical science.

† This humourous essay was written many years previous, and it is with reason supposed to have given the hint, to Alexander Stevens' lectures on heads.

this little government, when all the parts remain in due subordination to their lawful sovereign. Thus when the body indulges itself in all manner of gluttony and intemperance, the fault is not to be charged on the head or nerves, which plainly points out all the fatal consequences attending excess. I have often observed with regret, that a parent seldom examines whether his son will shine most at the bar, the pulpit, or the field: the question is, whether his interest be greater with such a general, such a bishop, such a judge, or such a member of parliament, and his son's employment is determined accordingly. It sometimes indeed happens that certain heads are born under so kind an influence of the stars, that they are equally fit for every kind of office in the nation; but it would be a false and dangerous conclusion to say so of all heads; besides, with me it is a matter of doubt, whether such universal geniuses be fit for any thing, according to a well known and trite, but profound observation. As therefore it is of the greatest consequence to the public, what kind of heads is chosen into office, some animadversion in general upon them, it is hoped, will not be thought unnecessary.

The first kind we shall mention is the mathematical head, so called as having length, breadth, and thickness; which three dimensions taken together, constitute what mathematicians call a solid. The mathematical head may properly be divided into two

sorts, the *hard heads* and the *soft heads.* Take notice that *hard* is not used here in a philosophic sense, for we verily believe it may be possible to break such a head with the blow of a hammer; it is only meant that this head being well fortified by nature, it will require more than ordinary force to make it yield inward. It is our opinion that the owners of such heads would make excellent plowmen, and good common soldiers and sailors. These heads too being already furnished with natural armour, would save the nation a considerable expense in steel caps, which circumstance only, may recommend them to the serious attention of government. This kind of head also can bear a great quantity of strong liquor, an accomplishment which has been thought necessary in swordsmen from time immemorial. It might therefore become a test of the different degrees of prowess residing in the pate, to try how much strong drink it can endure; this however we beg leave to submit to wiser judgments.

The second division of the mathematical or solid, comes under the denomination of *soft head.* Some indeed dispute the justness and propriety of this division, because, say they, this species partakes only of breadth and length, not of thickness, consequently is only a superfices not a solid, whence it is sometimes called paper skull. But all this is only a cavil, for we will be bold to say, there are no heads in nature of so extraordinary thinness. The only differ-

ence then between the hard and the soft head, is, that the latter is formed of matter more rare, and less dense than the former, though it has all the three dimensions of length, breadth and thickness, in as full perfection as the other. It is obvious however that the substance of which this head is composed, has not strength sufficient to reflect bullets; we advise therefore its owner, by all means not to take to the musket. If it be born to a fortune, it would be adviseable to turn all its talents to the improvement of dress, and make up for its natural infirmities, by the size of the perriwig, or the hat and feather, which may serve to defend its tender constitution from the invasions of the air and cold.

If the soft head have no advantage of health entailed upon it at its birth, it is our opinion, that under such circumstances, it would make a very good tailor or haberdasher. There is also ample field for it among tumblers, players, dancers, and merry andrews; but we caution against ever undertaking any thing that may require a series of reflections, from which uneasiness we pronounce the soft head to be as absolutely free as the hard.

It is also humbly submitted for the consideration of the public, whether soft heads might not be brought up in such a manner, as to serve the ladies instead of lap-dogs, monkeys, poll-parrots, or squirrels; as we are fully persuaded, that a soft head of any tolerable capacity, may be brought to play as many tricks and

frolics as any monkey or lap-dog whatever. And it is to be hoped, that the fair sex, (on an equal fund of merit, or to speak in the scholastic style, *cæteris paribus*) would receive into their service a human, in preference to an inhuman animal. If this scheme be thought practicable, we would propose an academy for the education of poor soft heads, where the richer sort (whom we suppose already accomplished in this kind of erudition, having employed their whole lives in the study of it) would certainly, in compassion to their less affluent brethren, instruct them in the art of a sure and comfortable subsistence.

We now beg leave to touch upon some of the intrinsic qualities of these two species of heads; in which there is seldom any grains of modesty, discretion, reason or judgment, to be observed; and we may affirm from experience, that we have seen both sorts read a page of Virgil, Homer, Swift, or Pope, with the same degree of taste, that at another time they have run over a page of Ogilvie, or Quarles. For this strange phenomenon we shall endeavour to give a physical reason, which, it is hoped, will be thought by the candid reader, as reasonable as many hypotheses advanced by naturalists for the solution of some wonderful effects of nature—and first of the hard head.

If we suppose the internals of a *hard head* to be formed something like those substances which reflect all the rays of the sun; it is plain, that all the fine and

subtle rays of sense darted from these authors, impinging against certain impenetrable laminæ in the cavity of the skull, (by some mistaken for brains) must be repelled with a velocity equal to that wherewith they approached; or, in other words, that the angle of reflexion, must be equal to the ray of incidence.

With regard to the *soft head*, its subject matter may likewise be conceived to have the same form in its particles, with those bodies, which transmit or give a free passage to all the rays of light, but reflect none. The nature of which bodies is to be of a dark, black, or obscure colour; they are eclipsed, if we may be allowed the expression, by too much light. If these reasons, which we trust, will be deemed satisfactory, be just, instead of hard and soft, we may with equal propriety say, *reflecting and transmitting heads.*

We shall now, as briefly as possible, drop a few observations upon round heads, and long heads.

The spherical or *round heads*, were greatly in vogue during the time of Cromwell, but for what reason we cannot presume to determine. It is probable that this form of the head was then admired, as it was most agreeable to the principles of government, prevailing at that time, which reduced all persons and things to an equality. Now as lines drawn from the centre of this head to the circumference are equal, no part of it has pre-eminence above the rest; which perhaps furnished the owners of it with the hint of

levelling in government. We know not if there be any round heads now or not; but we are credibly informed, that on the anatomy of round heads in those days, the brains were found deposited in the very centre, which consequently attracted all the gross humours in the head to them, so that no objects could pass readily through so gross a medium, but such as were of a heavy nature, and come thither with considerable velocity.

The next species is the *long head*, which ought to be of an eliptical and not of a conical figure. The *long* head has met with general approbation and applause in the world. Some scruple not to affirm, that we are indebted to this head for the invention and cultivation of all arts and sciences. This may be too bold an assertion, but there is reason, we think, to rely on this, that the long head first proved the heavenly bodies to be of an oval and not of a spherical figure; and that these orbits were elipses and not circles. Having read Plato, should we mistake his sense, we hope to be excused. He says, we think, "that the patterns of all external objects exist first in the brain, which is a kind of repository, where they all lie put up at random, on the top of one another, like so many bales of goods in a merchant's warehouse. But when the proper object of any pattern strikes on the sense, then the corresponding idea steps forth from its store-room, and stands at the door of its cell, in full dimensions."

From which doctrine we hold it demonstrable, that the long heads must have first observed the elipsis of the planet's orbits, as the two focusses existed first in its own figure. From these two fountains, we also conceive, proceeds that double portion of sense and learning which it manifests above other heads.

Having thus read through some of the forms of heads, and as it might prove too irksome to examine the inward qualifications, we should be glad to see some external shape of a head fixed on as a standard, which shall determine its capability of executing this or the other employment. Such a proceeding would also have this advantage, that fewer murmurs and complaints would then exist among the members of the commonwealth, who, if they did not succeed in their endeavours for preferment, must attach the whole blame to nature, and not upon the judgment of the disposer.

Further Craniological data, founded on the doctrine of the phren.

As the interior substance of the head or cocoa-nut shell, namely the brain, gives origin to the nerves by which the principal senses are influenced, the right ordering or adapting the sensorium to the faculties of its possessor becomes a matter no longer of secondary consideration: some craniological data, founded on the doctrine of the phren, ought necessarily to be laid down,

to direct parents in the choice of the profession in which, with every prospect in their favour, their children might most probably excel; and that in which the natural state of their nerves would also be most likely to concur. Thus, for instance, where the organ of *combativeness* is predominant, which gives a general propensity to contend, resent, or attack without determining the modes or object, the possessor being well adapted either for war or cavilling; a soldier, a logician, or a butcher, would doubtless better suit the genius of this individual than any of the more effeminate occupations. *Adhesiveness*, which produces a friendly attachment in general, would pronounce the possessor to be well adapted for a dog or a pigeon-fancier, a Whitechapel bird-catcher, a sportsman, &c. The organ of *destructiveness*, the faculty of which seems to be the propensity to destroy in general, might be equally well exercised in the useful employment of a vermin-killer, such for example, as a rat-catcher, where he might have an opportunity of rivalling, and probably of excelling the famous dog Billy; a weasel hunter, or a destroyer of caterpillars, &c. *Aquisitiveness*, the faculty which produces the tendency to acquire and to possess in general, might find an ample field for its activity in the capacity of a lepidopterist, or black-beetle catcher; and, where this faculty might be found to be too energetic, and not regulated by any of the higher sentiments,

the *adhesive* office of a *conveyancer* might find occupation for its prowess: *cæteris paribus.*

Having now laid before our readers something in the style of the *humoral pathology* of the brain and nerves, we shall proceed *seriatim*, to discuss in analytical order, those instruments whose functions are so much the common topic; and to point out the best means of remedying nervous affections, derangement of the organs of digestion, &c. from which originate many evils, which tend to render human life a burden, and the victim a common bore, and often little better than a nuisance in society.

It is frequently a much easier matter to laugh some persons into reason, than to reason them out of their follies. None are more whimsical than the sickly tribe of valetudinarians, who have, by some means or other, contracted such a fanciful and capricious habit of body, as to set defiance to all social order and medical discrimination. The system of drugging, and stimulating, as long as a spark of sensibility remains, has so completely swamped the judgment, that a line can scarcely be drawn between diseases of the body and that of the mind. To say the least of the hypochondriac crew;

> 'Their conduct, like a sick man's dreams,
> Is formed of vanity and whims.'

PART II.

DEFINITION OF HEALTH; AND EXPLANATIONS OF THE ANIMAL FUNCTIONS.

If life be defined an assemblage of all the functions, health may be called the assemblage of all the secretions, acting in harmony and equilibrium. To maintain that durable state of life, called health, a proper preparation of the fluids are the first requisite; the next the solids duly formed of these fluids; then the invigorating influence of the vital powers; last *mens sana in corpore sano*, i. e. a sound mind in a sound body.

The causes of the diversity of temperaments are very numerous; for instance, hereditary tendency, habit of body, climate, diet, religion, mode of life and luxury. Besides the variety of constitutions to which men are subject from these incidents, circumstances peculiar to every individual, influence the number, as well as the energy and vigour of the functions. In regard to age, the health of a new born infant is different from that of an adult: in regard to sex, it differs in a marriageable virgin and an old woman past child-bearing, during menstruation and suckling; in regard to mode of life, it is as different as the barbarous tribes of North America.

The more functions flourish simultaneously in the

body, the more considerable is its life; and *vice versa*. Hence life is greatest, when the functions have attained their highest perfection in adult age; and least, when the functions, although very perfect, are fewer and more sluggish; namely, in the newly conceived embryo; life is also less vigorous during the opposite state*.

The functions have long been divided into four classes. The first comprehends the vital functions, so termed, because their uninterrupted performance is necessary to life. Such are the circulation and respiration. The second comprehends the *animal* functions, by which animals are chiefly distinguished from vegetables. Such is the connexion of the mind with the body, especially sense and muscular motion. The third is the natural, by means of which the body is nourished. The fourth, the genitial, intended for the propagation of the species, &c.

A CURSORY VIEW OF THE NERVOUS SYSTEM.

"The same nerves are fashion'd to sustain,
The greatest pleasure and the greatest pain."

THE nerves, so susceptible of such varied feelings, the hobgoblin of effeminate men-milliners, debauchees, valetudinarians, and elderly maidens, are long whitish, pulpy stumps, proceeding from the brain and spinal marrow. They are plentifully distributed over the

* Blumenbach's Physiology, &c.

body, and are composed of bundles of fibres diversely ramified, constituting the organs of sensation and motion*. They are divided into trunks, branches, ramuli, capillary fibres, nervous plexuses, and ganglions or knots. From whatever part they take their origin, the nerves all terminate in some one or other of the organs of sense, the different viscera, vessels, muscles and bones. In the human body there are *thirty-nine pair of nerves;* nine pair of which belong to or arise from the brain, called the *cerebral;* and thirty pair from the spinal marrow, called the *spinal nerves.* These are all divided, subdivided, plexified, reramified, and scattered, though connected throughout the entire system, so as completely to occupy every creek, corner, and crevice of the fabric.

* It is to the experiments of MM. Gallois, Flourens, Bell, Brodie, &c. we owe the extension of our knowledge of the nervous system; the first has shewn that the different portions of the spinal marrow, form likewise centres, from which also the nervous actions of corresponding parts of the body proceed, and to which they tend. "Hence, observes Mr. Abernethey, "it is not unlikely that real disorders of the digestive organs, sometimes affect the different portions of the spinal marrow, and produce sympathetic disorders of the body and limbs, without operating through the medium of the brain as has been supposed. According to M. Flourens there are two properties essentially distinct in the nervous system: the one to excite muscular contraction, the other *to perceive* impressions, &c.

Of the cerebral nerves, connected with the organs of sense, are the *olfactory*, which arise from that part of the brain called the striated bodies, (*corpora striata*) whence they pass forwards, becoming flatter and more enlarged, sending down a number of branches, which pass through the sieve-like, or *cribriform* hole of the ethmoid bone, to be distributed in the pituitary membrane lining the inside of the nose; where they form the organ of smelling.

The odorous particles from a great variety of bodies, extremely minute and subtile, and the effluvia continually flying off from them, are the objects of the sense of smell; and which are applied to the schneiderian membrane, by drawing them in along with the air. This is done strongly, slowly, and repeatedly, when we wish to judge with accuracy by this sense; with which most animals are furnished in a greater degree of perfection than man. These nerves are liable to a want of energy, which occasions a loss of smell, and which is mostly a symptom of some other disorders.

The optic nerves. These being the organs of sight, most of the diseases to which they are liable produce blindness. The organs of sight being a kind of case, containing pellucid humour, of different density, altogether so adjusted, that the rays of light, proceeding from luminous objects, and admitted at a hole in the fore-part of the eye, are brought to a focus on its back part. Here they fall upon a soft pulpy expan-

sion of the optic nerve, called the retina, by means of which, the idea of a visible image is excited upon the brain.

The lingual nerves. These are situated at the tip and edges of the tongue, and are the chief organs of taste.

The organs of touch are the nervous papillæ of the skin, which are extremely numerous and sensible at the points of the fingers and lips, which seem endued with a peculiar sense of touch. The papillæ swell when irritated, and elevate the skin, thereby increasing the degree of sensibillity. The sense of touch is increased by education. Blind persons, it is said, have possessed the sense of feeling to such an eminent degree, as even to distinguish the variety of colours, and their different shades. Too great a sensation is moderated by the epidermis or scarf skin; it also defends the papillæ from being dried by the air.

The auditory nerves, or as they are termed, the seventh pair, originate on each side, by two branches, the hard and the soft portion (*portio dura* and *portio mollis*). The first is, in fact, a nerve of the face, and is therefore with more propriety, called the fascial nerve; it arises from the fourth ventricle of the brain, and after having proceeded and perforated various substances, and afterwards divided and waddled into seven or eight branches, constituting the goose's foot; (*pes anserinus*) it supplies the ear, parotid

gland, muscles of the face, and communicates with the branches of the fifth pair, or *nervi trigêmini*. The second, or soft portion, arises from the *medulla oblongata*, and the fourth ventricle of the brain, enters the internal auditory passage, and is distributed by innumerable branches on the membranes of the inner ear, which consists of various boney cells and winding canals, forming the immediate organ of hearing.

Nerves are the organs of our senses. Bodies applied to certain parts of our system, produce changes in those parts, which changes are conveyed in an unknown manner to the brain, by means of the nerves only, and SENSATION is produced; so that *sensation* is a property peculiar to the nervous fibre, as irritability is to the muscular fibre; and hence all sentient parts are supplied with nerves, although they cannot be detected by the eye. All impression perceived by the organs of sense, by the percipient extremities of nerves, are transmitted to one point in the cerebral substance, and it is here that the *sensorium commune* exists, considered by Descartes to be in the pineal gland; by La Peyronie to be in the (*corpus callosum*) callous body; by Richerand to be in the annular body (*corpus annularis*) as this is a confluence of the large and little brain (*cerebrum* and *cerebellum*).

The senses are distinguished into *internal* and *external*. The INTERNAL SENSES are ideas which the

sensorium commune, or mind, forms to itself, and may be produced from the external senses, or they may be excited spontaneously; such, for instance, are *memory*, *imagination*, *conscience*, the *passions of the mind*, and *reasoning*; by the superior excellence of which men differ so eminently from the brute creation. The external senses are those already mentioned; viz. smelling, seeing, tasting, touching, and hearing.

If the nerves be the cause, manner or instrument, of various painful affections, they are also those of the most delightful sensations. Tic douleureux, that excruciating pain of the face, which has been compared to "the flickering of summer lightning;" locked jaw, and universal spasm, are among those dreadful scourges to which they are subject. The most refined sensations are also produced in various ways by them, to the organs of sense; and the following history may afford some idea of the exquisite sensibility that may be communicated through one medium alone, to the whole system.

*The pleasures of titillation, experienced through the medium of the auditory nerves, &c.**

HUMAN nature, though every where the same, is so seemingly diversified by the various habits and

* Attributed to Lord Chesterfield.

customs of different countries, and so blended with the early impressions we receive from our education, that they are often confounded together, and mistaken for one another. This makes us look with astonishment upon all customs that are extremely different from our own, and we hardly allow those nations to be of the same nature with ourselves, if they are unlike in their manner; whereas all human actions may be traced up to those two great motives, the pursuit of pleasure, and the avoidance of pain; and upon a strict examination, we shall often find that those customs, which at first view, seem the most different from our own, have in reality a great analogy with them. What more particularly suggested this thought to me, was an account which a gentleman, who was lately returned from China, gave, in a company where I happened to be present, of a pleasure held in high esteem, and extremely practised by that luxurious nation. He told us that the tickling of the ears was one of the most exquisite sensations known in China; and that the delight administered to the whole frame, through this organ, could by an able and skilful tickler, be raised to whatever degree of extacy the patient should desire.

Struck with this novelty, the company expressed their surprise, as is usual on such occasions, first by a silly silence, and then by many silly questions. The account too, coming from so far as China, raised

both their wonder and their curiosity, much more than if it had come from any European country, and opened a larger field for pertinent questions. Among others, the gentleman was asked, whether the Chinese ears and fingers had the least resemblance to ours; to which having answered in the affirmative, he went on thus: "I perceive I have excited your curiosity so much by mentioning a custom unknown to you here, that I believe it will not be disagreeable, if I give you a particular account of it."

"This pleasure, strange as it may seem to you, is in China reckoned almost equal to any that the senses afford. There is not an ear in the country untickled; the ticklers have in their turn, others who tickle them, insomuch that there is a circulation of tickling through that vast empire; or if, by chance, there be some few unhappy enough not to find ticklers, or some ticklers clumsy enough, not to find business, they comfort themselves at least with self-titillation. This profession is one of the most lucrative and considerable ones in China, the most eminent performers being either handsomely requited in money, or still better rewarded by the credit and influence it gives them with the party tickled; insomuch that a man's fortune is made, as soon as he gets to be tickler to any considerable mandarin."

The conclusion of the gentleman's discourse was attended with the usual interjections of wonder and surprise from the company. Some called it strange,

some odd, and some very comical; and those who thought it the most improbable, I found by their questions, the most desirous to learn it. I observed too, that, while the recital lasted, they were most of them trying the experiment upon their own ears, but without any visible effect that I could perceive. The company soon afterwards broke up and I went home, when I could not help reflecting with some degree of wonder, at the wonder of the rest; because I could see nothing extraordinary in the power which the ear exercised in China, when I considered the extensive influence of that important organ in Europe. Here, as in China, it is the source of both pleasure and power; the manner of applying to it is only different. Here the titillation is vocal, there it is manual, but the effects are the same; and, by the bye, European ears are not always unacquainted neither with manual application. To make out the analogy I hinted at, between the Chinese and ourselves, in this particular, I will offer to my reader some instances of the sensibility and prevalency of the nerves of the ears of Great Britain.

The British ears seem to be as greedy and sensible of titillation, as the Chinese can possibly be; nor is the profession of an ear-tickler here, any way inferior, or less lucrative. There are three sorts, the private-tickler, the public-tickler, and the self-tickler. Flattery is always surest to produce vibration of the air, which affects the auditory nerves with the most

exquisite titillation; and, according to the thicker or thinner texture of those organs, the flattery must be more or less strong. This is the immediate province of the private-tickler; and his great skill consists in turning his flattery to the ear of his patient; it were endless to give instances of the influence and advantages of those artists who excel in this way.

The business of a public-tickler is to modulate his voice, dispose his matter, and enforce his arguments in such a manner, as to excite a pleasing sensation in the ears of a number or assembly of people: this is the most difficult branch of the profession, and that in which the fewest excel; but to the few who do it, it is the most lucrative and the most considerable. The bar has at present but few proficients of this sort, the pulpit none, the latter alone seems not to decline.

I must not here omit some public-ticklers, of great eminency, and whose titillative faculties must be allowed to be singly confined to the ear, I mean the Italian singers, to whom such crowds resort, for the extasy they administer through that organ, and who so liberally requite their labours, that, if they will but do them the favour to stay two or three years longer, and have six or eight benefits more, they will have nothing left but their ears to give. The self-tickler is as unhappy as contemptible; for having none of the talents necessary for tickling of others, and consequently not worthy of being tickled by others, is reduced to tickle himself: his own ears alone receive

any titillation from his own efforts. I know an eminent performer of this kind, who by being nearly related to a skilful public-tickler, would fain set up for the business himself, but has met with such repeated discouragements, that he is reduced to the mortifying resource of self-titillation, in which he commits the most horrid excesses.

Definition of some auricular phrases; and the sympathetic existence between the ear and the palm of the hand. The ear the seat of honour as well as pleasure, power, and pain. Auricular cautions to princes, nobles, and the fair sex, &c.

Besides the proofs above mentioned, of the influence of the ear in this country, many of our most common phrases and expressions, from whence the genius of a people may be collected, demonstrate, that the ear is reckoned the principal and most predominant part of our whole mechanism. As for instance—to have the ear of one's prince, is understood by every body to mean, having a good share of his authority, if not the whole; which plainly hints how that influence is acquired. To have the ear of the first minister is the next, if not an equal advantage. I am therefore not surprised, that so considerable a possession should be so frequently attempted, and so eagerly solicited, as we may always observe it is. But I must caution the person, who would make his fortune in this way, to confine his attempt strictly to

the ear of the singular number; a design upon the ears in the plural, of a first minister being for the most part rather difficult and dangerous, however great.

To give ear to a person, implies giving credit, being convinced and being guided by that person; all this by the success of his endeavours upon that prevailing organ.

To lend an ear is something less, but still intimates a willingness and tendency in the lender to be prevailed upon by a little more tickling of that part. Then the lending of an ear is a sure presage of success to a skillful tickler. For example, a person, who lends an ear to a minister, seldom fails in putting them both in his power soon afterwards; and, when a fine woman lends an ear to a lover, she shews a disposition at least, to a further and future titillation.

To be deaf, and *to stop one's ears*, are common and known expressions, to signify a total refusion and rejection of a person or proposition; in which case I have often observed the manual application to succeed by a strong vellication or rigorous percussion of the outward membranes of the ear.

There cannot be a stronger instance of the great value that has always been set upon these parts, than the constant manner of expressing the utmost and most ardent desires people can have for any thing, by saying they would "give their ears" for it; a price so great that it is seldom either paid or required.

Witness the number of people actually wearing their ears still, who in justice have long since forfeited them.

Over head and ears would be a manifest pleonasmus, the head being higher than the ears, were not the ears reckoned so much more valuable than all the rest of the head, as to make it a true climax.

It were unnecessary to mention, as farther proofs of the importance and dignity of those organs, that pulling, boxing, or cutting of the ears, are the highest insults that choleric men of honour can either give or receive; which shews that the ear is the seat of honour as well as of pleasure.

Anatomists have discovered, that there is an intimate correspondence between the palm of the hand and the ear, and that a previous application to the hand, communicates itself instantly, by the force and velocity of attraction, to the ear, and agreeably prepares that part to receive and admit of titillation. I must say too, that I have known this practised with success upon very considerable persons of both sexes.

Having thus demonstrated, by many instances, that the nerves of the ear are the most material part in the whole mechanism of our structure; and that the ear is both the seat and source of honour, power, pleasure, and pain, I cannot conclude without an earnest exhortation to all my country folks, of whatsoever rank or sex, to take the utmost care of their ears. "Guard your ears, O ye princes, for your

power is lodged in your ears! Ye nobles, for your honour lies in your ears! Guard your ears, ye fair, if you would guard your virtue. And guard your ears, all my fellow subjects, if you would guard your liberties and properties!"

Having thus taken a glance sufficient for our purpose, of the nerves, we now proceed to survey the stomach, or

> That mysterious, all-consuming, bourne,
> Whence neither beef nor pudding e'er return.

THE STOMACH AND ITS ACCOUTREMENTS.

This organ has frequently a great deal more laid to its charge than it is guilty of; for it is just as tractable as any other part of the system when well used; and is often considerably more indulgent. It possesses certainly the most exquisite sympathy, and is feelingly alive to all the injuries inflicted on any of its dependencies: but that it is either a pudding-bag, intended to be stuffed, or like a pair of saddle-bags, built for stowage, and to be crammed as full as it can hold, is a mistaken and not unfrequently a fatal notion; although, in the absence of a better simile, it may not inappropriately be likened both in an anatomical and physiological point of view, to a pair of bag-pipes, which, having an entrance and an exit for the necessary quantity of air they ought to receive and contain, without over-distending its sides beyond the natural elasticity, it submits to the functions it

has to perform with equal ease and harmony. In like manner, the stomach has its conducting tube for the aliment it is destined to hold for the nourishment of the system; so also has it its common sewer or drain, (the intestinal canal) by which all superfluous substances are carried off. By this succession of changes being regularly kept up, the health and strength of the system is maintained.

But, to proceed, the stomach is a membraneous receptacle, placed in what anatomists term the epigastric region*, or superior part of the abdomen; subject however, to variation according as it is in a state of repletion and depletion; and is capable in the adult, of holding upwards of three quarts of water. It receives the *ingesta* from the œsophagus. When empty, it is divided into an anterior and a posterior surface; a great and a little curvature; the *cardiac*, or superior opening; the *pyloric*, or inferior opening. The first, or superior opening, derives its name from being situated near the heart; the second, or inferior opening, from the latin word *pylorus*, a porter or sentinel; because it guards, as it were, the entrance of the intestines.

* The anterior part of the abdomen or belly is divided into three regions. 1. The epigastric which lies over the stomach, and whose sides are termed the hypogastric region. 2. The umbilical region, surrounding the naval, and whose sides are called the epicolic regions. 3. The hypogastric region, which lies over the urinary bladder, and whose sides are called groin.

The stomach is connected with the *œsophagus* or gullet, the duodenum, or first small intestine, the omentum, and pancreas. It is composed of three coats or membranes; and some anatomists enumerate a fourth, or nervous coat. It is supplied with arteries, veins, nerves, absorbents and glands, and is adapted in every respect to receive the *ingesta* or food from the mouth, to retain, mix, digest, and expel it into the duodenum, there to undergo the process of

Chymification, or Digestion.

The tubes—the glands*—these foremost to explain,
The muscles, these expound, and those the brain;
While others pore through microscopic glass,
And see the lymph thro' subtle strainers pass†.
From sense, not wild *hypothesis*, deduce
The structure of each vessel and its use.
Though late, Assellius' angel-eye explor'd,
Where lacteal rivulets incessant pour'd;
Through viewless ducts meand'ring, had descry'd,
This way and that, the chyly fluids glide;
Thine, now to mark—O Picquet, only thine!
Where, faithful to their course, the milky currents join:
Whence, upwards, as they flow, again they part;
Again, uniting, e'er they reach the heart.

Digestion or chymification, is that change the food undergoes in the stomach, by which it is converted

* These several discoveries in anatomy are owing to Wharton, Willis, Brown, and others, since the discovery of the circulation of the blood.

† Malpighi, who died in 1694, was the first discoverer of

into chyme. The circumstances necessary to effect a healthy digestion of food, are 1. A certain degree of heat in the stomach. 2. A free mixture of *saliva* with the food in the stomach. 3. A certain quantity of healthy gastric juice; viz. of that limpid colourless fluid so called, secreted by the exhaling vessels of the very numerous arteries which are distributed on every part of the stomach, and whose principal use it is to digest the food. 4. The natural peristaltic motion of the stomach. 5. The pressure of the contraction and relaxation of the abdominal muscles and diaphragm.

From these circumstances the particles of food are softened, dissolved, diluted and intimately mixed into a soft pap, called chyme, which passes through the pylorus or inferior aperture of the stomach, into the duodenum, or first small intestine, where the nutritious part is separated from it, and taken up by the lacteals or mouths of the absorbent vessels; by which it is carried to the receptacle of the chyle, and by means of the thoracic duct, carried into and assimilated with the blood.

the lacteal or lymphatic vessels, each of which, according to Arburthnot, is one hundred times finer than a hair. Asellius, however, was the first who described them, Anno 1622, six years before Harvey, our immortal countryman, discovered the circulation of the blood. The coats of the lacteals are so thin as to be invisible, except when distended with chyle or lymph. Picquet, a French anatomist, first discovered the receptacle of the chyle, and its passage to the thoracic duct, Anno, 1651.

Chylification.

This is the change of the chyme in the small intestines into chyle, a white fluid, which is separated from the food, and which, some hours after eating, may be observed in the lacteal vessels of the mesentery, and in the thoracic duct. It forms the blood, the basis of all the secretions.

The chyme in the duodenum is mixed with the pancreatic juice, the bile, and enteric juice, that is, the juice secreted by the glands of the intestines; from which mixture, effected by the continual peristaltic motion of the intestines, a milk-like fluid is separated, termed chyle, which is absorbed by the pendulous openings of the lacteals, and conveyed through the mesentery into the thoracic duct or trunk of all the absorbents, to be sent into and mixed with the blood, to form new blood: after the bile has effected this purpose, its oily, bitter and colouring principle.

The Machinery concerned in the Process of Digestion, &c.

Digestion and indigestion are subjects of as much gossip and complaint as the nerves. Every little uneasiness is attributed to the hobgoblin indigestion, and *probably* with much *probability*, though indigestion is always more an effect than a cause of disease; consequently the cure of indigestion ought to

commence by removing the cause, without which, as a matter of moral certainty, the effect cannot be expected to cease. Before, however, any one can comprehend the manner in which digestion is performed, some knowledge of the apparatus by which this marvellous process is effected, ought to be acquired.

The digestive apparatus, or that animal machinery by which the conversion of our aliment into nutriment is effected, may be represented as a long tube diversely contorted upon itself, wide at certain points, narrow at others; susceptible of becoming wide and narrow, and into which are poured a great quantity of fluids, by means of particular ducts. Anatomically, the digestive canal, six times longer than the body, in the abdomen, is divided into several portions, viz. the mouth, pharynx, the gullet, the stomach, the small intestines, the large intestines, and the anus.

The small intestines, in the order of their succession from the stomach, are the duodenum, jejunum and ilium. The first commences at the pyloric opening of the stomach, snd is about twelve fingers breadth in length; and has an oblique perforation in its middle, which is the opening common to the pancreatic duct, and *ductus communis choledochus*, or common choledoch duct, the first of which carries the pancreatic juices, from the pancreas; the second, the bile, from the gall-bladder, to mix with the chyle. The jejunum constitutes the first half from the duodenum, the other half is ileum. The large intestines

are distinguished into the cæcum or blind gut, which lies upon the right hip, over the internal iliac muscle; the small intestine called the ilium, opens obliquely into it in such a manner as to form a valve to impede the return of the fæces. The ascending portion of the first large intestine is the colon; it proceeds towards the liver by the name of the *ascending portion* of the colon; and, having reached the liver, forms a transverse arch across to the other side; it then descends, forming what is termed the sigmoid flexure of the colon, where the gut is termed the rectum, which terminates in the anus.

The intestines are connected with the mesentery, a membranous production, formed of two layers of the peritoneum, (between which are a quantity of cellular or fatty membrane, numerous glands, lacteals, lymphatics, arteries, veins, and nerves), the os cocygis, (or bone, at the bottom of the spine) and the urinary bladder; and in women with the vagina.

The intestinal canal throughout its whole extent, is formed of two membraneous coats. The inner one, which is destined to be in contact with the aliment, consists of a *mucous membrane*, the appearance and structure of which vary in each of its portions, so that it is no longer the same at the pharynx or upper part of the gullet, as at the mouth; nor at the stomach, as at the gullet or œsophagus, &c. At the hips and anus, this membrane is lost in the skin. The second coat of this intestinal canal is *muscular*, and

is composed of two layers of fibres, a longitudinal and a circular one. The arrangement, thickness, and the nature of these fibres differ in proportion, as are observed in the mouth, the large intestines, &c.

A great number of blood-vessels, open into or commence from the intestinal canal; but the abdominal portion receives an infinitely greater number than that part which is above it. In the latter none are met with, except such as are necessary to its nutrition, and the inconsiderable secretion of which it is the seat; whilst the number and size of the vessels which belong to the abdominal portion, indicate that it is the agent of a very considerable secretion. The chylifercous vessels, or the vessels which carry the chyle or nutritious fluid separated from our aliment, to the thoracic duct, to be mixed and assimilated with the blood, take their origin exclusively from the intestinal canal.

With respect to the nerves in the digestive canal, they are distributed in the inverse order of its vessels; that is, the cephalic, cervical and pectoral parts receive a great many more than the abdominal portion, with the exception of the stomach, where the two nerves of the eighth pair are terminated. The remaining portion of the canal receives scarcely any of the cerebral nerves. The only nerves observed there, proceed from the sub-diaphramatic ganglions of the great sympathetic.

The bodies which pour fluids into the digestive

canal, are, 1st the digestive *mucous membrane* itself, with which the aliment is in contact; 2d some of the *isolated follicles*, which are spread in great number throughout its whole extent. 3d The *conglomerated follicles* which meet each other at the *isthmus faucium*, or that part of the fauces which lies between the mouth and the gullet, which, in the fanciful peregrinations of anatomists, is said to resemble an isthmus of land, between the pillars of the *velum pendulum palati*, or soft palate of the mouth, and sometimes at the junction of the œsophagus with the stomach; 4th The *mucous glands*, which are found in greater or less number in the internal part of the cheeks, the arch of the palate, and round the gullet. 5th The parotid, sub-maxillary and sub-lingual glands, which secrete the saliva into the mouth. The liver and pancreas, pour the bile and pancreatic juice into the duodenum. All the digestive organs contained in the abdominal cavity are immediately covered in a manner more or less perfect by the serous* membrane, called the *peritoneum*, which serves to contain and strengthen the abdominal viscera, and to exhale a vapour to lubricate them.

* Membranes are divided into mucous and serous; the one secreting mucous, the other serum.

FORMATION OF THE BLOOD.

SANGUIFICATION, or formation of the blood, appears to be nothing more then the mixing, by the action of the blood-vessels, of the chyle with the blood; for as it passes from the subclavian vein into which it is poured by the thoracic duct, (which is formed by all the absorbents forming into one trunk, commencing from an oval reservoir or membraneous bag, called the *receptacle of the chyle,* lying on the body of the first lumber vertebra, behind the right crus of the diaphragm, formed by the junction of the lymphatics* of the lower extremities and lacteals), it changes its colour, and when it has reached the heart, cannot be distinguished from the mass of circulating fluids.

THE BILE, ITS PROPERTIES, &c. VULGAR NOTIONS ENTERTAINED CONCERNING IT, &c. BILIOUS COMPLAINTS, ANOTHER PEST OF SOCIETY, &c.

THE bile is secreted by the liver, the largest as well as the heaviest of all the viscera, especially in

* The absorbent system consists of very thin pellucid vessels, which carry the lymph from every part of the body; substances applied to the surface of the body, and the chyle from the intestines, into the thoracic duct. These vessels are divided into *lacteals* and *lymphatic.* They are called *lacteals* in the intestines and mesentery; and lymphatic in every other part.

the fœtus, in which its size is inversely as the age. The importance of this organ is manifested, both by its immense supply of blood vessels, and their extraordinary distribution, as well as by its universal existence. It is no less common to all red-blooded animals, than the heart itself.

The bile flows slowly and regularly along the hepatic duct. The greater portion runs constantly through the common choledoch duct, into the duodenum, or first small intestine, but some passes from the hepatic into the cystic duct, and is received into the gall-bladder, where it remains for a short period, and acquires the name of cystic bile*.

The bile which has passed into the gall-bladder, is retained until, from the reclined or supine posture of the body, it flows down from it spontaneously, or is squeezed out by the pressure of the neighbouring jejunum or ileum ; (the second and third small intestine), or of the colon (first large intestine), when distended with fæces. The pressure of stimuli in the duodenum may drive the bile in that direction.

The important and various uses of the bile in chylification, are first, to precipitate the fæces, and separate the milky chyle from the mixed and equally pultaceous chyme, propelled from the stomach into the duodenum, and diluted by the pancreatic juice.

* In cows and other brutes, there are peculiar hypatocystic ducts, which convey the bile directly from the liver to the gall-bladder.

The bile separates itself into two portions, the one serous the other resinous. The latter combines with the fæces, tinges them, and is discharged with them; the former is probably mixed with the chyle, and carried back to the blood.

What are usually termed biliary complaints are as prevalent as nervous affections, and indigestion. A bilious complaint; a nervous disease and dyspepsy or indigestion, are universal epidemics; although from their ambiguous nomenclature it would be no difficult matter to trace them all to one common cause. These names constitute one of the most excellent nosological abridgements extant. They are in the mouth of every quack and pseudo-practitioner. An anti-bilious pill, so termed, to work off the bile; a dinner pill to create an appetite; and a tonic to brace up the nerves, constitute the *ne plus ultra* of the modern practice of physic.

The bile was never intended by the laws of the animal economy, to become a tenant, either at will or by any other arrangement in the stomach. It flows from the gall-bladder, which is situated in and adheres to the concave surface of the liver, into the duodenum for the purposes above specified; and it is as little likely to get thence into the stomach, as the substance with which it combines; and only then, if at all, by the same means; namely, by violent vomiting efforts so as to overcome the opposition of the pyloric valve.

What then are commonly called bilious complaints, are disordered states of the stomach; and have the same origin; and admit of the same remedial means as indigestion and other nervous *vagaries*.

THE PANCREATIC JUICE.

The pancreas, a glandular body, of a long figure, compared to a dog's tongue, and situated in the epigastric region under the stomach. The pancreatic duct perforates the duodenum with the common choledoch duct, and conveys its secretion, a humour similar to saliva, into the same canal.

The excretion of the pancreatic juice is augmented by the same causes which affect the saliva; viz. by pressure and stimuli. By the former it is emulged, whenever the stomach, in a state of repletion, is incumbent upon the pancreas. Its use is to assist in the formation of the chyle, or that fluid into which the nutritive particles of our aliment are converted. It is of a limpid colour.

EXPLANATION OF THE FUNCTION OF SECRETION: ITS DUE PERFORMANCE CONNECTED WITH GENERAL HEALTH, &c.

From whatever cause the function of secretion may be arrested, constitutional derangement, more or less, is the consequence; and thus it continues, is exacerbated or diminished, in proportion, as the

secretions are restored to their healthy actions, and *vice versa*.

The function of secretion in an animal body, is that process by which a fluid is separated from the blood, though different in its properties from blood.

The organs which secrete the various humours are the glands; and the proximate or immediate cause of secretion is a specific action of the arteries of these glands; for every secretion is formed from the extremities of arteries. The secretion of the bile is no exception to this law, for the vena portæ, or great vein, which carries the blood from the abdominal viscera, (the spleen mysentery and stomach), into the liver, takes upon itself the function of an artery; thus the mucous glands secrete *mucus;* the salival glands, as the parotid submaxillary, and sublingual, *saliva* or spittle; the pencilli of the liver, viz. the innumerable branches into which the vena portæ is divided after it enters the liver, thus named from their arrangement resembling a hair pencil; the cryptæ, or convolutions of the renal artery upon itself, of the kidneys, which are beautifully ramified in the substance of this organ, *urine;* the glands of the breast secrete the milk in women, &c.

The secreted fluids are the proper stimuli to the receptacles and ducts, through which the secretion is to pass to its place of destination; so that the secretions move along the secretory ducts by means of the contractility of the coats of the ducts, and the

assistance of neighbouring moving powers. Hence the necessity of a healthy secretion to the regular performance of every function connected with the animal economy.

Recapitulation of the natural functions of the Digestive Organs, &c.

From the preceding observations, it will be seen that the changes which the food undergoes in the digestive organs of the more complicated animal, bipeds as well as quadrupeds, are three-fold; and distinct organs are allotted to each of the three processes. Digestion takes place in the stomach; chylification in the small intestines: and a third process, hitherto undenominated, is performed in the large intestines. It is probable therefore, that, in some cases, one set of organs may be more disordered than the others, consequently one of the above-mentioned processes may fail more than the rest. For instance, the stomach may digest the food in a healthy manner, although the intestines do not perform their share of the changes which they ought to effect. The food is converted in the stomach into a vicid semi-transparent substance, called chyme; and that the change is produced by the agency of the gastric juice, secreted, that is, furnished from the blood, like every other secretion, by the exhaling vessels of the very numerous arteries strewed over every part of the stomach,

is a point as well ascertained as any in physiology*. In a state of health this conversion takes place without any appearance of that rational decomposition which animal and vegetable matter would ordinarily undergo in a warm and moist place. When, however, digestion is imperfect, gaseous fluids are extricated from the alimentary matter. Vegetable food becomes acid, and oils becomes rancid. Uneasy sensations are also felt, and undigested aliment may be observed in the fæces.

A disordered state of secretion, either as to quantity or quality, will be the natural effect of irritation of a secreting organ. This is evidently the case with the tongue; and we may, with great probability, con-

* It is the opinion of modern physiologists, that the gastric juice is the agent by which digestion is affected; but they are by no means so unanimous as to the immediate cause of chylification. It is not improbable, that the intestinal juice is a principal agent in this process, although its qualities have not yet been enquired into; for, indeed, the investigation would be attended with almost insuperable difficulties. Since the bile and pancreatic liquor are poured into the intestines, at a small distance from the stomach, it is natural to consider these fluids as useful in effecting the change which the alimentary matter undergoes in the small intestines, namely, its conversion into chyle. The chyme or aliment digested by the stomach, being rancid, the pancreatic juice has been considered as an useful and necessary diluent, and perhaps this fluid may have other properties with which we are unacquainted. *See Abernethy, on The Constitutional Origin and Treatment of Local Diseases.* p. 31.

jecture that the same consequence also takes place in the stomach. As likewise the juices of the stomach are the immediate agents of digestion, that *viscus* must be disturbed in proportion as its secretions are deficient or vitiated. If undigested matter pass from the stomach into the intestines, it can scarcely be supposed that these powers are capable of converting it into chyle; and it may become irritating to those organs in consequence of the chymical changes which it may then undergo. When digestion is imperfect, animal and vegetable substances experience considerable chymical changes, before they leave the stomach; and similar changes may continue to take place during the time they are detained in the bowels, unless counteracted by the powers of the digestive organs; powers which seem chiefly to belong to the fluids, which are secreted into them*.

Indigestion, its causes, symptoms, treatment, &c.

Organs in the animal economy, cannot long be so deranged as to produce vitiated secretions, without at the same time, giving rise to other deviations from health. The debility of stomach which prevents a due secretion of gastric juice, must at length produce some of those other effects, which are witnessed in disorders of this organ. The symptoms which arise

* *Vide* Abernethy on The Constitutional Origin and Treatment of Local Diseases, &c. p. 27.

immediately from undigested food, exist in various degrees in different cases. People frequently complain of a sense of distention after eating, of flatulent and acid eructations, who, notwithstanding, enjoy good general health; and find that even these symptoms may be prevented by taking less food, and that of a more digestable quality. If they are prudent in this respect, and the constitution is otherwise sound, and not exposed to the effects of indolence and other causes, weakening the nervous system, the stomach will often recover its powers without further means*.

Among the causes of indigestion, may be enumerated every thing which tends to weaken the system generally, or the stomach in particular; for instance, narcotics, as opium, taken in immoderate quantity, spirituous liquors, and excessive venery, are the most frequent causes; tea, tobacco, &c. the frequent use of warm relaxing liquors; sedentary and studious occupations; imperfect mastication of the food; certain depressing affections of the mind; a diet of a too flatulent and fariaceous nature; over-loading the stomach; exposure to moist and cold air; long watching; want of sleep, besides a variety of other causes, depending on local and general disease. Intense thought; want of exercise, &c.

The symptoms of indigestion, are loss of appetite; nausea, vomiting, flatulence, eructations, rumination,

* See Wilson Phillip, on Indigestion, &c.

heartburn, pain of the stomach, at least having some or more of these at once; mostly with costiveness; and recovering without disease of the stomach or other parts.

The treatment of indigestion, must be commenced by avoiding the causes, whatever these may be, which occasion it. If it arise from the excessive use of spirituous or fermented liquors, smoking tobacco, irregular hours, want of sleep, eating crude indigestible substances, or excesses of any other kinds, the patient need not expect any benefit from medicine, until these bad habits are corrected. Medical treatment must follow, not precede, physical and moral propriety; and it is to the want of this natural and necessary arrangement of cause and effect, that so many *miserables* are disappointed in the delusive hope they so fondly cherish of again enjoying health.

Out of the above cause, arise the *vapours*, *hypochondriasm*, or lowness of spirits, the *doldrums*, the *fidgets*, the *fantods*, the *horrors*, the *blue-devils*, with their concomitant paraphernalia, and consequent disease. In like manner when indigestion is a consequence of local disease, the primary affections must be attended to.

To remove crudites from the stomach, gentle emetics of ipecacuanha may be prescribed; morbid acidity* may be corrected by the interposition of alkalies

* For a prescription in heartburn depending upon acidity in the stomach, &c. See Appendix.

and absorbents, alone or combined with laxatives. When the fæces are of an unhealthy clayey colour, calomel, in the form of Plummer's pill, or the blue pill, in small doses, may be administered, with the occasional use of some gentle aperient. To restore the tone of the stomach and intestines, vegetable bitters, as infusion of quassia, columba, gentian, &c. Tonics combined with aromatics, air, exercise, the flesh-brush, or coarse towel, the cold bath; attention to regimen, by not overloading the stomach, carefully avoiding the more undigestible and flatulent vegetables; too free indulgence in malt liquors; substituting for them soda-water, toast and water, balm or ginger-beer, &c. when thirst requires such diluents. Brandy and water, madeira and sherry, used in moderation, are also beneficial, as cordial and strengthening beverages, but it requires sometimes more than ordinary stoicism, to limit the quantity of such generous luxuries to the just medium necessary to a state of convalescence.

The internal use of the Buxton waters, a warm mineral spring in Derbyshire, has been found to be of considerable service in symptoms of defective digestion of the alimentary organs. A recourse to this remedy will often relieve the heartburn, flatulency, and sickness; it will increase the appetite, animate the spirits, and improve the health. The dose is two thirds of a pint before breakfast. The first use of these waters are apt to occasion diarrhœa,

which, however, is rather salutary than detrimental; but costiveness is a more usual effect, especially in sluggish habits*.

Investigating the treatment of the disorders of the digestive organs, it is necessary to ascertain not only what medicines are beneficial, but also what change they produce in the circumstances of the disorder. The administration of a medicine may in one case be succeeded by a discharge of bile, and a striking relief from long continued and distressful feelings; yet the same medicine may be given in many other instances, without producing the same effects. To what then are such changes to be attributed.

"I have generally explained to the patients," observes an author† already quoted, "the objects I had in view, in correcting disorders of the digestive organs, by saying, that there are three things which I consider as right and necessary to the cure of disorders. *First*, that the stomach should thoroughly digest all the food that is put into it. The patient perceiving the necessity of this end, becomes attentive to his diet, and observes the effect which the quantity and quality of his food and medicine have upon his feelings, and the apparent powers of his stomach. *Secondly*, that the residue of the food

* See "Natural and Medical Dietetion, or Practical Rules for Eating and Drinking," &c. By Mr. Forsyth, p. 327.

† Mr. J. Abernethy, p. 98.

should be daily discharged from the bowels; here too, the patient, apprized of the design, notes what kind and dose of purgative medicine best effect the intention; and whether it answers better if taken at once, or at intervals. *Thirdly*, that the secretion of bile should be right, both with respect to quantity and quality. In cases where the secretion of bile has been for a long time deficient or faulty, I recommend, as I have said, irritating and undebilitating doses of mercury*, to be taken every second or third night, till the stools become of the wet rhubarb colour; that is, of a deep brown formed by the intensity of the yellow colour."

This mode, it is observed, of exhibiting the medicine, has at least the advantage of being innocent; and if months elapse before the object is accomplished, we cannot wonder at the tardiness of the cure, when we consider the probable duration of the disorder prior to our attempts to correct it. The patient is relieved in proportion as the end is accomplished, which feeling induces him to persevere in such innocent measures. This plan, in short, which also includes the following suggestion relative to air, exercise and diet, is so simple and apparently so inefficient, that its power might reasonably be doubted, did not facts attest its utility.

* From three to five grain of the blue pill. See Appendix.

The advantage of pure air and exercise in nervous disorders, and in those of the digestive organs, &c.

Nervous patients, whenever circumstances will permit them, should take as much exercise, short of fatigue, as they can; live much in the open air, and to prevent as much as possible, their mind from being agitated by anxiety, or exhausted by exertion.

The advantages of exercise in nervous disorders upon which those of the digestive organs in general so greatly depend, are sufficiently apparent. It were to be wished that some criterion or index existed to denote the strength and irritability of the nervous system, serving as the pulse does with regard to the sanguierous organ. It is probable the strength, agility, and indefatigability of the muscles, may be regarded as the surest evidence of energy, of nervous power and bodily vigour. If this however was admitted, it would follow that many persons, possessing great nervous power, have nevertheless great nervous irritability.

Many who are excessively irritable and hypochondriacal, and are constantly obliged to take medicines to regulate their bowels, whilst they live an inactive life, soon get clear of their nervous irritation, or they require aperient medicines, when they use exercise to a degree that would be immoderate in ordinary constitutions. The conclusions that may have been

drawn, is that nervous tranquility is restored in consequence of the redundant energy becoming exhausted by its proper channels, the muscles. On the contrary, when the nervous system is weak and irritable, exercise is equally beneficial; though some caution may be requisite as to the extent in which it may be indulged. A weak and irritable patient may not be able to walk more than half a mile without nearly fainting with fatigue on the first day of the experiment; but by persevering in the effort, he will be able to undergo considerable muscular exertion without fatigue. This certainly does imply a considerable increase of bodily strength, the acquisition of which is the principal object aimed at in the cure of disorders. The nervous irritability, in like manner, will proportionably diminish with its cause. In the latter case, the nervous energy seems to be augmented in consequence of the demand for it being encreased.

ADDISON* ON EXERCISE, &c.

On the subject of exercise, so conducive and so generally admitted as not only essential but indispensable to the health of the body as well as the mind, the opinions and observations of all ages may be brought forward in its support. The elegant and eloquent Addison, speaking of its importance, observes:

"I consider the body as a system of tubes and

* See Spectator, vol. I. p. 37.

glands, or to use a more rustic phrase, a bundle of pipes and strainers, fitted to one another in so wonderful a manner, as to make a proper engine for the soul to work upon. This description does not only comprehend the bowels, bones, tendons, veins, nerves, and arteries, but every muscle and every ligature, which is a composition of fibres, that are so many imperceptible tubes or pipes, interwoven on all sides with invisible glands or strainers."

This general outline of the human body, without considering it in the niceties of anatomy, points out to us how absolutely necessary exercise is for the right preservation of it. There must be frequent motions and agitations, to mix, digest and separate the juices contained in it, as well as to clear and cleanse that infinitude of pipes and strainers of which it is composed, and to give their solid parts a more firm and lasting tone. Labour or exercise ferments the humours, casts them into their proper channels, throws off redundancies, and helps nature in those secret distributions, without which the body cannot subsist in its vigour, nor the soul act with cheerfulness. It keeps the understanding clear, the imagination untroubled, by refining those spirits that are necessary for the proper exertion of our intellectual faculties, during the present laws of unison between soul and body.

It is, in fact, to the neglect of exercise that must be ascribed the spleen, and a variety of similar complaints

to which the flesh is heir to; particularly that species of *doldrums*, nervishness, and irritability of temper which men of studious and sedentary habits, are so apt to acquire; as well as that no less squeamishness and fretfulness of disposition called the vapours, to which those of the other sex are so often subject.

Had exercise not been absolutely necessary for our well-being, nature would not have made the body so proper for it, by giving such activity to the limbs, and such pliancy to every part as necessarily produce those compressions, extensions, contorsions, dilatations, and all other kinds of motions necessary to the preservation of such a system of tubes and glands as before mentioned. And that inducements might not be wanting to engage us in such an exercise of the body as is proper for its welfare, it is so ordered, that nothing valuable can be procured without it. Not to mention riches and honour, even food and raiment are not to be come at without the toil of the hands and the sweat of the brow. Providence furnishes materials, but expects that we should work them up ourselves. The earth must be laboured before it gives its encrease, and when it is forced into its several products, how many hands must they pass through before they are fit for use? manufactures, trade and agriculture, naturally employ more than nineteen parts in twenty of the species; and, as respects those who are not obliged to labour, by the condition in which they are born, they are more mise-

rable than the rest of mankind, unless they indulge themselves in that voluntary labour, which goes by the name of exercise.

OBSERVATIONS ON MR. ABERNETHY'S RULES FOR TAKING EXERCISE, &c.

Mr. ABERNETHY, who justly conceives that exercise is not employed as a medical agent, to the extent that its efficacy seems to deserve; and who of its medical effects, as is well known, entertains the highest opinion, prescribes the following rather questionable rules for his patients; whom, we presume, he must, from a species of animal analogy, consider very much in the light of stage-horses.

"They should rise," says he, "early when their powers have been refreshed by sleep, and actively exercise themselves in the open air till they feel a slight degree of fatigue; they should rest one hour, then breakfast, and rest three hours, in order that the energies of the constitution should be concentered in the work of digestion; then taking active exercise again for two hours, rest one; then taking their dinner they should rest for three hours, exercise two, rest one, and take their slight meal. The state of the weather need present no objection to the prosecution of measures so essential to health, since it is in the power of every one to protect themselves from cold by clothing; independent of this, exercise may be taken in a chamber, with the windows thrown open, by walking

actively backwards and forwards, as sailors do on ship-board;" that is, trotting up and down stairs, or playing Tom Cox's traverse, out of one room into another.

People are also cautioned against sleeping too much, as it is a cause of gout and other chronic disorders. Waking, undisturbed from sleep, indicates that the bodily powers are refreshed. Many persons upon first waking, feel alert and disposed to rise, when, upon taking a second nap, they become lethargic, can scarcely be awakened, and feel oppressed and indisposed to exertion for some time after they have arisen.

When nervous disorders, which are invariably complicated with those of the digestive organs, and are often mistaken for them, are long continued, they do not admit of a speedy cure; hence, attention to diet, air, exercise, and mental tranquillity, are more decidedly beneficial than medicines. And it is well authenticated, that patients labouring under the irritation of a local disease, who can scarcely either eat or sleep in town, recover their appetite and digestion, and sleep so soundly, on their removal to the country, as to leave no room for doubting, that the change of air has produced this beneficial alteration in their health. But this does not prove the case in all instances; in the majority of cases, neither change of air, nor change of diet, will do any good; and frequently also they do harm. Sleep nevertheless is a

branch of the restorative principle; it is indispensable to life; and may without injury be shortened by habit.

Let it be further observed, that "he who concocts and digests well, will be long lived; concoction is performed during rest and sleep, and digestion by watching and exercise. From eating comes sleep, from sleep, digestion; and from digestion a good perspiration;" but unusual, watching, may be rendered heavier, if the food with which it is nourished be difficult to perspire.

What are termed bilious constitutions are very much hurt by too much sleep, which can only be explained by the want of exercise, and irregular digestion; which chokes up as it were, the perspiratory functions, and exposes the head and bowels to be affected by the retention of superfluous excrement. As an incentive to health, exercise gives vigour and strength, consequently ought never to be disregarded where it can conveniently be adopted; but, if exercise conduces to throw off all superfluities in the system, temperance in diet prevents their accumulation, and renders it less necessary; if exercise clears the vessels, temperance neither satiates nor overstrains them; if exercise raises the proper ferments in the humours, and promotes a salutary state of the circulation, temperance gives nature her full scope, and enables her to exert herself with all her force and

vigour: and if exercise dissipates a growing distemper, temperance starves it*.

Digestion and Indigestion, often bug-bears; examination of food: the absurdity of talking about quantity, quality, &c. Genuine gastronomical directions to promote easy and perfect digestion, &c.

As well might general rules be laid down for every man to travel by, as to think of regulating diet according to general plans or systems. The remedy doubtless would be worse than the disease. The man therefore, who will not eat when he is hungry, but waits an hour longer for a dinner or any other meal, deserves to lose his appetite for his pains.

As regards the quantity of food, this will mostly be regulated by the appetite, which cloys in proportion as the containing medium fills; and the man who neither knows nor cares when he has eaten enough, will be little benefited by any instruction. The quality of food will also be considerably regulated by the appetite, and the means of procuring one description of aliment in preference to another; not forgetting the facility or difficulty with which it may be obtained. The mode of preparing food, will, in like manner, depend as much on convenience as upon taste. But the most difficult and perplexing circumstance, frequently connected with the process of digestion, is

* "Natural and Medical Dietetion," &c. Introduction, p. iv.

the means of procuring any quantity or quality of food. This is the grand consideration with the majority of people; and to those in good health, there are no rules like nature's—that is to say, eat, drink, and sleep, as she dictates, if you have the means, and nothing particular interposes, between these restoratives and her cravings.

A healthy stomach, so far from submitting to rules, would spurn them with contempt. To talk about the digestive organs of a man in health, digesting this or that substance, we laugh at such nonsensical notions. The healthy stomach knows no distinctions, and, with the exception of the duration of the process, which is the only difference, it is as capable of digesting a cobler's lapstone*, as it is a red potatoe.

A debilitated or morbid state of the stomach, in consequence of long continued intemperance, local or general disease, &c. may have its powers diminished often so considerably below the standard of health, as frequently to require some little nicety in the selection and preparation of food; but the man in health must be an epicure, more or less, who diverges beyond the simplest mode of cookery in the gratification of his palate, or in the choice of his nutriment.

A sensible writer† observes, that "the diet of a human creature, full grown, and in the state of man-

* *See* Paulian's Dictionaire Physique, for the history of a true Lithophagus, or stone-eater.

† See Arbuthnot concerning the nature of aliments.

hood, ought to be solid, with a sufficient degree of tenacity, without acrimony, their chief drink cold water; because, in such a state, it has its own natural spirit and air, (which heat destroys), with a quantity of fermented liquors, proportioned to their natural constitutions.

"The solidity, quantity, and strength of the aliment is to be proportioned to the labour or quantity of muscular motion, which, in youth, is greater than any other age, on which account, a strong and solid diet would seem to be indicated. But as their age is still in a state of accretion, the diet ought still to be emollient and relaxing, copious and without acrimony.

"Infancy and childhood demand such copious nourishing aliment, as lengthens their fibres, without breaking or hardning, because of their weakness and state of accretion. Milk has all these qualities.

A variety of the most equivocal experiments have been made to prove individual facts on the subject of digestion, few of which, though many of them revolting to nature, have proved conspicuously useful. Among these are a number of useless essays on digestion, or rather on the powers of the stomach in preparing the food for the purposes of nutrition. Dogs and cats without number have been sacrificed to ascertain a mere nothing—and their guts and garbage uselessly ransacked, to ascertain whether beef, pork,

mutton, veal, gristle, sinew, bone and fat, were easiest of digestion. But admitting that pork be more easily digested than anyof the other named substances in a dog's stomach, by analogy in a man's, does it not equally prove, that that food which the stomach most easily digests, requires most frequently to be replenished? and that were such rapid digestion uniformly effected, either indigestion from continued exertion, or a morbid fatness or obesity would be the inevitable consequence. But it does not follow that the food easiest of digestion, is on that account the most nutritive; although that which is most easily and rapidly digested, may accord best with the intention of nature. Instead therefore of butchering dogs and cats in cold blood to ascertain, after a given time, the particular power of digestion that takes place in different kinds of animal food, would it not be more humane, and the experiment more decisive, to take a number of dogs, of equal species and magnitude, (if the same number of half-starved fellow-creatures would not answer the same purpose), and feed them for three or six months, one upon pork, another upon mutton, the third on beef, and the fourth upon veal, and so on? would it not be visible by the end of this, or a less degree of time, which of these animals was in the best condition? consequently the particular food it was fed with, by analogy, might be considered the most nutritive, the most healthy to the human species.

The stomach has gone through such a variety of metamorphoses in the hands of different digesting gentlemen, that it has been assimilated by them to every thing but what it actually is. It has occasionally been converted into a grinding-mill; a common digester for making soup; a brewer's vat, or a fermenting tub, &c. We can however assure the less informed, that digestion does in no way resemble any chymical process; for digestion alters all kinds of vegetables and animal substances in their original structure, and a third sort of homogenous matter is the result; viz. chyle, which resembles neither the one nor the other of these, before they are converted into nourishment for the body; and this change in their natural properties takes place, in these different substances, at the same time, which never occurs in any chymical process. (*See Chylification, &c.* p. 53.)

In a word then, as regards food, that quality of it, generally speaking, is the best and most conducive to health, which is most simple, purest and most free from irritating properties, and such as approaches nearest to the nature of our bodies when in a state of health, or which admits of being more easily converted or assimilated into their substances by the powers of life, after it has been duly prepared by the art of cookery, although at times it is quite superfluous to be over nice even on this point; and viewing the subject on a comprehensive scale, there is much reason to suppose that there is scarcely a substance,

animal, vegetable, or mineral, that does not in some manner or other contain the basis from which some animal is capable of extracting nutriment.

Mistaken notions relative to food.

People are tutored by theorists, and experimenters who imagine that one person requires an animal diet, and another, whose avocation and habits are different, a vegetable regimen. Many of the diseases originating in symptomatic indigestion, the great epidemic of the northern nations, are all induced by a habit of living too exclusively upon a few articles of food, most of which are animal. Nature intended that men should subsist upon the various bounties with which she has so liberally replenished the earth, and constituted his system in a manner suitable to partake, almost indiscriminately, of whatever is agreeable to his palate; and the injurious effects of many articles of diet are to be attributed, not so much to their peculiar nature, as to the refinements of cookery. Animal food most unquestionably contains a larger proportion of nutriment, in a given quantity, than vegetables; and in a proper state of preparation, it is almost adapted for the immediate action of the absorbents, in what are termed the *chylopoietic viscera*, or small intestines; but the digestive functions in the human system, become prematurely exhausted by constant action, and the whole system eventually sinks under great or uninterrupted excitement. It is

no less true, however, that a much smaller quantity of animal food will suffice with a larger proportion of vegetables. If plain animal food were taken but once a day, and even were it occasionally omitted, and wholesome vegetables and pure water, or a weak fermented beverage, substituted for the various ragouts, and the more deleterious potions of distilled liquors, with which modern tables are so abundantly supplied, we should see health walking in the very path which is daily crowded with the bloated victims of voluptuous appetite; but as appropriately expressed in the following lines;

"Not long before the flood had left the face of earth,
And lost mankind received a second birth,
Ere lux'ry rose—with sickness in her train,—
And all the frightful family of pain;
Nature's spare *wants* forsook the homely board,
With mad profusion, see each table stor'd;
Invention labour'd to debauch the treat,
And whet the jaded appetite to eat;
Intoxicating wines, henceforth, began
To inflame the blood, not cheer the heart of man;
Hence *gout* and *stone* afflict the human race,
Hence lazy *jaundice*, with her saffron face,
Palsy, with shaking head, and tott'ring knees,
And bloated *dropsy*, the staunch sot's disease!
Consumption pale, with keen but hollow eye,
And sharpen'd feature, shew'd that death was nigh;
The feeble offspring curse their crazy sires,
And tainted from his birth the youth expires.

Millions of Gentoos have lived to an advanced age,

without having tasted of any thing that ever possessed life; and have been wholly free from a chain of maladies, which have scourged every civilized nation in the globe; and Sir R-ch-d Ph-ll-ps, who is said to be a species of Gentoo, though we apprehend not a very rigid one, in diet, looks as ruddy as a ploughman, is actually as fat as a porpoise, and is never in a *panic* but when the "true secret of British wealth and strength," will not be taught by his "golden rules for bankers." To be brief, the wandering Arabs, who have traversed the barren deserts of Sahara, subsisting on the scanty pittance of milk from the half-famished camel that carries them, have seen two hundred years roll round them, without a day of sickness.

WHAT ARE THE BEST MEANS OF PROMOTING DIGESTION? &c.

DIGESTION, it is said, is best promoted by preserving the body quiet after a meal, "after dinner set a while," &c.; this we are in a great measure taught to observe, by many of the brute creation, who lie down after a feeding, "*Natura omnia animalia à pastu quiescere docuit**," says Haller; but among many the dinner hour interferes with such a custom; and then we have the opposite proofs of digestion being, apparently, equally as beneficially carried on among the labouring people, who immediately return to their toils after a full meal; so

* Nature has taught all animals to rest after a meal.

that custom must have considerable influence under either circumstances; although it is generally evident that a disposition to rest, or rather to drowsiness, inclining to sleep, ensues after taking food; but whether, taking the two opposites, this state should be encouraged or retarded, appears a question of as much importance, as whether, although much more easily considered, we ought to eat those articles which most readily admit of being digested, or such as are more bulky and equally nutritious, but of more difficult assimilation. Bulk in our aliment is indispensably necessary; nor ought the nutritive particles of it to be in equal proportion; for if bulk, partially to distend the organ, were not essential, the organ, in a state of collapse, could not perform its functions. And indeed it appears probable that when the stomach is empty, the gastric juice is less plentifully secreted, which, were it otherwise, from its peculiar properties, might have an injurious, if not a fatal effect upon the coats of the stomach. If bulk in the aliment were not in fact indispensable to its proper digestion; and if the richest and most easy articles of digestion, were preferable to such as contain only a proportionate quantity, food of the most concentrated kind would be preferred to that containing fewer nutritive particles. Gravies of the richest water would supersede mutton broth; rumps and sir-loins of beef would be reduced to a mere animal extract; with such other fantastic dainties as the

epicurean appetite might suggest, *e. g.* as the brains of peacocks or parrots, the tongues of thrushes, and nightingales, "or the teats of a lactiferous sow, &c"

The most easy and luxurious position, could it always be indulged in, is sitting in an *easy chair*. The horizontal posture is rather an impediment to digestion, as the descent of the food is somewhat impeded, and heaviness and long sleeps are produced. When the stomach is weak, other means are often used for producing digestion, such as taking bitters, alkalies, water impregnated with carbonic acid, (soda water), after a meal; also using spices, diluting the food, or cutting it into very small particles, and well masticating it. Digestion also is assisted by taking small quantities of food at a time, by which the excitability of the stomach is never exhausted, and this is particularly necessary in weak stomachs; although in the healthy state of this organ, we again repeat there is nothing equal to a regular good "tuck out;" it is far preferable to pecking every now and then; and a healthier chyle is the consequence.

The worst means of all is stimulating the stomach by distilled or fermented liquors; for although these may seem to have an apparent and momentary cheering influence; they produce very bad effects after a certain time, and greatly injure the digestive machinery.

ALIMENTARY STIMULI, CONDIMENTS, &c.

MAN is very fond of being stimulated, and very desirous of experiencing again the stimulus he has already tried the effects of: instances of this may be referred to snuff-takers, &c. and this will explain the use of condiments, which, if used within certain bounds, are in a manner natural to men, and may be very useful. Salt is the most common condiment. Pliny observes, "hercule, vita humana sine sale degi non potest." Infants soon become fond of it. If taken moderately it is very wholesome, although not nourishing, and most of it passes off by the urine. It stimulates the stomach, and promotes the secretion of the gastric juice: it is, however, but stimulating the stomach without any necessity, and this viscus, when once used to stimulants, can no longer digest without them, until a new condition of the organ is induced by temperance. In tropical climates, where they use more vegetables a larger quantity of condiments is added to their food than in Europe, independently of their growing there.

All our fluids are impregnated with sea salt; so great is the quantity we take, it is found in all secreted fluids, dropsies, the blood, and contents of the intestines: it is not assimilated, but passes through the different channels.

Vinegar, an acetous acid, is also much used; it contains some small nutritive particles, but is chiefly

used to excite the appetite, to cool the food, and render it more sapid; we mix it with spices of a quite different nature, as mustard, pepper, &c. It was very anciently used; the Roman soldier mixed with it water for common drink.

Sour milk is a common condiment among the Highlanders. *Catsup*, or salt flavoured by mushrooms; *Soy*, a sort of volatile alkali with common salt, flavoured with the soyo bean, the putrefied *dolichos soyo*, growing in china, impregnated with sea-salt; aromatics, as cloves, cinnamon, &c. *certain seeds*, as carraway, anniseed, &c. *acrid roots*, as horse-radish, onions, and shalots; all these increase the secretion of saliva and gastric juice, prevent flatulence, warm the stomach and strengthen it.

Three other substances are used as stimulants to the stomach, though they cannot properly be called condiments. *Sugar* is used as food, condiment, medicine, for preserving substances from putrefaction. It is injurious to the teeth, because, by standing on them, it combines with oxygen, and forms oxalic acid, which has a great affinity for the teeth. 2. *Vinous liquors.* By drinking these we can digest a larger quantity of food, the stomach being stimulated, and therefore acting under the influence of a more powerful action. It has been said that vinous liquors harden the food and coagulate it; but, if this be true, it is a question whether food coagulated be not more easy of digestion? They stimulate the sanguiferous

and chyliferous system, and if not taken very moderately, prove hurtful by exhausting the irritability, producing the same effect as a whip on an animal, it makes him go when tired, whether he will or not. 3. *Alcohol* differs in flavour according to the substances from which it is prepared, or the artificial additions it receives. It appears in different forms, as brandy, rum, gin, usquebaugh, eau-de-vie, &c. It is more deleterious than wine, and produces all its ill effects more quickly. When well diluted, and not too frequently used, it may prove useful.

Tea and coffee, are emollient, exhilarant, and very useful beverages, if not taken in excess. They abate generally the force of the circulation, diminish the stimulating effect of the food eaten at dinner, and by their flavour promote digestion, although abuse of either may induce different results.

THE INCONVENIENCE AND INUTILITY OF OVER-LOADING THE STOMACH.

As no permanent strength or advantage is to be otherwise acquired than by the digestion of our food, it is on this account by no means unimportant to attend to its *quantity*, *quality*, and the periods at which it ought to be taken, to insure its perfect digestion.

It is certain that no benefit can possibly result from putting, or rather *stuffing* more food into the stomach than it can conveniently contain, although

one good meal is allowed to be better than two scanty ones, as the surplus can never afford nourishment to the body; on the contrary, this gourmandizing practice is productive of serious evils. Being confined in a warm receptacle, the superabundant and undigested aliment may there undergo the chymical changes natural to dead animal and vegetable matter. The vegetable food will ferment and become acid; the animal, will grow rancid and putrid. These changes are occasionally rendered evident when a disordered stomach throws up some of its contents; *e. g.* the teeth are roughned and set on edge by the corrosive properties of the acid; and the throat feels burnt by the acrimony of the rancid oil. These effects, though only occasionally made apparent, must constantly take place, unless by the digestive powers of the stomach the food be converted into a new substance, not liable to such chymical changes. These new and irritating compounds, may not, indeed, materially affect a healthy stomach, though they cannot fail to be injurious to one that is weak and irritable, as well as to the whole tract of the alimentary canal, by maintaining and aggravating its disorder. Part of the fluid changed in this manner will be absorbed from the bowels, and render the blood impure, from which there is no outlet for various kinds of matter, but through the kidnies; and this may prove a cause of foul urine, as well as of the presence of many substances in that fluid not natural to it, and be productive of serious diseases in the urinary organs. Sen-

sible then of the evils resulting from undigested aliment, we should cautiously guard against them by proportioning the quantity of our food to the capacity and strength of the digestive organs.

Man an omnivorous animal, and naturally a glutton.

It would appear that nature had formed every animal, except man—omnivorous man, to live and enjoy health upon a precarious and scanty supply of food; but in civilized society, man having food always at command, and finding his palate peculiarly stimulated by its use, as well as a temporary hilarity and energy both of body and mind, resulting from the excitement it occasions in his stomach, sensations he can at pleasure produce, eats and drinks an enormous quantity more than is necessary. He crams his stomach with every description of the most heterogeneous aliment which absolutely putrefies before it digests; he fills his blood vessels to oppression, and induces diseases in them as well as in the heart. If his digestion be imperfect, he fills them with unassimilated substances, from which it is impossible for nutriment to be separated, and which consequently must be injurious.

In proportion as the digestive apparatus is weak so should the ordinary quantity of food be lessened; taking care, nevertheless, that what we do consume, be as nutritive and as easy of digestion as possible.

By thus adapting an abstemious though nutritive plan of diet, with regard to the bulk of our aliment,

even to a degree, that a sensation of want may be produced in the system, we adopt the means most likely to create an appetite, and increase the powers of digestion.

Advantages resulting from change of diet.

With respect to the quality of food, leaving the nature of it out of the question, when the stomach is weak, it is particularly desirable that it be small in quantity, nutritive, though containing a proportionate quantity of unassimilable matter, easy of digestion; and adapted to the feelings of the stomach; as it is well known that substances apparently unfit, do frequently agree with the stomach, by digesting well, and even tranquillizing an irritable state of this organ merely because they are suitable to the cravings or sensations which it had previously experienced. Nor are instances wanting of changes of diet having produced a quiet and healthy state of the stomach, in cases where medicines have been ineffectual. Neither ought these occurrences to excite surprise; for since digestion and the consequent tranquillity of the stomach depend on a proper quantity of healthy gastric juice being secreted and mixed up with the food, these secretions are most likely to be produced by whatever agreeably excites it; as it may also be obstructed by whatever has a contrary tendency. Therefore it may be worth while to remember, that

"The friendly limpid draught, the temp'rate meal,
Ne'er ask'd the aid of bolus or of pill."

We have already observed, that though food taken in a weak state of the stomach, ought to be adapted in quantity and quality to the power of this organ, and that it ought not to be crammed or distended with superfluous substances; nature has also very wisely provided, that along with the pure nutritious part of the food, there should nevertheless be contained a certain admixture of unassimilable matter, in order to give it more bulk, and thereby to convey more true energy to the stomach. The most invigorating articles of food, accordingly, are such as are introduced into the stomach in a solid form; and not only devoid of fluidity, but possessing a certain degree of hardness and tenacity, so as to excite the powers of the containing *viscus* to stronger action*. It is found, therefore, in the human species, that plain solid food, combined with a certain proportion of unassimilable matter, is infinitely more efficient for the purpose of health and strength, than that which consists of pure alimentary matter, whether gelatinous, oily, or saccharine. And with regard to animals, it is a well-ascertained fact, in horses, that their strength is much better sustained by hay than grass; for the stomach being an organ of universal sympathy, does, by the exertions on which it is put in digesting hard food, confer vigour on the whole frame.

* See Sir Gilbert Blane's Medical Logic, p. 97.

TIME AND MANNER OF TAKING FOOD CONSIDERED.

This is another subject on which there exists much discrepancy of opinion; and as far as our experience enables us to draw any inference, the time of taking food is less under the influence of rules, than any other question connected with the digestive economy. "It is evidently the intention of nature," observes Mr. Abernethy, "that we should put into the stomach a certain portion of food, the excitement of which, inducing a secretion of gastric fluid, by its action becomes digested. This office of the stomach being effected, it should be left in a state of repose, till its powers are restored and accumulated; and this return of energy would in health be denoted by a return of appetite. Three hours more or less may elapse, in the healthy, before the digestion of a moderate meal be effected, so that the stomach is empty and in a state of repose. It is reasonable therefore to allow the same proportion of time for the same purpose, when the organ is disordered, whilst we have diminished the quantity of food, in order to proportion it to the diminished powers of the organ; yet instead of pursuing this rational plan of diet, many persons are taking food every third or fourth hour, pleading, in excuse for such conduct, that they cannot do without it. The truth is, that when the stomach is disordered, the exertion of digesting a single meal, after its excitement and efforts have ceased, is productive

of sensations of languor, sinking, and inquietude, which ought to be calmed or counteracted by medicines, and not by food, for a second meal cannot be well digested in this state of the stomach."

Nothing so probable as the above observations, as far as they apply to a weakly or disordered state of the digestive organs: "we also often," observes the same author, "tease and disorder our stomachs by fasting for too long a period; and when we have thus brought on what I may call a discontented state of the organ, unfitting it for its office, we sit down to a meal, and fill it to its utmost, regardless of its power or its feelings. The rules, then for diet may be thus summarily expressed: *we should proportion the quantity of food to the powers of the stomach; adapt its quality to the feelings of the organ, and take it at regular intervals of six or seven hours, thrice during the day.*" Now with every difference to the respectable authority here quoted, we beg in *toto* to dissent from his opinion regarding the propriety as well as the possibility, or necessity of adhering to these rules of diet, eligible and plausible as they may appear. For whom, we would ask are these rules calculated? This is the first time, and we are sorry for it, that we have had occasion to find fault with the intelligent and experienced author, for lumping his business in such an undigested manner. But, lest we might be charged with high treason against the digestive organs, we shall content ourselves with merely observing that

we cannot conceive the times of *the day*, six or seven hours apart, that this gentleman would set aside for satisfying the cravings, often irresistable, of the stomach. For, unless, like young rooks, we begin to *craw! craw! craw!* as soon as we open our eyes in the morning, it will be midnight before supper or third meal, comes up: and then, recollect, we must not go to bed with heavy suppers, to prevent restlessness, unpleasant dreams, &c.; neither does Mr. A's. plan of taking exercise accord with his own rules of diet; independent of which, like these, it appears calculated for one set only of digestive organs; and not for those of every class of society (see p. 76). We are told to rise early, but what may be early to one might be late to another; neither do we know to what season of the year these directions are most applicable; and again, if every one was to rest three hours after a meal, in order that "the energies of the constitution should be concentered in the work of digestion," they would soon, if their living depended upon their labour, either mental or corporeal, have reason to reject artificial systems of digestion, by the adoption of which they had nothing left to digest in the natural way. In this instance, we must again beg leave to differ from our very judicious author, against whom also we doubt not the majority of modern gastronomers will declare, by decidedly stating that either six or seven hours fasting is too long for any stomach; notwithstanding that more disorders arise

from repletion than inanition. This sort of eating by rule, carries with it its own refutation, and is every thing but an axiom in the laws of the animal economy. It would, in the first place, suppose, a thing impossible, that all stomachs, healthy or unhealthy, were alike; in the second, it would be imposing an unnatural restraint on the appetite of one man, because that of another was less formidable. Six or seven hours between meals may have no inconvenience with those who have accustomed themselves to the observance of such periods; and few there are even of this class of feeders, who do not occasionally, if not always, nibble something in the shape of a *lunch* during shorter intervals; the very thing itself which points out the propriety of making a meal at that time, that is, should no particular inconvenience, such as *breach of custom*, or weightier considerations, which would subject the appetites of many to be controlled by one, be interposed between this unequivocal call to satisfy nature, and the necessity of abiding by it. But, unfortunately for the welfare of many, there are, in every system or plan, a variety of misleading principles, well worthy of the severest animadversions; among these, on the subject under discussion; may be brought forward custom and fashion. The first has been justly reprobated, as "the plague of wise men and the idol of fools;" the second exercises its dominion chiefly over persons of mediocre circumstances, although it is not without its influence

on the upper orders, who, in consequence of their opulence, have a most unquestionable right to warp the goddess which way they will. These may dine when and where they will. Not so the industrious mechanic or labourer, he must have his dinner, hot or cold, at mid-day; and his other meals at short and equal distances of time, to enable him to wear out the toils of the day without exhaustion, and often without fatigue. Fashion is evidently referrable to the head of authority; for the devotions blindly paid to it supplies the acknowledgment of a certain superiority, to which we are called to sacrifice our own reason and judgment; but which it is the great object of cultivated reason in independent minds to resist and cast off with disdain.

It may be said of reason and fashion, as of nature and physic; they ought never to disagree, the one ought to regulate the other; and which, by a reciprocal substitution of the words, may; in the following lines, like Paddy Flaherty's bull, run two ways at once.

Says Reason / Nature to Fashion / Physic, what pity that we,
Who ought to be friends should so seldom agree;
Who ought to assist and succour each other,
And in amity live like sister and brother.

But to look for this concord alas, is in vain!
Dame Reason / Nature of Fashion / Physic has much to complain;
But Fashion / Physic should know, I am not to be taught,
By severe flagellation, to do what I ought.

The best rules of diet are, and we know it from experience, where there is no settled system of domestic economy, to make it a point of eating as often as the appetite requires to be appeased. This is saying much, but whoever will abide by this regulation, or rather this call of nature, will not have much to complain of, as regards equi-distances of time; for a man will soon learn, and sooner accustom himself to be regular in his meals, by suffering his appetite to dictate to him, rather than by taking upon himself to dictate to his stomach. It is this very rule that has taught people in different capacities of life, to regulate their breakfast, their dinner, and every other subsequent meal. It will be no extravagant assertion to say that nine-tenths of the inhabitants of Europe go to dinner at one o'clock, consequently, where there is one man hungry at four, five, or six o'clock, who has not previously dined, there are nine enjoying their dinner with a good appetite at one.

Rakes, debauchees, and intemperate livers of every kind, breakfast late, that is, from eleven to one o'clock; their morbid appetites scarcely ever before that time begins to crave a fresh supply; and can only then be coaxed through the medium of *devils*, ham, porter or ale, with other high-seasoned meats and *bonne-bouches;* such as these may well enough with their over-heated bloods, dispense with food for seven hours at a time; and may be contented to perch for two or three hours, before he returns to his sprees. The sober, temperate, and industrious tradesman, enjoys

his homely breakfast a short time after getting out of bed, with all the *gout* and spirit of an epicure. He requires no stimulus to rouse a lethargic palate; no bracers to tighten his slackened nerves. He has enjoyed refreshing sleep; the blue-devils, the horrors, and other views in perspective of pandemonium, disturbed not his rest; no hideous phantom hovered round his pillow; no night-mare, hag-like, squatting upon his breast bone, held him spell-bound in terrific agony; he rises in the morning, to use his own words, "with a stomach like a horse, and as strong as a jack-ass." These are not the men whose economy would permit them to go without food much above the half of seven hours; unless, in the healthy state, the progress of digestion was carried on at a much slower rate, than that which Mr. Abernethy, in common with other physiologists, is pleased to admit. Although, doubtless, custom may, as already observed, either curtail or extend the time of eating.

Many men in good bodily health, eat but once or twice a day; indeed, with the author of these pages himself, it has been a matter of indifference for the last twelve years, whether he ever ate above one meal a day, viz. something in the shape of a solid dinner; and seldom does it ever matter much, whether this be early in the fore part of the day, or late in the afternoon, if the appetite suggests it. And, if he submits to go through the manœuvres of the breakfast or tea-table, it is merely because,

being a family man, courtesy and affection command his presence; and oftener because, on certain occasions, he finds it unavoidable, inasmuch as he would not otherwise be thought either disagreeable in his manners, or eccentric in his appetite. In the choice of his aliment, he is neither an epicure nor a sloven; and when the high-tide of appetite flows, a crust of bread and cheese or cold meat, would be preferred to waiting half an hour for a more sumptuous and varied repast. *De gustibus*, therefore, *non est disputandum;* or, as we say in French, *chacun a son gout*, as well, *sa folie*. There are peculiarities of constitution that will not permit themselves to be dictated to by set rules, or by any species of foreign *friandise* or affected delicacy; which all tend to deteriorate a naturally good stomach, rather than assist whimsical and fastidious notions of digestion.

Refined and wire-drawn systems of feeding are as unnatural as the fear of death, which often proves mortal, and which sets people on methods to save their lives, which infallibly destroy them. This is a reflection, made by some historians, upon observing that more are killed in a flight than in a battle; and may be applied to those multitudes of imaginary nervous and sick people, who sicken by the very means of health, who ruin their constitutions by physic, and throw themselves into the arms of death by endeavouring to escape it. A method not only dangerous but below the practice and dignity of a rational being.

To consult the preservation of life, as the only end of it; to make our health our business; to engage in no action that is no part of a regimen or course of physic, are purposes so abject, mean and unworthy of human nature, that a generous soul would rather die than submit to them. Besides that a continual anxiety for life vitiates and corrodes all its enjoyments, and casts a melancholy and lugubrious gloom over the whole face of nature; as it is impossible we should take pleasure or delight in any thing we are every moment afraid of losing.

By these observations, it is not meant to attach blame to any one for taking a proper care of health—a blessing sooner lost than recovered; on the contrary, as cheerfulness of mind and capacity for business, are in a great measure, the effects of a well-tempered constitution, a man cannot take too much pains to cultivate and preserve it; that this care which we are prompted to, not only by common sense, but by duty and instinct, should never engage us in groundless fears, melancholy apprehensions, and imaginary evils, which are natural to every man who is more anxious to live than to know how to live. In short, the preservation of life should only be a secondary consideration, and the observation of it our principal aim. If we have this frame of mind, we shall take the best means to preserve life, without being over solicitous about the event; and shall arrive at that point of

felicity which Martial has mentioned as the perfection of happiness, viz. of neither fearing nor wishing for death.

HABIT AND PECULIARITIES OF CONSTITUTION CONSIDERED.

As with the appetite so it is with sleep, a man may acquire a habit of dispensing with this restorative principle to a greater extent than it would be possible for others to do, without the risk of materially injuring the general health. The same holds good as regards hard-drinkers; many of whom enjoy excellent health, unless when stultified in the delusive potion. This *methodus bibendi*, which we do not by any means recommend, is only to be acquired by habit. Some confirmed drunkards are known to live to a great age; many of whom revel in a single debauch that would go a great way in ruining some ordinary and less hardy constitutions. Men arrived at this climax who, like Will Boniface, as the saying is, eat, drink, and sleep upon ale; their *solum pabulum vitæ* would soon "kick the bucket," were they unfortunately to be deprived of it: we say unfortunately, because, in the instances to which we allude, such a prohibition would amount to little better than starving a man to death. Of the truth of these assertions, numerous instances might be adduced. Old and confirmed tiplers never enjoy worse health than when

deprived of the use of their *aqua vitæ*. Eating and drinking are so closely allied, that what is said of the one, will in a great measure hold good with the other. People of apparently equal temperaments and habits of life, differ so widely in their consumptive powers, that one shall devour every thing in the shape of a comestible that comes before him; while another shall be satisfied with a very moderate portion even of what are termed "choice viands."

If the force of habit and predisposition required further illustration, the different extremes of heat and cold are as diversely borne. One shall be subjected to all the vicissitudes of climate, without inconvenience; while another will shrink and suffer from the smallest change. One shall be wet to the skin and suffer his clothes to be dried upon him by the natural heat of the body, without the most trifling consequence. Another shall only expose himself to the draught of a window or key-hole, and for his pains he shall be rewarded with a stiff-neck, a catarhal affection, or a pain in the head. The night air, or a fog gives one a cold, or a sore throat, while another escapes similar and more formidable consequences with impunity. Others again sleep in a damp bed, or put on damp linen, and an ague, or an inflammatory sore-throat shall be the result; but, should the more hardy and unsophisticated son of nature take up his roost in a cock-loft, or pitch his tent under a hedge for the night, he would rise from his slumbers

as much refreshed and as little inconvenienced as if he had snoozed on a feather bed. So true it is, that,

"——————— weariness
Can snore upon the straw, when resty sloth
Finds the down pillow hard."

There can hardly be adduced a more striking example of the peculiarities of constitution, than the well known fact, of the diversity of individuals with regard to their various susceptibility of sea-sickness. Some are so constituted as never to be affected with it at all; the majority of those who are exposed to its causes, become exempted from it by time; but some are so constituted, as never to get the better of it*, though ever so long at sea. "It would be in vain, I believe, to search for any other cause of this than that primodial and inscrutable peculiarity in which all the other diversities of the human constitution originate†.

Sleep being one of the most universal and indispensable wants of nature, is one of the most important and most prominent features in the natural history of life; and a man could no more exist without it than without food; as therefore it becomes indispensable, nature with her usual wisdom

* The Imperial Marine Tincture of Dr. Stevenson, a late discovery, is said to prevent as well as cure, this distressing malady.

† See Elements of Medical Logic, p. 178.

and kindness, has provided great powers of accommodation, suited to the emergencies of human life. With a view to this it is observable, that the refreshment of sleep is not in the simple ratio of its duration, the principal share of this act of restoration being found to take place in the beginning of it. If a person be at any time deprived of one half, or more of his usual portion of it, the inconvenience experienced is by no means in proportion to this privation; and habit will bring persons, whose affairs require it, to subsist in health and vigour, with a small allowance of sleep.

We might here also mention the disposition of some constitutions to resist, and others to imbibe contagion and infection. One shall be exposed to the whole effluvia of a pestilential lazarreto, and escape the plague or yellow fever; while another shall only inhale the atmosphere of an ordinary sick room and fall under the influence of the disease.

All these causes and contingencies resemble the numerous virtues of many medicines, which agree with some constitutions only, from particular idiocycrasy; they are specifics in some disorders, are proper at particular periods, and under peculiar circumstances.—In fact, settled plans of diet, either in health or disease, are mere chimera, since no two persons will be found under the same circumstances, either as regards constitution, or general health, or peculiarity of disease, as to admit of their applica-

bility without that considerable variation which would do away at once with all the pretended accuracy of rules, rendered liable to such a multiplicity of active and passive exceptions. On this subject, therefore, we find, that, if we regard the nature as well as the mode of taking our diet; custom in a great measure detracts from the injuries which are stated to arise from certain deviations in the quality of our aliment, and its intemperate or unseasonable use; for such things as persons have been long accustomed to, however pernicious they may be in themselves, become from use, less offensive, and lose a portion of their dangerous effects: it might indeed otherwise be said that it would be miserable to live according to the strict rules of Physic. Nature itself is changed by custom. Husbandmen and those who are habituated to laborious lives, eat with eager appetite fat and rusty bacon, coarse salt meats, black bread and hard cheese, which the pampered children of indolence would reject with scorn; "Custom is all in all," says Burton* "and matters, that would be pernicious to some, are delightful to others." Travellers frequently experience this in a high degree. The strange meats of foreign countries cause great alterations and diseases in the constitution until use and custom mitigate and reconcile their effects and makes all good again. In proof of this we have the history of Mithridates, who, by frequent use, to the astonish-

*Author of the Anatomy of Melancholy.

ment of Pliny who records it, was able to endure poison; and Curtius relates the story of a young female who was sent to Alexander by king Porus, who had been fed on poison from her earliest infancy. Theophrastus also mentions a shepherd who could eat hellebore in substance; and it is well known that the Turks eat opium by drachms at a time. And we have no less than the authority of the father of physic, Hypocrates himself, as well as Galen his commentator, that we ought never, unless it be a very bad one, to change custom hastily; and that it is adviseable for all persons to adhere to that which they have been used to, be it in diet, exercise, or any other thing; for custom, like an insinuating school-mistress, silently and gradually establishes her authority over us; and when we oppose her, she then immediately unmasks and becomes a furious and unconquerable tyrant. Hence nature hates and resists all sudden changes, and is best brought to that state of conformity which may be desirable, by slow and gradual advances.

THE CAUSE AND CURE OF NERVOUS SQUEAMISHNESS, &c.

"We cannot reasonably expect tranquillity of the nervous system, whilst there is disorder of the digestive organs."

Abernethy.

Nervous affections are produced by those exercises of the mind which conduce most to exhale the spirits, such as anger, sudden joy, fear, love, sorrow,

and other debilitating causes of the mind and body. There are some extremely nervous people, who nevertheless lead the most temperate and uniform lives; this species may be said to depend on education, and the habits and circumstances under which the individual has been reared. Want of early converse with the world, leaves always, and for a greater or less time, a kind of *mauvaise honte*, little short of sheepishness. A sailor or a soldier, whose courage is proof against a musket or a cannon ball, would look as stupid as a country bumkin on the first introduction to a lady's drawing-room, while the fopling, who would be frightened into hysterics at the sound of a cracker or a squib, would look as brazen and as much at home as the knocker on the hall-door. This may be called nerve and no nerve. Impudence is the absence of all nerve, as much as confidence is the whole assemblage; and diffidence is only a modest deficiency of it.

The sensations of the nervous are often indiscribable*. They do things for which they can render no

* Nervous antipathies are equally as varied, and we have instances on record of the most whimsical, as well as of the most singular kind, in men eminent for their learning and profound knowledge. The duke d' Epernon, would faint at the sight of a levret; Cæsar d' Albert, at a sucking pig; Schookins, professor of philosophy, at the sight or smell of cheese; Tycho Brake, at the sight of a fox; Hobbes if left in the dark; Bacon, during an eclipse of the sun; Bayle, if he

account. They are in perpetual apprehension without cause. The sound of a coroner's inquest brings a shudder of horror that will suspend the appetite, and produce a thrill equal to an electric shock. Sudden news or surprises, convulse the system, and excite alarms, which can scarcely be allayed without the greatest efforts; the least noise or extraordinary exertion of the voice of another person, sets the hair on end, which communicates the general vibrations to the very tips of the fingers, and produces a hectic flush of the countenance, that subsides only with calmer moments.

Nervous people are generally suspicious and inconstant; and generally they are characterized by a costive habit of body. Peevishness, which is a natural consequence of their complaint, ought to be tolerated and soothed, rather than opposed, when it does not degenerate into extremes; which it not unfrequently does when too much indulged in. We have known people, in every other respect apparently in good health, so nervously timid, that they have frequently

heard water falling from a water spout. There was one Olaus, says George Harmeus, in the acts of Copenhagen, 1676, who at the sound of his own name, would shriek and become convulsed. Schœnk speaks of a person who immediately swooned if a pig was brought upon the table; and if a jew turn up his nose at the sight of a piece of pork, the nerves are the cause, as the instruments of muscular motion, as much as the injunction of the lawgiver against its use.

hesitated before they passed over a bridge or under an archway; and we have lately been assured by a nervous friend, that for many years he could scarcely ever be induced to go down Fish-street hill, lest the monument should bury him in its ruins; also that he made it an invariable rule, whenever he got to St. Dunstan's church, at the end of Fleet-street, to cross over, whatever the inconvenience, rather than pass under the clock. Others are completely put beside themselves if one but look them in the face, or whisper any thing to a second person in their presence, which they do not hear. Full of doubts, hesitations and terrors, the past, the present, and the future constantly occupy their mind; until, unless attacked by the proper remedies, diet, air, exercise, cheerful company, change of scene, &c. it degenerates into that species of melancholy, if not a worse, which goes and comes upon every small occasion of sorrow, sickness, need, fear, grief, care, discontent, trouble, passion, or other perturbation of the mind; and which causes such a degree of anguish or vexation, as diminishes or destroys the common sensations of every pleasure.

The generality of those who complain most of their *nerves*, are people addicted, if not to many, to some peculiar vices; such as idleness or inactivity, hard drinking, late and irregular sleepers, romance-reading ladies, indulgence in secret pleasures, sedentary occupations, intense thinking, religious fanaticism,

&c. In vain may we attempt to allay the irritability of the nerves while such causes are in full operation.

Weak nerves are the most constant companions of inactivity, which never fails to induce an universal relaxation of the solids, which disposes the body to innumerable diseases; and when the solids are relaxed, neither the digestion nor any of the secretions can be regularly performed. It is absolutely impossible, therefore, to enjoy health, where the perspiration is not duly carried on; and this can never be the case where exercise is neglected. When the matter which ought to be thrown off by perspiration is retained in the body, it vitiates the humours, and occasions the gout, fever, rheumatism, pains of the stomach, flatulence, indigestion, whence result frightful and unpleasant dreams, the night-mare, &c. timorous sensations, fear of death, and all the inseparable appendages of the hypochondriac. Exercise in the open air alone, would prevent many of those diseases which cannot be cured; and would infallibly remove others over which medicine has little or no controul.

The nervous tipler, who shivers and shakes to that excess that it is often with difficulty he can raise the insidious potion to his lips, would reproduce a tolerable state of nerves, by a gradual diminution of his cups, combined with exercise. A man may at all times enjoy his wine or his grog, in whatever shape he may choose to avail himself of it, without, as it were, strangling nature and degenerating into a beast:

" For when the wine's quick force has peirc'd the brain,
And push'd the raging heat through ev'ry vein,
The members all grow dull, the reason weak;
Nor can the tongue its usual accents speak:
The eyeballs swim; the legs forget their gait,
And bend beneath the body's cumb'rous weight.
Unmanly quarrels, and loud noise, deface
The powers of reason, and usurp their place:
Oft times with vi'lent fits the patient falls,
As if with thunder struck, or foams and bawls,
Talks madly, shakes, moves here and there, breathes short,
Extends and tires his limbs with antic sport,
While the rank venom, scatter'd through the whole,
Destroys the ablest functions of his soul!"

To this spirited protraiture of a drunkard, may be compared in an equal ratio, the degrading results of every kind of excess, which ever may be the ruling passion indulged in.

As early rising is the natural consequence of going to bed early, it implies sobriety, good order, and an exemption from many fashionable follies extremely prejudicial to health; but here again custom must come into the account; and on this subject we mean only to imply a deviation from established rules.

The man who accustoms himself to retire to his bed at an early hour, can seldom join in the follies or the amusements of the jolly god. His rest is not disturbed by the effects of unseasonable luxury. He knows that temperance, moderate exercise, composure of mind, and external tranquillity

are the best narcotics. His slumbers are sound and refreshing. The waste of spirits occasioned by the labour of the preceding day are fully repaired. Every muscle, fibre, and nerve, has regained its proper tone. He rises with cheerfulness and vigour to breathe the morning air, and to enter upon tbe duties of the day. In short, attention to this single point, of accustoming one's self, where one's trade or calling will admit of it, of going to bed early, and of rising betimes, will be found to supersede a variety of other precepts, and may justly be called the restorer of the nerves, and the golden rules for the attainment of health and long life. But men of every occupation, and in every situation of life, have lived to a good old age; and some indeed have enjoyed this blessing, whose plan of living was by no means regular; although it is inconsistent with observation, that all very old men have been early risers.

Injurious effects of idleness, &c.

Idleness, which is the opposite extreme to immoderate exercise, is a more frequent source of nervous affections, than almost any other cause. It is justly termed "the badge of gentry, the bane of body and mind, the nurse of haughtiness, the step-mother of discipline, the chief author of all mischief, one of the seven deadly sins, the cushion upon which the devil chiefly reposes, and a great cause not only of melancholy, but of many other diseases; for the mind is naturally active, and if it be not occupied about some

honest business, it rushes into mischief, or sinks into melancholy."

Inactivity of the body is the improper intermission of necessary exercise, which causes crudities, obstructions, excrementitious humours, quenches the natural heat, dulls the spirits, and renders the mind unfit for employment. As the ground that is untilled runs to weeds, so indolence produces nothing but gross humours. A horse unexercised, and a hawk unflown, contract diseases, from which, if left in their natural state, they would entirely escape. An idle dog will be mangy, and how can indolent people any more than these animals expect to escape disease. But idleness of mind is allowed to be infinitely more prejudicial than idleness of body. Genius without employment is a disease; the rust of the soul, "a very hell itself. "As in a standing pool," as Seneca observes, "worms and filthy creepers increase, so do evil and corrupt thoughts in the mind of an idle person." The whole soul is contaminated by it.

Description of an idler, &c.

Burton, in his Anatomy of Melancholy, gives a no less felicitous description of an idle person, than of a drunkard. "Idle persons," says he, "whatever be their age, sex, or condition, however rich, well allied, or fortunate, can never be well either in body or in mind. Wearied, vexed, loathing, weeping, sighing, grieving, and suspecting, they are continually offended

with the world and its concerns, and disgusted with every object in it. Their lives are painful to themselves, and burthensome to others; for their bodies are doomed to endure the miseries of ill-health, and their minds to be tortured by every foolish fancy." This is the true cause why the rich and the great generally labour under this disease; for idleness is an appendix to nobility, who, counting business as a disgrace, sanction every whim in search of, and spend all their time, in dissipated pleasures, idle sports, and useless recreations. We shall conclude this part with the following curious and amusing extract from an old book, entitled, "*The Breviary of Healthe,*" *by Andrew Boorde, Phisyche Doctoure, an Englishman,* anno, 1557; which may be adopted, if thought proper, according to existing symptoms as a cure for the *lazy-fever.*

"The 151 chaptire doth shewe of an evyll fever, the which doth combat yonge persons, named the fever burden (lazy fever). Among all the fevers, I had almost forgotten the fever burden, with the whiche many yonge men, yonge women, maydens, and other yonge persons, bee sore infected now-a-days. *The cause of this infirmitie*:—this never doth come naturally, or els by evyll and slouthful brynging up. If it do come by nature, then the fever is incurable; for it can never out of the fleshe that is bred in the bone; yf it come by slouthful brynging up, it may be holpen by diligent labour. A remedy: there is nothynge for the fever burden as is *unguentum baculinum;* that is to say, take a sticke or wan of a yard of length, and more, and let it be as great as a man's fynger, and wyth it anoynt the back and shoulders well,

morning and evening, and do this 21 days; and if this fever wyl not holpen in that tyme, let them beware of waggynge on the gallows; and whyles they do take theyr medicine, put no lubberwort in thyr pottage."

A HINT OR TWO TO THE FAIR SEX.

THE fair sex, particularly those who labour under nervous weakness, would do well to relinquish novel reading in bed, by candle-light, or by the fire side, to the great prejudice not only of their general health, but of their eye-sight and complexion. Whether their complaint may proceed from this or other causes, they should go to bed early and rise betimes in the morning. No female ought to be out of bed after ten o'clock; as much sooner as they like. Proper attention should be paid to the state of the bowels, which are too apt to be neglected: and as females are more confined, physically and morally, than males, so habit and constitution have rendered exercise less indispensable; although the same benefits will result from it used in a moderate degree; and on proper occasions, it ought not to be neglected, by the solitary and sedentary. For every thing under the sun, as Solomon says, there are proper seasons; and it is by a due regulation of our active duties, consistent, not with general rules, for that is impossible, we say again, but with circumstances on which the mode of life depends, that we are to manage all that relates to our health, as well as to our various pursuits in life.

Watching is more pernicious to female nerves, than

to those of males; it brings on premature wrinkles, produces pimples and a sallow skin, gives the complexion a jaundiced and haggard appearance, and if it be combined with a strong propensity and indulgence in "Hodges' cordial," the charms of youth, the glow of health, and the smiles of contentment soon degenerate into their opposite extremes. Those who wish to taste the sweets of sleep, must go to bed, *animo securo, quieto, et libero*, that is, with a secure, composed and quiet mind. As sleep therefore expels cares, and tranquillizes the mind, it is particularly serviceable in allaying nervous irritability; and must not only be procured at proper intervals, but protracted, if possible, where there is such a necessity for it, beyond its ordinary duration. Mirth and merry company are the companions of music in the cure of melancholy, which we all know is an affection of the nerves arising from causes already related. The merrier the heart the longer the life. Mirth is one of the three Salernian doctors (Dr. Merryman, Dr. Diet, and Dr. Quiet,) which cures all diseases*. A merry companion is held to be better than music; and as useful to a melancholy mind, as an easy carriage and a pleasant road are to a weary traveller.

* Spiritus temperat, calorem excitat, naturalem virtutem corroborat, juvenile corpus diu servat vitam prorogat, ingenium acuit, et hominum negotiis quibus libetaptionem reddit. *schola salern.*

PART III.

THE PHILOSOPHY OF THE STOMACH, &c.

"Ingenii largitor venter!*"—Persius.

The stomach, though the main spring of our system, ought not unnecessarily to engage more of the attention of men, than is requisite to the due performance of its necessary functions and the maintenance of health. If it be not however, sufficiently wound up to warm the heart and support the circulation, the whole business of life will in proportion be ineffectively performed; we can neither think with precision, sleep with tranquillity, walk with vigour, or sit down with comfort. That the stomach has considerable influence over all the natural functions, must unquestionably be admitted; but that any of these functions are subject to be seriously deranged by a partial or occasional privation of aliment, is supposing at once that the wheels of the machine become instantly clogged and rusty, unless the anti-attrition be constantly administered to keep them in full play. This, however, is not the case, as abstinence, when not carried too far, quickens the perceptions, and gives fresh energy to the powers of the mind.

In almost all ages there have been disputes, and controversies concerning the food best suited to

* The belly is the fountain of genius!

the nature of man; in order to ascertain whether a mixed diet, or one purely vegetable or animal, be most favourable to the development of the bodily powers and mental faculties. With regard to the effects of these foods on men, it must be observed, that there are no persons who live entirely on vegetables. The Pythagoreans themselves ate milk; and those who do so mostly, as the Pythagoreans, are weakly, sick and meagre, labouring under constant diarrhœa, and several other diseases. The hardy and robust never live on these, but on more substantial aliment; although in hot climates, vegetable diet, without inconvenience, may be carried to great excess; and although it be granted that man is intended to live promiscuously on these different foods, yet the vegetable should be in a very great proportion.

Animal food, although it gives strength to the body, is, nevertheless, not without its hazards to the system; insomuch that it is productive of plethora with all its consequences. By acting as a stimulus to the stomach in particular, and to the system in general, it excites fever, accelerates the circulation, and promotes perspiration. By a repetition of these stimuli, the system is soon exhausted; and a man who has betimes accustomed himself to animal diet, is either early carried off by inflammatory diseases, or if he does not take exercise enough to render that diet salutary, such an accumulation of putrescent food is made, as in his late life lays the foundation of the

most inveterate chronic distempers. It becomes, therefore, a question whether such a degree of bodily strength, with so many dangers and inconveniences attending it, is at all desirable.

By a long continued use of animal food, several instances of scurvy in excess have been produced; it is then always unlucky to be obliged to prescribe meat; but, when it is become absolutely indispensable, it should be combined with as much vegetable aliment as possible; and when a cure is effected, it should be gradually resumed.

The assimilation of vegetable aliment is more easily effected in warm than in cold climates, so that in the former it may be more plentifully used, and when joined to exercise, it imparts a tolerable degree of strength and vigour; and, although the general rule be in favour of animal diet, for giving strength, still there are many instances of it being produced in a remarkable degree from vegetables, which have the advantage of whetting the appetite as well as being less liable to affect us from a full meal of it. In short, a variety of considerations taken into the account, it may be justly concluded that a large proportion of vegetable food is beneficial to the generality of mankind; inasmuch as it secures health, and tends to the prolongation of life. Infancy and youth, should principally be confined to it. In manhood and in the decline of life, animal food may be more freely used; and towards the end of

life, a return to a vegetable diet should be again solicited.

COOKS. INTENTION OF COOKERY. REFINED EPICURISM INCOMPATIBLE WITH LONG-LIFE, &c.

As the chief business of cooking is to render food easy of digestion, and to facilitate nutrition; this object is most completely accomplished by simplest process. Unfortunately, however, this intention is frequently overlooked, and that which was designed for a wholesome and nutritious purpose, is by the ingenuity of the cook converted into a stimulus, to excite the organs of digestion to undue action, thereby exhausting the energy of the digestive organs, which in this manner get out of repair.

Livy informs us that, in ancient days, a cook was considered as a base knave; but he is now a great man, in high request, a companion for a prince, and the rival of a gentleman, and his skill now ranks among the finest arts, and most noble sciences; but, *venter deus*, he still wears his brains in his belly, and his guts in his head:

> "This favour'd artist ev'ry fancy tries,
> To make, in various figures, dishes rise;
> While dirty scullions, with their greasy fists,
> Dive in luxurious sauces to the wrists."

Notwithstanding this well-timed satire on the culinary department, a thorough knowledge of the aliment destined for our constitution and of good

cookery, stand in the foremost rank of the science of gastronomy, as being the most important towards the preservation of the human species, and as leading to the perpetuity of all the enjoyments of nature. It is by wholesome and nutritious aliment that our limbs are strengthened, and that those organs destined to the perfection of the senses, are reanimated. It is from the juice of our alimentary fluids, that the entire texture of our frail machine is formed. It is to the chyle which proceeds from our food, that we are indebted for our blood, flesh, nerves, organs; and all our senses owe their existence and sensibility to it. Is it not then a matter of some surprise and of considerable regret, that so much pains should be taken to sophisticate the very staff of life, by every art and invention that refined epicurism and unnatural palates can sugest? where,

> "Invention labours to debauch the treat,
> And whet the jaded appetite to eat."

Stomachic insanity, or extravagant epicurism, compared with simplicity of diet, &c.

Appetites are often capricious when left to the imagination; and the stomach when accustomed to artificial stimuli, plays such fantastic tricks, that a straight jacket would be as indispensable on these occasions, to prevent it from destroying itself, as upon the most determined suicide.

According to gastronomers, there are three sorts of

appetite, two of which come more immediately under the consideration of the gourmand. "The first is that which we feel upon an empty stomach, a sensation so imperious that it does not quibble much with the description of food; but which makes the mouth water at the sight of a good ragout. The second is that which is felt when sitting down to a table without being hungry, we taste some succulent dish, which realizes the proverb that 'an appetite comes by eating;' and which may be compared to a husband whose lukewarm heart grows warm on the first caresses of his wife. The third is that excited by some delusive viand, which makes its appearance toward the end of a meal, when, the stomach already satisfied, the temperate man is about to retire without reluctance. This may be typified by the gross desires of libertinage which, although illusory, or feeding only in the mind, give rise nevertheless to some real pleasures*." A knowledge of stomachical metaphysics ought to direct a skilful cook how to prepare, the first, second, and third courses; the last of which usually consists of a ridiculous variety of wines, liquors, fruits, confectionery, &c. to feed the eye, to overcome the stomach, paralyze digestion, and seduce children of a larger growth, to sacrifice the health and comfort of several days, for the baby pleasure of tickling their tongues with these new-fangled lollypops.

* *See* Cours Gastronomique.

The most insane stomach, or if the expression please better, the greatest epicure of whom we have any modern account, was Lewis, Count Zinzendorf, who was no less distinguished by all the memoir writers of the last century, from the solemn Marquis de Lamberti, down to the ingenious Baron de Pollnitz: the latter of whom remarks "that he kept the noblest and most elegant table at Vienna. With all his shining talents, and profound abilities, which had rendered him admired in so many different courts, the Count was less zealous of his reputation in the cabinet, than of his honour in displaying the most splendid, and the most exquisite table, that perhaps was ever kept in that or any other capital. His magnificence in this point would have been truly wonderful, if it had not been eclipsed by various excellences of a superior kind. His skill was so great, that he was equally acquainted with Asiatic and Italian luxury. His olios exceeded those of Spain; his pastry was much more delicate than that of Naples; his perigord pies were truly brought from thence; his sausages were made at Bologna; his macaroni at the grand duke's court; and as for his wines, no country that produced a grape of any repute, but a sample of it, for the honour of its vineyard, was to be found at his all-capacious side-board. His kitchen was an epitome of the universe; for there were cooks in it of all nations; and in the adjacent numerous and spacious apartments, were to be found rarities

collected from all the quarters of the globe. He had, in order to collect these, his agents for provisions in every country; the carriages on which they were laden, came quicker and more regular than the posts, and those who were well informed believed that the expenses of his entertainments, ran higher than that for secret correspondence, though very possibly they might be rendered subservient or useful to each other.

In order to display his superior learning, he would discourse at large, and deliver the most curious as well as copious lectures on all his domestic and exotic delicacies. In these he showed a true spirit of justice; no man was ever less a plagiary. "This pillau," he would observe, he had from prince Eugene, who had it from the bashaw of Buda; the egg soup, was made after the mode of the marchioness de Prie; the roan ducks were stewed in the style of the cardinal du Bois; and the lampreys came ready dressed from a great minister in England. His dishes furnished him with a kind of chronology; his water *souchy* was borrowed from marshall d' Auvergue's table when he was first in Holland; the pheasant *tourte* was a discovery he made in Spain, where he was so lucky as to pick up a man, who as a purveyor, had been in the service of that prince of *bons-vivans*, the duke de Vendome; but he always allowed that the grand school of cookery was the congress at Soissons, where the political conferences proved ineffectual, but the entertainments of the several minis-

ters were splendid beyond description. In a word, with a true Apician eloquence, he generously instructed all the novices in good living; and, as Solomon discoursed of every herb, from the cedar of Lebanon, to the hyssop on the wall; so he began with a champignon no bigger than a Dutchman's waistcoat button, and ended with wild boar, the glory of the German forests!!!

On his public days, there was an half hour, and sometimes near a whole one, when he was altogether inaccessible; and with respect to his employment on these seasons, as is ever the case as to the privacies of prime ministers, there was a great variety of deep as well as different speculations. An inquisitive foreigner, however, resolved to be at the bottom, cost what it would; and by a gratification to one of his pages, which might have procured a greater secret, he was let into this, when he beheld from his recess the following scene. The count, seated in his elbow chair, gave the signal for his being ready for the important business, when, preceded by a page, with a cloth on his arm, and a drinking glass, one of his principal domestics appeared, who presented a silver salver, with many little pieces of bread, elegantly disposed; he was immediately followed by the first cook, who, on another salver, had a number of small vessels filled with so many different kinds of gravy. His excellency then tucking his napkin into his cravat, first washed and gargled his mouth, and having wiped

it, dipped a piece of bread into each kind of sauce, and having tasted with much deliberation, rinsing his palate (to avoid confusion) after every piece, at length with inexpressible sagacity decided as to the destination of them all. These grand instruments of luxury, with their attendants, were then dismissed; and the long expected minister having fully discussed this interesting affair, found himself at liberty to discharge the next duties of his political functions. This proves that the science of eating, after all, is no liberal science; and that such finical nicety, and such studious deference to pamper the palate, is more noxious than beneficial; for let us only draw a comparison between the plainest and the most choice and refined *bon-vivans*, and we shall find upon an average, that the lives of the latter barely number above half the years of the former.

Salutary admonitions. The human frame compared to a barrel organ, &c.

Instead, therefore, of adopting or imitating the destructive refinement of the epicure, it would be well, without falling into the other extreme, were people to follow the advice given by Mr. Addison in the Spectator, of reading the writings of Cornaro; who, having naturally a weak constitution, which he seemed to have so ruined by intemperance, was expected to die at the age of thirty-five; but who at that time of life, adopted such a regimen, that he only al-

lowed himself twelve ounces of food, daily. By this plan of diet, he lived upwards of an hundred years; and it is pleasing to observe the tranquil, cheerful, and energetic state of mind accompanying his bodily health, which in a great degree was induced by it.

Cornaro found, that as the powers of his stomach declined with the powers of life in general, it was necessary he should diminish the quantity of his food, and by so doing, he retained to the last the feelings of health. Hence again, the comparison of the human frame to a barrel organ, possessing a systematic arrangement of parts, played upon by peculiar powers, and executing particular purposes; life being the music produced by the general assemblage or result of the harmonious action; so long, therefore, as either the vital or the mechanical instrument is duly wound up by a regular supply of food, or of the wind, so long the music will continue; but both are worn out by their own action; and, when the machine will no longer work, the life has the same close as the music; and in the language of Cornelius Gallus, as quoted and applied by Pope Leo X.

Redit in nihilum, quod fuit ante nihil.

"Simple diet," observes Pliny*," is best; for many

* Lib. ij. c. 52. See also Avicenna, 31. dec. 2. c. "Nihil deterius quam si tempus justo longius comedendo probahatur et varia ciborum genera conjungantur; inde morborum scaturigo, quæ ex repugnantia humorum oritur.

dishes bring many diseases; and rich sauces are worse than even heaping several meats upon each other." But there is not so much harm proceeding from the substance and quality of the food itself, as from the intemperate and unseasonable use of it. As a general rule, therefore, that quantity of food may at all times be ventured upon, which nature is able to "*concoct*, *digest* and *perspire*;" and if it were exactly known how much food it would be convenient for the stomach to bear every day, a man's health and strength might be preserved to a great age; but *malheureusement*, the all devouring gut, the "*omnivorantia et homicida gula*," destroys more than the sword.

Gluttony is the source, indeed, of all our infirmities, and the fountain of all our diseases. "As a lamp is choaked by a superabundance of oil, a fire extinguished by excess of fuel, so is the natural heat of the body destroyed by intemperate diet" An insatiable stomach is a pernicious sink. Mercurialis eloquently insists that gluttony is a peculiar cause of disease; and this opinion is not only confirmed by Hippocrates, Solander, Crato, and other writers, but by the common observation and experience of mankind.

The golden mean which ought to regulate extremes in diet, and other things, is no where better painted than by the great and immortal Milton, who, when he introduces the angel Michæl giving directions to our

first parents, by what means they might preserve health, says

"——— ——— if thou well observe
The rule of *not too much*, by temperance taught
In what thou eat'st and drink'st, seeking from thence
Due nourishment, not gluttonous delight,
'Till many years over thy head return:
So may'st thou live, 'till, like ripe fruit, thou drop
Into thy mother's lap, or be with ease
Gather'd, not harshly pluck'd; in death mature."

So also in deputing the various modes by which man would injure health, and extinguish life, he observes:—

"Of death, many are the ways that lead
To his grim cave; all dismal; yet to sense
More terrible at the entrance than within.
Some, as thou sawest, by violent stroke shall die;
By fire, flood, famine; by *intemperance* more,
In meats and drinks, which on the earth shall bring
Diseases dire, of which a monstrous crew
Before thee shall appear."

One reason for epicurism and the sophistication of food, is the facility with which the most wholesome aliment is procured; from the erroneous notion that that which is dearest and scarcest must assuredly be the best; and there are instances of enormous sums being spent in the purchase of a single dish, which, if economically expended, would supply several families for a year.

"———————— a lavish slave,
Six thousand pieces for a barbel gave:
For his own gut he bought the stately fish,
And spent his fortune on a single dish."

Even at the present day, every thing that is cheap is scorned; and as observed by Seneca, "the glorious light of nature is loathed at our meals, and banished from our presence, only because it comes free, and at no expense." The merit, in truth, of modern times, directs all its rays, *ad gulam;* and the only inducement to study, is to please the palate, and to satisfy the stomach.

"Invite a lord to dine, and let him have
The nicest dish his appetite can crave;
Still if it be on oaken table set,
His lordship will grow sick, and cannot eat.
Something's amiss, he knows not what to think;
Either your venison's rank, or sauces stink.
Order some other table to be brought,
Something at great expence, and latest wrought,
Beneath whose orb large yawning panthers lie,
Carved in rich pedestals of ivory;
He finds no more of that offensive smell;
The meat recovers and my lord grows well!

The old proverb that "a good appetite is the best sauce," is true to an azimuth. The artificial palate of the epicure, how keen soever it may be, stands far below the natural stimulus. The black broth of Lacedemon has long continued to excite the wonder of the philosopher, and the disgust of the epicure. What the ingredients of the sable composition were, has

not been exactly ascertained. Julius Pollux, says, it was *blood*, thickened in a certain way: Dr. Lister, supposes it to have been hogs-blood; if so, this celebrated Spartan dish, bore no very distant resemblance to the black-puddings of our days. At all events it does not appear to have been a very tempting dish, since a citizen of Sybaris, who tasted it, declared it was no longer a matter of astonishment with him, why the Spartans were so fearless of death, since any one in his senses, would much rather die, than exist on such execrable food*. When Dionysius the tyrant had tasted the black broth, he exclaimed against it as miserable stuff. The cook replied, "it was no wonder, for the sauce was wanting." "What sauce?" asked Dionysius; the answer was "*labour* and *exercise*, *hunger* and *thirst*, these are the sauces we Lacedemonians use, and they render the coarsest fare agreeable."

THE EFFECTS OF CLEANLINESS.

In addition to the regulation of diet, pure air, exercise, tranquillity of mind, &c. cleanliness is as essential to bodily health and firm nerve; and the want of it is a fault which admits of no excuse. The word cleanliness, in fact, is but another term for a sound and healthy skin—a pure mirror of the harmony of the internal parts with the surface; and a clear skin is "visible health." Frequent washing not only removes

* *Vide* Athenæum, lib. iv. c. 3.

the filth and scurf which adhere to the skin, but likewise promotes the perspiration, braces the body, and enlivens the spirits.

Cleanliness, is considered, as Aristotle calls them, one of the *half-virtues;* and is chiefly recommended under the four following considerations; 1. As it is a mark of politeness; 2. As it produces love; 3. As it bears analogy to purity of mind; 4. And as it preserves health.

Considered as a mark of politeness, it is universally agreed upon, that no one unadorned with this virtue, can go into company without giving manifest offence. The easier or higher any one's fortune is, this duty rises proportionally. The different nations of the world are as much distinguished by their cleanliness, as by their arts and sciences. The more any country is civilized, the more they consult this part of politeness. We need but compare our ideas of a female *Hottentot*, and an *English beauty*, to be satisfied of the truth of what is here advanced. In the next place, cleanliness may be said to be the foster-mother of love. Beauty, indeed, most commonly produces that passion in the mind, but cleanliness preserves it. An indifferent face and person, kept in perpetual neatness, has won many a heart from a pretty slattern.

In the east, where the warmth of the climate makes attention to cleanliness more immediately necessary than in colder countries, it is made a part of their religion. The jewish law (and the mahomedan, which

in some things is copied after it) is filled with bathings, purifications, and other rites of the like nature.

Though there is the above-named convenient reason to be assigned for these ceremonies, the chief intention undoubtedly was to typify inward purity and cleanliness of heart by those outward washings. We read several injunctions of this kind in the book of Deuteronomy, which confirm this truth; and which are but ill-accounted for by saying, as some do, that they were only instituted for convenience in the desert; which otherwise could not have been habitable for so many years. The following story extracted from an account of mahomedan superstitions, exemplifies the rigid attention and devotion that is paid to ablutions in the east.

"A dervise of great sanctity, one morning had the misfortune as he took up a chrystal cup which was consecrated to the prophet, to let it fall upon the ground, and dash it to pieces. His son coming in, some time after, he stretched out his hand to bless him, as his manner was every morning; but the youth going out stumbled over the threshold and broke his arm. As the old man wondered at these events, a caravan passed by on its way from Mecca. The devise approached it to beg a blessing; but as he stroked one of the holy camels, he received a kick from the beast that sorely bruised him. His sorrow and amazement encreased upon him, until he recollected that, through inadvertency, he had that morning gone abroad without washing his hands.

PRESCRIPTIONS.

FOR INDIGESTION, OR DERANGEMENT OF THE DIGESTIVE ORGANS, NERVOUS AFFECTIONS, &c.

1. PLUMMER'S PILL.—Five grains each; one to be taken at bed-time. In cases of indigestion, where the biliary secretion is defective, and is combined with a diseased state of the liver, spleen or biliary ducts. Or a pill containing about two grains of the submuriate of mercury, may be taken every third night, succeeded next morning by an aperient draught, of infusion of senna and epsom salts, or a sufficient quantity of the aperient mixture, No. 21.

*** Plummer's Pill has long been celebrated in most diseases of the skin and other complaints. Given as above directed, in deranged digestive organs, its use must be continued for some time. Whey, Bristol waters, and decoction of the woods, have been generally recommended at the same time.

In conjunction with this pill, or with three grains of the blue pill, every second night, five grains of Turkey rhubarb, may be taken daily about an hour before dinner. Or, if the form of a pill be preferred:

2. Take Turkey rhubarb, finely powdered 1 drachm.
Ginger in powder . . . . . 10 grains.
Oil of Cinnamon . . . . . 5 drops.
Syrup, enough to make the mass, of which let twelve pills be made. Dose one, an hour before dinner.

FORDYCE.

In Heart-burn, accompanied with wind on the stomach, &c.

3. Take Prepared chalk . . . . . 15 grains.
Spirit of nutmeg . . . . . 1 drachm.
Syrup of ginger . . . . . 2 drachms.
Water . . . . . 1½ ounce.
Make a draught to be taken twice a day. PHILLIP.

As heartburn may proceed from various causes, should it prove troublesome, some attention must be made in the ordinary diet; by substituting for it, articles of a less pungent and acrid nature, avoiding spices and aromatics. A gentle emetic may precede the use of this or any of the following prescriptions; than which, repeated occasionally, nothing proves more

serviceable in dyspeptic complaints originating in a diseased action of the digestive organs:

Or,

4. Take Magnesia . . . . . ½ drachm.
Mint water . . . . . 2½ drachms.
Compound spirit of lavender . ½ drachm.
Spirit of carraway . . . . . ½ ounce.
Syrup of ginger . . . . . 2 drachms.
Mix. A table spoonful to be taken occasionally. HUFELAND.

In Acidities of the stomach and intestines.

5. Take Solution of ammonia . . . . 12 drops.
Almond emulsion . . . . . 2 ounces.
Tincture of opium . . . . . 10 drops.
Make a draught; to be taken three times a day. ARMSTRONG.

Or,

6. Take Solution of the subcarbonate of potash 15 drops.
Chalk mixture . . . . . 2 ounces.
Tincture of calumba . . . . . 1 drachm.
Make a draught, to be taken occasionally. LAING.

In painful flatulence.

7. Take Camphor mixture . . . . . 1 ounce.
Fetid spirit of ammonia . . . ½ ounce.
Make a draught to be taken immediately the symptoms come on. PHILLIP.

Nervous drops.

8. Take Huxham's Tincture of Bark . . 1 ounce.
Compound Tincture of Valerian . 1 ounce.
Compound Spirits of Lavender . ½ ounce.
A tea spoonfull in any liquid, three or four times a day. BUCHAN.

In the Hysterics and other nervous affections.*

9. Take Russian Castor . . . . . 1 scruple.
Carbonate of Ammonia . . . . 5 grains.
Simple Syrup, enough to make a bolus. BLACK.

Or,

10. Take Tincture of Castor . . . . . 1 drachm.
Sulphuric Æther . . . . . 10 drops.
Tincture of Opium . . . . . 10 drops.
Cinnamon Water . . . . . 1½ ounce.
Make a draught. To be taken when the fit is coming on. PARIS.

* The symptoms which immediately constitute this disease may be removed when violent, by blood-letting, and a brisk purgative, along with the warm bath." *See* Hamilton on female complaints, p. 47.

In the Hysterics and other Nervous affections.

11. Take Tincture of Ammoniated Valerian 2 drachms.
Tincture of Castor . . . . . 3 drachms.
Sulphuric Æther . . . . . 1 drachm.
Cinnamon Water . . . . . 4 ounces.
Dose, a table spoonful every two hours. BAILLIE.

Or,

12. Take Succinated Spirit of Ammonia . . ½ drachm.
Sulphuric Æther . . . . . 1 drachm.
Dose 15 drops in a wine glassful of mint water. Ibi .

Anti-Hysteric bolus.

13. Take Powder of Valerian . . . . . 1 drachm.
Carbonate of Iron . . . . . ½ scruple.
Syrup of Ginger, enough to make a bolus.
JONES.

To be taken as occasion may require; one daily to phlegmatic women, and such as are debilitated by excessive discharges, will find considerable benefit from this bolus, or the following

Electuary.

14. Take Peruvian Bark . . . . . 1 ounce.
Valerian in powder . . . . . 2 drachms.
Honey, enough to mix for an electuary. Dose the size of a nutmeg.
To be taken once or twice a day. LETTSOM.

In Palpitation of the Heart, accompanied with much nervous irritability.

15. Take Tincture of Foxglove . . . . . 10 drachms.
Camphor mixture . . . . . 10 drachms.
Tincture of Calumba . . . . . 1 drachm.
Sulphuric Æther . . . . . 15 drops.
Make a draught to be taken every four hours. COOPER.

In Costiveness and Nervous Head-ache.

16. Take Fine Turkey Rhubarb . . . . . ½ drachm.
Powder of Nutmeg . . . . . ½ drachm.
Extract of Camomiles . . . . . 1 scruple.
Oil of Peppermint . . . . . 10 drops.
Make 30 pills, and take three twice a day, occasionally.
FOTHERGILL.

In Costiveness from Indigestion.

17. Take Infusion of Senna . . . . . 1 ounce.
Tincture of Senna . . . . . 1 drachm.
Tincture of Jalap . . . . . 1 drachm.
Tartrate of Potash . . . . . 1 drachm.
Syrup of Senna . . . . . 1 drachm.
Make a draught; to be taken early in the morning.

PHILLIP.

Tonic and Purgative pills to create an appetite, &c.

18. Take Ammoniated Iron . . . . . 1 drachm.
Extract of Gentian . . . . . ½ drachm.
Extract of Aloes . . . . . ½ drachm.
Mix and divide the mass into 30 pills, of which take two, three times a day. In phlegmatic habits.

PARIS.

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Hysteric, Nervous, and Antispasmodic pills.

20. Take Galbanum, Myrrh, and Sagapenum,
in powder, of each . . . . . 2 drachms.
Assafœtida . . . . . 1 drachm.
Syrup of Saffron, enough to make the whole into a mass
Make 60 pills, and take 2 or 3 occasionally.

LATHAM.

Stomachic and Purgative pills.

21. Take Socotrine Aloes . . . . . 1 drachm.
Myrrh . . . . . ½ drachm.
Assafœtida . . . . . ½ drachm.
Make 20 pills. Dose 2 or 3 occasionally.

HAMILTON.

* Sold by some of the patent medicine venders in the metropolis, but by whom in particular, we cannot at present say.

Draught in Nervous langour.

22. Take Compound Spirit of Lavender . . 1 drachm.
Spirit of Rosemary . . . . . 10 drops.
Spirit of Nutmeg . . . . . 1 drachm.
Tincture of Opium . . . . . 10 drops.
Cinnamom Water . . . . . 2 ounces.

To be taken when symptoms of weariness or languor occur without exercise.

FOTHERGILL.

Aperient mixture and pill, in Indigestion.

23. Take Epsom Salts . . . . . ½ ounce.
Manna . . . . . 2 drachms.
Infusion of Senna . . . . . 6 drachms.
Tincture of Senna . . . . . 2 drachms.
Peppermint Water . . . . . 1 ounce.
Distilled Water . . . . . 8 ounces.

A table spoonfull, the first thing in the morning, with three grains of the blue pill every other night.

ABERNETHY.

*** This aperient mixture may accompany the use of any of the preceding prescriptions, which are not of a laxative nature themselves; and the use of all of them, without which much advantage cannot be expected, must be assisted with exercise, pure air, and such an amendment in the ordinary diet as may be deemed advisable.

Debilities of the stomach may be alleviated by the ordinary tonic infusions; as those of Peruvian bark, Gentian, Calumba, &c. In stomach and bowel complaints, nervous languor, &c. the tincture or infusion of the hop, are of singular advantage: a drachm of the former, in some aromatic tincture, or a tea cupfull of the latter, twice a day, or once, early in the morning, is the best manner of taking it.

In Bilious complaints, accompanied with indigestion.

24. Take of Cathartic extract . . . . . 1 drachm.
Calomel . . . . . ½ drachm.
James' Powder (genuine) . . . 1 scruple.

Mix and divide into 20 pills. SIR A. CLARKE.

One or two of these pills taken occasionally at bed time, will move the bowels gently next morning, will carry off diseased, and promote healthy secretions of bile, will be found to obviate that mental despondency and long train of nervous symptoms so constantly attendant on bilious and liver complaints.

Mixture for excess of bile.

After a dose of rhubarb and ginger, or two or three of the rhubarb pills, (No. 2.)

25. Take Chalk mixture . . . . . 6 ounces.
Tincture of Cinnamon . . . . . ½ ounces.
Laudanum . . . . . 1 drachm.

Mix and take two table spoonful after every liquid motion.
SIR. A. CLARKE.

Diseases arising from an excess of bile, or an increased secretion, are equally distressing as those which are caused by a deficiency. Where there is deficiency of bile, which often occurs after bowel complaints are cured, the compound decoction of aloes regulates and carries on the functions of the alimentary canal, excites the peristaltic action of the intestines; prevents the accumulation of mucus, and neutralizes any disengaged acid in the stomach or bowels.

Chalybeate draught to restore the tone of the stomach and nerves.

26. Take Wine of Iron . . . . . 2 drachms.
Infusion of Gentian . . . . . 1½ ounce.
Tincture of Cascarilla . . . . . 1 drachm.

Make a draught to be taken two or three times a day.

An Electuary for the same.

27. Take powder of Peruvian bark . . . . . 1 ounce.
Myrrh . . . . . 2 drachms.
Compound powder of Cinnamon . . ½ drachm.
Subcarbonate of Iron . . . . . 2 drachms.

Syrup of orange peel, a sufficiency to form an electuary; of which the bulk of a walnut may be taken three times a day, with two ounces of the infusion of quassia. THOMAS.

*** In an impaired or capricious appetite, chalybeates are of singular service in restoring the tone of the stomach and nerves, as well as weakness of the assimilating organs; irregular digestion, windy distention of the abdomen, anxiety about the pit of the stomach, difficult respiration from sympathy with the stomach, and occasional vomiting of viscid mucus.

Aperient Electuary in lowness of spirits.

28. Take Cream of Tartar . . . . . 2 ounces.
Tartarised Iron . . . . . 3 drachms.
Powdered Ginger . . . . . 1 scruple.
Simple syrup *q. s.* Mix for an electuary.

Dose, the size of a nutmeg, occasionally. GREGORY.

Pills in Costiveness from deficient Bile, &c.

29. Take Compound Gamboge pills . . . 6 grains.
Extract of Colocynth . . . . . 6 grains.
Calomel . . . . . 2 grains.
Tartarised Antimony . . . . . ¼ grain.
Oil of Cloves . . . . . 2 drops.
Simple Syrup . . . . . *q. s.*

Mix, and divide into 4 pills; two to be taken every third night, at bed-time. HAMILTON.

Stomachic and laxative pills.

30. Take Turkey Rhubarb . . . . . 15 grains.
Myrrh, in powder . . . . . 15 grains.
Extract of common Aloes . . . 6 grains.
Extract of Camomiles . . . . . ½ drachms.
Oil of Cloves . . . . . 8 drops.

Mix and divide into 20 pills: two to be taken about an hour before dinner. BAILLIE.

Some General Observations on Costiveness, &c.

As the food and drink we daily consume, for the support of the body, necessarily deposits useless matter, (*See Chymification* or *Digestion*, p. 52.) a daily motion of the bowels is extremely salutary; particularly in persons subject to costiveness, and the many disagreeable consequences thence arising; *e. g.* frequent head-aches, difficult breathing, flatulency, eructations, and spasms; which produce peevishness of temper, general lassitude, and ultimately, if not obviated, hypochondriasm; the abdomen of such persons feel tumid; the circulation of the blood in the intestinal vessels is impeded, and consequently the general circulation interrupted. These complaints sooner or later, certainly attend habitual costiveness; especially if no other kind of evacuation, as that by urine, or insensible perspiration, be in an uncommon degree increased. With people in good health, the evacuation by stool usually takes place once or twice a day, and either in the morning or evening, according to the habits of the person. Those who are of a costive habit of body, should visit the customary retreat, regularly every morning at a certain hour, and thus endeavour to procure a motion by proper efforts, even though at the moment they may not feel such an inclination; for it is well founded on experience, that nature at length will be habituated, by perseverance, to observe a certain regularity in this respect. The proper time for these attempts is early in the morning and late in the evening; and whatever means of diet may be adopted with this

intention, they ought to be employed from three to four hours previous to the time we wish to succeed, or immediately before going to bed; taking care, however, that if every effort of this kind prove abortive, these voluntary exertions in promoting stool should by no means be carried to an extravagant degree, as by such unnatural pressure we may bring on ruptures, piles, or the bursting of blood-vessels about the rectum. Hence it is more advisable to abstain, for some time, from all crude and solid food, and to use only such articles as are of a light and aperient nature; as rye bread, spinach, boiled fruit, particularly prunes; decoctions of currants, ripe pears, apples; sweet and emollient vegetables, especially beet-roots, and occasionally corned meat; using for drinks, sweet table beer, whey, infusions of malt, &c. and should these, with necessary exercise, not produce the desired effect, recourse may be had to some mild purgative, as any of the preceding; or the following,

Pills for costive habits.

31. Take Extract of common Aloes . . . . 20 grains.
Ginger in powder . . . . . ½ drachm.
Powder of Ipecacuanha . . . . 8 grains.
Simple Syrup. enough to form the mass; which is to be divided into 16 pills. One to be taken daily, before dinner.

Or,

32 Take Aloetic pills with Myrrh . . . . 15 grains.
Divide the mass into three pills for a dose. THOMAS.

*** Where indigestion is occasioned by defective biliary secretion, and is combined with a diseased state of the liver, spleen, or biliary ducts, the stools indicating a want of due mixture of the bile with them, calomel should be employed. A pill containing about two grains may be taken every third night, succeeded the next morning, by an aperient draught composed of 1½ ounce of the infusion of senna, with two or three drachms of epsom salts.

FINIS.

Plummer and Brewis, Printers, Love-lane, Eastcheap.

CORRIGENDA.

Page 36. Second line from the bottom for *stumps* read *strings*.
55. Fifth line from the bottom, for *Pharyne* read *Pharynx*.
57. Last line of Note, for *mucous* read *mucus*.
58. Ninth line from top, for *lumber* read *lumbar*.
id. Seventh line from ditto, for *membraneous* read *membranous*.
64. Second line of Note, for *affected* read *effected*.
71. Fourteenth line from bot. for *sanguierous* read *sanguiferous*.
96. Twelfth line from bottom, for *difference* read *deference*.
106. Seventeenth line from top, for *primodial* read *primordial*.

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