

The treatment and cure of diseases incidental to sedentary life / by William Pearce.

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THE
TREATMENT AND CURE
OF
DISEASES
INCIDENTAL TO
SEDENTARY LIFE.



BY
WILLIAM PEARCE, M.R.C.S., L.S.A.,

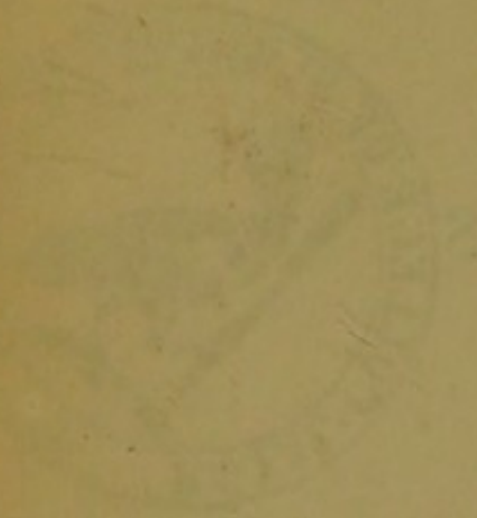
AUTHOR OF
'THE MORAL AND INTELLECTUAL TRAINING OF INFANTS,
'EVERY MOTHER'S BOOK,' ETC. ETC.

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1854.

PRESENTED
by the
AUTHOR.

THE TREATMENT AND CURE



OF THE

SEEDBAY LIFE

WILLIAM J. ADLARD, M.D.

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P R E F A C E.

ALTHOUGH it is true that unavoidable evils must be borne with patience, still, it becomes the duty of every man to endeavour to diminish their magnitude and mitigate their effects. That close mental application and sedentary habits tend to debilitate the system, and render the individual liable to many disordered states of health, is a fact attested by the painful experience of a large and important portion of the community. The following pages are penned in the hope that means may be suggested by which these necessary evils may be rendered less injurious, and the disorders resulting from their continued effects may be detected and treated in

their earliest stages, before a series of disordered function is established, and confirmed disease supervenes.

The injurious effects of sedentary habits being frequently manifested in some disorder of the functions of digestion and assimilation, we have first treated of the symptoms of that protean disease—dyspepsia; and have endeavoured to lay down a few simple rules, by the observance of which a weak stomach may be “coaxed” to perform its functions with comfort, and in proportion to the exigencies of the system, when it cannot be forced to do its duties with rapidity and vigour.

The nervous system being the one which first exhibits the effects of close and long-continued mental labour, we have offered a few suggestions, by the adoption of which sufficient nervous energy may be furnished to supply all the purposes of life, and afford the various organs of digestion, assimilation, and secretion, assistance in the performance of their important functions, without itself suffering from exhaustion or premature decay.

In reference to diet, believing as we do, that all the productions of the earth were given by an All-wise Providence for man's use, and that the abuse of any article of diet is no argument against its use, we have not particularised anything as wholesome or unwholesome IN ITSELF; but have endeavoured to show that regularity in the periods of taking food, proportioning both quantity and quality to the digestive powers of the stomach, and an observance of the peculiarities which experience has taught the individual, are of more importance than strict rules or general prohibitions, and that for all things there is a time, a season, and frequently a necessity.

In the treatment of disease, we have been careful not to overstep the bounds of safety, or to encourage quackery and empiricism; but, having suggested remedies calculated to relieve the symptoms described before each prescription, we have advised immediate resort to the usual medical attendant in the event of benefit not being speedily experienced. And, lastly, it has been our intention, avoiding all technicalities and abstruse theories, to

state plain, simple facts, in a manner best calculated to interest our readers, so that they may apply the deductions made from them to the preservation and restoration of their own health.

WILLIAM PEARCE.

6, CHARLES PLACE, COBOURG ROAD;

July, 1854.

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DISEASES

INCIDENTAL TO

SEDENTARY LIFE.

CHAPTER I.

THE EVILS OF QUACKERY—SUSCEPTIBILITY OF DIFFERENT CONSTITUTIONS—THE “BLIND LEADING THE BLIND”—LAWS OF THE HUMAN CONSTITUTION—FUNCTION OF THE SKIN—SUPPLY OF BLOOD—NERVOUS SYSTEM—MUTUAL ACTION OF ORGANS.

It has often been said that “a little learning is a dangerous thing,” and, though the meaning of this oft-quoted sentence has been frequently misapplied, there is at least one kind of learning to which it is remarkably applicable, “the science of Medicine.” And yet, perhaps, there is no scientific pursuit so pestered with “dabblers” and men of superficial knowledge, as the medical profession. Medicine being a science, upon the proper practice and application of which much of the happiness and well being of mankind depends,—this is not as it ought to be. Truly, there appears to be better days in store; the strict necessity for a sound gene-

ral and classical preliminary education, before becoming articulated to the profession, and the searching and practical nature of the examinations necessary to obtain the "coveted diploma," are slowly but surely working important and useful reformatations; still, whatever pains may be bestowed upon the acquisition of medical information, and however carefully and conscientiously the profession may be practised, there are many who allow themselves to prefer the vaunted nostrums of the quack, to believe in the miraculous cures of the empiric, or to be captivated by the verbose nonsense of the charlatan, rather than apply to those who are qualified for the proper discharge of their duties by study and experience. Our daily and weekly journals teem with advertisements of curative agents of all kinds,—from the compounds of colocynth, gamboge, and blue pill, to mixtures of meal and ground lentils. If, however, there are makers and venders of these things, so also there are buyers and consumers. Some because the name of the complaint they imagine themselves to be suffering from is mentioned in the Pandoric advertisement, and others because they imagine they know the laws of their own constitution; and quote the old saying that "if at forty a man is not his own physician he is a fool." Let those who quote this absurd saying be assured

that they certainly have no right to the *former* of the two appellations. But there is, if possible, a more dangerous kind of quackery than the one just mentioned—the practice of Domestic Medicine. That kind of practice which with calomel, antimony, jalap, and salts, in the one hand, and Buchan, Graham, or Culpepper in the other, looks into “the books” for a local pain or isolated symptom of disease, as though it were consulting a lexicon, and then administers the supposed remedies as freely and with as little compunction as though it were merely explaining the simple meaning of some ambiguous word or sentence. However, if there is one class of society which more than another is exempt from absurdities of the kind referred to, it is to be hoped that those whose vocations are studious, and require the exercise of sound reasoning, combined with discrimination and judgment, are entitled to such honorable distinction: and it is, therefore, with little fear of being misunderstood, or appearing to give any encouragement to quackery and empiricism, that we purpose to give a few hints for the preservation and restoration of health in those of sedentary employments.

The increasing experience of medical men, and the elaborate statistics of disease which, from time to

time, are brought before the reading public, all tend to prove that there are certain diseases peculiar to men of certain habits and pursuits. For instance, the stone-mason, the painter, the cutler, and even the ruddy-faced agriculturist, are, from their peculiar vocations, all more incident than other classes of their fellow-men to one distinctive class of diseases; and even when suffering from disorders—upon which their habits have no direct effect—and for which their employments do not afford any predisposing cause—they exhibit certain modifications of disease, and require a distinctive and peculiar mode of treatment, founded upon a knowledge of the many “little things” pertaining to their natural or artificial peculiarities and their station in life. Many imagine that the duties of a medical man consist merely in accurately and definitively detecting the existence of a disease answering to a certain nosological distinction, and then applying remedies, or a course of treatment indicated for its cure or relief. This idea, to a certain extent, or as far as it goes, may be correct; yet it forms but a very small and initiatory part of the considerations necessary for the successful treatment of human suffering. Diseases are modified, and to the inexperienced eye completely masked, by a variety of agencies; not only by those arising from the various

callings or manufactures in which men are engaged, but likewise, in a most important degree, by age, temperament, disposition, climate, locality, season of year, physical formation, hereditary tendencies, and a peculiar susceptibility of constitution, termed idiosyncrasy. All these things have to be ascertained and studied, and their various bearings thoughtfully considered, before a proper and rational treatment can be commenced. Take, for instance, the formidable disease called Apoplexy. A man is seized with a fit suddenly in the street; the crowd clamour for “a doctor and a lancet;” and, if the unfortunate sufferer be a strong, robust, well-fed countryman, perhaps their demand is right; but, suppose him to be a half-fed emaciated man, who for years has inhaled the partially de-oxygenised air of a large town, the lancet would completely extinguish the little vitality left. Or, suppose again the attack but simulates the disease mentioned, as poisoning with opium, certain forms of epilepsy, or diseased heart, and drunkenness will do,—how fearful would be the responsibility of that individual who used the lancet in this case, simply because “the books” connect apoplexy and bloodletting together. A well-to-do artisan, who for some years has resided in London and been constantly occupied in his handicraft, shall be attacked with pleurisy, or inflammation of

any important organ contained within the chest, and every drop of blood taken from that man removes the probability of a cure, or at best leaves him a "water-logged chest," to drag on a miserable existence for a few years; whereas, in a robust ploughboy of the same age and weight, residing in the country, suffering from the same disease, bleeding until faint from loss of blood, shall act like a charm and lead to a rapid and sound convalescence. Then the exhibition of certain remedies, even when otherwise pointedly indicated, become unsafe at certain seasons of the year, and under occasional transitory conditions of the constitution. Thus, examples might be given almost "*ad infinitum*," illustrative of the bearings of every one of the considerations before mentioned; and the reason why these "little incidentals" have been so prominently noticed, is to guard our readers against a most common and pernicious practice—a practice which often disappoints the patient, and sometimes deceives the physician. We mean the custom of recommending to others a certain drug, prescription, or course of treatment, from which we have ourselves derived benefit. "I was just like you—suffered just as you do," says visitor No. 1 to his sick friend, "and such and such a thing cured me." In a few hours visitor No. 2 comes with some well-meant advice, and another

curative means is suggested ; and thus, perhaps, the poor fellow's stomach becomes a receptacle for a heterogeneous jumble of physic,—some innocent, some potent : precious hours are wasted ; and that which was at first a simple deviation from health, easily remedied when its cause had been discovered, has run on to confirmed disease, at least influenced by loss of time, if not exasperated by bad treatment, before a medical man is called in. This is no fancied picture—it is an annoying and everyday occurrence. It is from this cause that many useful remedial agents fall into disrepute, and much undeserved blame is cast upon the profession ; and it is from a study of the considerations before mentioned that the glaring absurdities of advertised panaceas, applicable to all the “ills that flesh is heir to,” irrespective of age, constitution, or any other circumstance, become so evident and ridiculous.

It will be necessary, before entering more fully on the subject proposed, to give a brief physiological sketch of the natural functions and relative uses of the organs which most commonly suffer derangement or disease in those of sedentary habits. It is one of the immutable laws of nature that no one organ, or system of organs, can be long exercised, to the neglect or desuetude of others, without eventually leading to morbid changes, either in the neglected

or overtaxed organs, or both. There is such a thing in the "*vis medicatrix naturæ*" as the "law of compensation;" by which is meant that one organ shall perform more than its peculiar duty, or for a time assume a function not essentially its own; by which assistance or relief, the integrity of the system is for a time maintained, and disease prevented; but this compensatory action cannot continue long without leading to mischief, or at least exposing the constitution in which it exists to danger. For instance, it is necessary for the proper purification of the blood, in passing through the lungs, that a certain amount of the vivifying principle of the atmosphere, called oxygen, shall be inhaled, and a certain amount of useless matter in the form of carbon be exhaled, and that what is called the insensible perspiration or exhalation from the skin, shall assist in this purifying process; but, suppose a man to be confined in a close room, breathing the same atmosphere over and over again, or in company with others (perhaps considerably his juniors, who require more oxygen than he does), he has need to get rid of an extra amount of impurities, and in this he is assisted by the small vessels of the skin (capillaries,) becoming relaxed, so as to exhale more freely, and by the liver and kidneys taking upon themselves additional duties. This state of things lasts for a time without

any perceptible inconvenience, but sooner or later the functions of the skin become disordered and debilitated—the pores obstructed—the liver becomes enlarged—and either torpid or too active, too much or too little bile is secreted—and that of a depraved kind,—and functional derangement ensues. Now, if under these circumstances the body is exposed to cold, or the skin becomes influenced by any agent by which its increased exhalation is obstructed, the blood is thrown back upon internal organs already overburdened; and congestion, inflammation, cessation of function, and a series of morbid actions is generated. Thus, then, in those of sedentary habits, the liver and skin are prone to disordered function and disease. But these are among the most important organs of the body, the one from the vital importance of its function, the other from its duties and extent. If the liver becomes disordered, the stomach likewise suffers; the power of digesting food, assimilating when digested, and the throwing off of effete and useless matter becomes deranged. Thus then indigestion (*dyspepsia*) in all its protean forms—loss of flesh—and constipation, are among the ills to which the man of sedentary occupation is exposed.

Then there is another law of nature to be noticed,—it is that the flow of blood to any one organ is determined by the activity and consequent necessity

for an increased circulation in that organ. But a due amount of circulating fluid is necessary for the proper discharge of the healthy function of every organ of the body ; and hence, if one organ habitually receives a greater amount of blood than its natural share, other organs become disordered, and their functions imperfectly performed, because of their diminished supply. The man addicted to thought and close study exercises his brain, he reads many hours together, and thinks deeply ; and after a few days spent in this manner, he suffers from itching eyes, aching head, chilly skin, and cold feet, his appetite for food fails, he suffers from a dull pain or sense of fulness and uneasiness on his right side, and his bowels become constipated. The vessels within the head have become overburdened and relaxed ; thus accommodating themselves to the increased quantity of blood sent to them ; while the stomach, liver, bowels, skin, and extremities, have not received their healthy amount. Here then is another cause of ill health in those of sedentary habits.

There are also another class of actions to be considered, those of the nervous system,—of whose laws we know little or nothing, except what we learn from their effects and diseases. In whatever organ or part of the body there is a call for exercise

of function or action, there is likewise a determination of nervous power. We will to walk, to raise the arms, to close the eyes,—nervous power obeys our will; the muscles necessary for the performance of that act are stimulated, and the act is accomplished. We think and reason, arrange ideas, gather facts, draw conclusions, and during these processes nervous power is concentrated in the brain; but a supply of nervous influence is required for the use of other organs besides the brain, just in the same manner as blood is necessary for their nutrition, and to furnish the source of their proper secretions. A man, after several hours of close mental application, loathes food, shewing that the stomach has been inactive; forgets there is such a vulgar instrument as a dinner bell, or such an animal enjoyment as eating a dinner; he cares little for general conversation, for it does not interest him, and any exertion requires a determined effort; thus, then, loss of appetite, disinclination for exercise, and distaste for society, are among the ills and inconveniences arising from sedentary and studious occupations.

From what has been said, then, it will be evident that there is a natural dependence of all the organs of the body one upon the other;—that the secreting, the vascular, and the nervous systems all act according to mutual laws and series of effects;—that

disorder of one organ, or system of organs, leads to derangement or imperfect function in others dependent upon or joined with it in action ;—and that if these unhealthy actions are not corrected, they must sooner or later lead to positive and confirmed disease.

CHAPTER II.

DIGESTION.

WE will now proceed to notice some of the diseases and disordered states of health, to which those of a sedentary habits are liable ; not so much in the order in which they occur in "the Nosology," or with regard to their anatomical relations, but rather with respect to their frequency and importance ; and, first, those deviations from health, which, because they manifest themselves by some derangement of the functions and duties of the stomach, are said to arise from indigestion or dyspepsia,—by which is meant some evident imperfection in the natural process of digesting and assimilating food.

The healthy digestion of food requires the assistance of many organs and secretions ; first, the teeth are required to masticate and triturate the food ; and at the same time those glands which furnish

that peculiar fluid called saliva, are called upon for their secretion, so as to reduce the food to a pulpy mass ready to be swallowed, and brought more immediately under the digestive process.

The food having reached the stomach is exposed to the action of the proper secretion of that organ called "*gastric juice*," of which fluid it may be remarked that it exudes from the mucous or lining membrane of the stomach in small drops; that the presence of food or some solid substance is necessary to stimulate the membrane to furnish this secretion; that it is always acid, and that in conjunction with an albuminous substance called "*pepsia*," likewise furnished by the stomach, it possesses a peculiar solvent power. In the stomach the food is moved about with a rolling or churning motion, mixed with the gastric juice, reduced to a semi-fluid consistence, and converted into an uniform pulpy mass called "*chyme*." This mass is next by degrees passed through the lower (or pyloric) opening of the stomach into the first part of intestines (called "*duodenum*," from its length being said to be usually about "twelve finger-breadths"), there to be mixed with the secretion of the liver, bile, pancreatic juice (the secretion of the pancreas,—organs known in animals as the "sweet-bread"), and the mucous secretion of the intestines themselves. The effect

Of the admixture of these fluids is to separate the mass into two distinct parts, the one a nutritive portion, called "chyle," which is taken up or absorbed by an infinite number of small tubes opening in the mucous lining of the intestines (called lacteals, from the milk-like character of their contents) ; transmitted by them to a reservoir (the thoracic duct,) ready to receive their contents, and finally conveyed into the veins to be passed through the lungs, there to be purified and fitted for the purposes of life ; the other an excrementitious portion, which in its passages acts as a natural stimulus to the whole intestinal tract, and is eventually conveyed out of the body. The time occupied in these processes varies from two to five hours, according to the kind of food taken. It is necessary for good and easy digestion that the food should be minutely divided before being submitted to the action of the stomach ; in other words that the teeth should do their duty. A debilitated stomach acts slowly, if at all, on large or tough masses of food ; and, if digestion is long delayed, and food retained in the stomach, it undergoes the same decomposition from exposure to heat and moisture as any other organic matter would under similar circumstances ; hence, gases are extricated, causing distension and flatulency ; acids are formed, leading to heartburn and pain in the stomach,

or perhaps at length the offending matter is ejected by vomiting, or else passes in its half-putrid state downwards into the intestines, causing irritation, griping pains, &c., during the whole of its course, until it is expelled. Let it be borne in mind that whatever passes the stomach in an indigested form, passes undissolved through the whole of the intestinal canal, provoking disorder in its transit, and sometimes becoming the nucleus for dangerous concretions. Thus, then, we see that the teeth, as required for mastication, play an important part in the process of digestion; and as many busy and studious men, even with sound teeth, frequently eat rapidly and bolt their food, we have a common cause for flatulency, acidity, &c., and an easy and sure preventive for these ailments.

There are some substances of such an indigestible nature that, when introduced into the stomach, they appear to pass altogether unchanged; such are the husks of seeds, rind of fruit, dried currants, &c. These substances are, therefore, unfit for a weak and debilitated stomach; but, when the digestive powers are active, and the bowels at the same time sluggish, substances of this kind may be sometimes useful, by acting as a stimulus to the bowels, and so increasing that peculiar action (called peristaltic,) by which the contents of the intestines are moved

along their course. Brown bread is frequently and properly recommended to those who suffer from constipation arising from a sluggish action of the bowels themselves, because of the indigestible husk or bran contained in it. The natural and proper stimulant, however, for the intestines is the bile, which becomes mixed with the food in the duodenum, or first small intestine, immediately after it has passed from the stomach; and should the bile be prevented from passing into the bowel, or should the liver (from causes to be hereafter noticed) be unable to secrete this fluid, its constituents remain in the blood, vitiating it, and causing diseases in other and remote parts of the body. The functions of the stomach and liver being closely allied, the one cannot be disordered for any length of time without implicating the other.

Indigestion, or dyspepsia (by which designation we shall in future indicate it), appears to be almost essentially a disease of civilised life; and the physician pockets more fees from attending to the disorders arising from eating and drinking than from any other source. Cullen, in his definition of this disease, enumerates a variety of symptoms, by the occurrence of some or all of which this complaint is characterised. He says: "*Anorexia—nausea vomitus—inflatio—ructus—ruminatio—cardialgia*

—*gastrodynia*:—*pauciora saltem vel plura horum simul concurrentia plerumque cum alvo adstrictâ et sine alio vel ventriculi ipsius vel aliarum partem morbo.*”

CHAPTER III.

LOSS OF APPETITE.

THE first symptom mentioned in this definition is "Anorexia," or loss of appetite. This symptom is not only a common and frequent characteristic of dyspepsia, but it likewise occurs in the commencement of almost all febrile and nervous diseases. It seems as though the functions of various organs of the body being deranged, or for the time suspended, nature intuitively forbids the taking of any food for which there is no adequate power of digestion, and no gastric fluid to be secreted; and which, under these circumstances, would but be the means of increasing irritation and disease. There have been many speculations on the cause of desire for food. Some have ascribed it to the action of the gastric fluid on an empty stomach; but, as it has been clearly ascertained that this fluid is not secreted unless something has entered the stomach requiring digestion, this view cannot be correct. It appears,

however, most probable, that the feeling of want of food arises from some peculiar nervous action in the stomach itself. No organ is more freely supplied with nerves, or lies in closer proximity to important nervous centres than the stomach. Again, certain agents taken into the stomach exercise an *instantaneous* effect on the whole of the nervous system; as prussic acid, and many vegetable poisons do. A sudden impression on the nervous system, such as fright, or the receipt of some unwelcome news, will immediately destroy the keenest appetite. The sensation of hunger, too, returns periodically, as all the phenomena of the nervous system do, and may be so governed by habit, as to recur at periods more near or more remote. In the commencement of dyspepsia, loss of appetite is frequently the only symptom noticed or complained of. Sometimes there is disgust at the very thought of eating, and at other times, though there may be some desire for food, yet the simple smell or sight of anything eatable at once gives rise to repugnance and dislike. Again, without decided "anorexia," the appetite will be capricious and various—perhaps craving and voracious. These are all disordered nervous actions; and if this symptom be unaccompanied with any other of consequence, it may be easily remedied. Moderate exercise in the open air; a mild aperient,

such as five to ten grains of "compound rhubarb pill" at bedtime, and a dose of bitter infusion; such as those of columba, gentian, or cascarilla, with a little soda or potash, two or three times a day, will soon remove this inconvenience. Should loss of appetite continue, the "dilute sulphuric acid" may be taken instead of the soda or potash.

The following form is palatable, and useful for this purpose:—

Take of Infusion of Cascarilla	:	4 ounces,
Infusion of Orange-peel	:	2 „
Bicarbonate of Potash	:	2 scruples;

or*—

Diluted Sulphuric Acid	:	40 minims,
Compound Tincture of Gentian	:	3 drachms.

Mix, and take three tablespoonfuls twice or thrice a day.

Simple as this symptom—called anorexia or loss of appetite—appears to be, it is not on this account to be neglected or allowed to continue. It shows a disorder of some function of the stomach, and this organ is in connection with others whose functions will soon become likewise disordered. Loss of appetite shows either that the stomach is too weak to digest food, or that it is overburdened and cannot

* If the urine is thick and scanty, the alkali is to be preferred; if loss of appetite continues, the acid is to be substituted.

easily perform its task ; or else that it is sympathising with other impressions on the nervous system. Should the simple means suggested fail in restoring the stomach to its healthy tone and activity, assistance should be sought from the usual medical attendant ; for, as has been said before, loss of appetite is one of the signs and concomitants of several insidious and wasting forms of disease. Those of sedentary habits should never eat to complete satiety, or commence their studies immediately after a meal. Nervous power is required in abundance to support the stomach in the performance of its functions, and the mental sluggishness and inactivity experienced after eating a hearty meal show that the brain requires repose while nervous power is assisting the process of digestion. To remove this state of disinclination for exertion, many are in the habit of taking strong coffee or tea shortly after dinner, and before the stomach has had time to perform its duty. This is but an attempt to prevent and frustrate one of the laws and necessities of nature : it is to arrest the function of one organ, and to call into exercise another requiring rest ; but be it remembered that there is not one natural process which can be perverted without entailing its punishment, and eventually leading to disease. Exercise has been mentioned ; and by

this is not meant a rural ramble or a day's holiday once a week or occasionally, but a regular and daily exercise. The one fatigues, the other invigorates. Neither is exercise properly taken if the mind is allowed to dwell upon the study or pursuit of the day: relaxation is required, the mind must be "unstrung." He makes but poor use of his leisure hour who meditates as he walks, and returns to his study or his desk to pen his rambling cogitations. Hence some cheerful and light occupation, or gentle athletic amusement, is required to disengage the mind for the time being from all deeper and more useful exertions. A man who absents himself from his sedentary occupation for a few days or weeks in the year, "to recruit himself," finds little or no enjoyment. The journey fatigues him, and he suffers from its effects for the first two or three days. In this state he cannot find any attraction, or enjoy any pleasure in the change from a heavy town atmosphere, or a close murky school-room or counting-house, to a bracing air and a glimpse of "Heaven's daylight." He feels dissatisfied, and wishes himself back again; and perhaps by the time when pure air, and absence from business, have so far invigorated his system and refreshed his mental powers, as to enable him to appreciate the various natural beauties and attrac-

tions about him, it is time to hurry his return to his daily avocations. This is not healthy and useful relaxation. Everything worth doing at all, especially in matters pertaining to health and well-being, is worth doing systematically and regularly.

CHAPTER IV.

NAUSEA—VOMITING—SEA-SICKNESS—APERIENTS—IRRITABLE
STOMACH.

THE next symptoms mentioned in our definition are *nausea vomitus*—sensation of sickness and vomiting. These are among the most unpleasant and annoying signs and effects of disordered stomach, and may arise from one of three causes. 1st, From a salutary effort of the stomach to get rid of some rich and indigestible food; 2d, From morbid irritability of the organ itself; and 3d, From some organic disease of the stomach. The stomach is furnished with layers or bands of muscular fibres, whose healthy action is to contract in a direction from above downwards; but if from any cause the action of these fibres is perverted or made to act in an opposite direction, vomiting ensues. One familiar example will not only show how easily this action of the muscular coat may be reversed, but will likewise tend to support what has been stated concerning the nervous supply and extreme sensi-

bility of the organ: we mean introducing the finger or tickling the back part of the throat. The membrane covering the fauces being continuous with the lining membrane of the throat, and supplied by extensions of the same nervous filaments, the irritation thus originated is conveyed to the stomach, causing it to contract in a direction from below upwards, and by this action the contents of the organ are expelled. The effect of this simple means of exciting vomiting is governed by the state of the organ, and acts more readily in proportion to the distension and amount of substance upon which the stomach is thus artificially stimulated to contract. Sometimes nausea will come on as soon as food is swallowed, and this has been attributed to a deficiency in the mucus and other fluids of the stomach, by which the food comes into immediate contact with the unprotected membrane lining the organ. In other cases there is not any nausea; but after an hour or two the food is rejected, showing that the stomach has digested as much as its debilitated state would allow, and that the remainder has become a source of irritation and perverted action. The matters thus thrown up are generally sour, and if there has been much straining during the act of vomiting, they are sometimes mixed with bile. Patients suffering in this manner frequently attri-

attribute their disease to "an overflow of bile," although the secretion of the liver has nothing whatever to do with it. The bile thus vomited comes from that portion of the bowel immediately below the stomach, and its presence is caused by the perverted contraction of the muscular fibres being transmitted to the intestine, causing regurgitation, or the return of food, mixed with bile, through the lower opening of the stomach. Vomiting frequently repeated is sure, from this cause, to lead to the expulsion of pure yellow bile; and it is a common error among dyspeptics to attribute their ailments to a disordered state of the biliary organs, when they are not at fault, and have only been acted upon mechanically. In sea-sickness, for instance, bile is constantly vomited. This is caused by frequent retching and straining, and the repeated pressure of the contents of the abdomen upon the liver and lower part of the stomach, arising from the heaving and pitching of the vessel. Those who have suffered from this distressing annoyance will have observed that the feeling of sickness is not so much present when the ship is rising upon a wave as when it is sinking down again into the hollow. The stomach, during this latter movement, impinges against the diaphragm (the muscular partition which separates the cavities of the chest and abdomen) and the liver.

The "*vis inertiae*" of the organs below prevents the descent of the stomach in its due proportion, hence the contractile action of the stomach becomes retroverted, and vomiting ensues. While on this subject we may digress a little further. Many remedies have been vaunted for the relief of seasickness, but the one we have found most effectual is one founded upon the mechanical action just explained. It consists in the sufferer getting as near the centre of the vessel as he can (the motion there being least perceptible), and then binding a broad roller-belt or handkerchief, with moderate firmness, round the region of the stomach. To this circular bandage are attached two other handkerchiefs, one passing under each thigh, so as to keep the one round the body firmly pulled downwards. By this means equal pressure is made upon the stomach ; it is kept closely pressed upon the liver below, and a portion of the diaphragm behind, and instead of being in a "floating state," the stomach and all the other organs within the abdomen move together, without one impinging on the other, and the inverted action of the stomach is thus prevented. When the stomach is otherwise in a healthy state, this simple mechanical means will generally succeed.

But to return to our subject. The nausea and uncomfortable sensations which arise from an over-

burdened stomach point out their own remedy, namely, some means by which the load may be removed; and this may be safely and speedily done by the following emetic draught, assisting its action by copious draughts of luke-warm water.

Take of Powdered Ipecacuanha-root	2 scruples,
Ipecacuanha Wine	2 drachms,
Water	1 ounce.

Mix, and make a draught.

For a few days after an irregularity of this kind, the food should be sparing, bland and nutritious; and the patient should not attempt to take food of any kind until the nerves of the stomach have so far recovered themselves as to originate the sensation of hunger. The bitter infusion with potash mentioned at page 21 will assist in restoring tone to the organ, and the bowels should be acted upon by some mild warm aperient. The following will answer the purpose very well:

Take of Compound Rhubarb Pill . . .	5 grains,
Compound Extract of Colocynth	3 „
Blue Pill	2 „
Cayenne Pepper	1 grain.

Divide into two pills, to be taken at bedtime.

If the patient be naturally of a costive habit, this may be followed by an aperient draught in the morning, for instance:—

Take of Compound Infusion of Senna,	
Decoction of Aloes, of each .	6 drachms,
Tartarised Soda . . .	2 „
Compound Tincture of Senna	2 „

Mix, and make a draught.

But while advising an aperient for the relief of these symptoms, it must be borne in mind that the habitual use of medicines of this class are eventually injurious. They soon become a necessary stimulus to the bowels; their coats become weakened; and disease and obstinate constipation, arising from debility and want of contractile power, caused by exhaustion of nervous energy resulting from the frequent use of purgatives, is the consequence. And here it may be mentioned, that no class of medicines have been more abused than those called purgatives. Every one considers himself qualified to administer them. Nurses frequently give a purgative to a child almost as soon as it is born. Many parents have stated times and seasons at which to give “a dose of physic” to their offspring. Some men take a purgative because their heads ache, some because their bellies ache; some because they fancy themselves too fat, others because they imagine themselves too thin; and some, they are in good health, and so must take “a dose” to keep them so. Nature may, indeed, be ashamed of her handiwork, if all these wants and imperfections arise

from natural causes. One of the great faults of civilised life is that ten times more physic is swallowed than is absolutely necessary; and in the list of domestic medicines, purgatives always occupy the first place. Temperance in eating and drinking—moderation in the gratification of all appetites of every kind—regularity in the periods of taking rest and food—and a mind free from the influence of superstition and quackery—these are the safeguards of health, the means of enjoying life, and the sure and safe prelude to a comfortable old age. When a man has suffered from a mild attack of dyspepsia of the kind before mentioned, it ought to serve as a warning against the consequences of future irregularity, or over-indulgence at table. Irregularities of this kind cannot be often repeated without leading to other evils of a more permanent and serious character. Frequently some of the indigestible matter taken into the stomach passes in its crude state into the intestinal canal, causing irritation and perhaps ulceration of the mucous membrane of the bowels; the liver, from over-exercise, becomes torpid; the kidneys debilitated, and unable to perform their important functions—hence various impurities are retained in the blood, some of them (such, for instance, as a peculiar substance thrown off by the kidney, called urea) poisonous in their nature, and others

which, by vitiating the blood, cause obstructions in the capillaries of the skin, leading to eruptions, boils, blotches, &c. The quantity of food which may be deemed an excess, does not in any individual case bear so much proportion to the capacity of the stomach, or the desire for nourishment, as it does to the state of general health and the integrity of the digestive functions. Those who wish to retain the stomach in a healthy state, and enjoy the good things of this life, will find in this, as in all other enjoyments, that moderation is the great principle by which all appetites should be governed.

There is a very troublesome kind of vomiting occurring in dyspepsia, arising from a morbid irritability of the stomach itself; and under this form it is a very unsatisfactory symptom to treat. Without any previous irregularity or indulgence, the stomach for several days refuses to retain anything; pressure over the region of the stomach causes a peculiar uneasy sensation, not amounting to pain; the countenance is expressive of anxiety; there is languor and disinclination for exercise or society; and the patient becomes feverish and restless. This state of stomach has been frequently brought on by close and intense study, especially night-work, and imbibing freely of tea (particularly green tea) and coffee, to keep the mind active and remove drowsi-

ness. It is almost unnecessary, under these circumstances, to forbid mental exertion, for there is no inclination for it. Still, everything calculated to seriously occupy the attention, or make the sufferer regret the time he is losing, should be avoided. In these cases, the nervous system is exquisitely sensitive, and, therefore, all means should be employed calculated to conduce to quietude and repose. If I may be allowed such an expression, "the stomach must be coaxed to retain food." A small quantity (one or two tablespoonfuls) of plain mutton or chicken broth, alternately with milk and limewater (in the proportion of two ounces of limewater to a pint of new milk), should be given every half hour; hot flannels or a sinapasm applied to the pit of the stomach. The patient should remain as quiet as possible, not lay in bed, but avoid moving from place to place more than is necessary; and the atmosphere of the room should be temperately warm, not hot. The limewater and milk, especially when acidity is present, often acts like a charm in these cases. If the bowels require it, a mild aperient should be administered; an aperient "*lavement*" is of great use in these cases, and has the advantage of not adding to the irritable state of the stomach. In regard to medicine, carbonic acid gas, as contained in soda-water, or the effervescing salines composed of

the carbonates of soda or potash, with lemon juice or citric acid, are useful, and tend to allay sickness. Sometimes the mineral acids, such as the dilute sulphuric and nitric, will answer, if (as is but seldom the case) there is no free acid in the stomach. An opium plaster to the pit of the stomach will sometimes afford relief, as will likewise a blister. Should the means just mentioned not succeed, no further attempt ought to be made without medical sanction. There are other and very successful remedies; but when it is stated that hydrocyanic or prussic acid, and opium, are among the most useful, the necessity for professional aid will be evident. No one would administer such remedies as these on his own responsibility, although in the hands of those who know their uses, they are perfectly safe and harmless. There is another reason why, in vomiting of this kind, the physician should be called in. It is because continued vomiting is frequently an important symptom in several serious diseases—such as those of the head, kidneys, and uterus. The great principle to be borne in mind, during the treatment and convalescence of continued vomiting as a symptom of dyspepsia, is to reduce the quantity of food to that amount, even though it appears small and barely sufficient for the purposes of life, which the stomach is able and willing to bear; and taking

care that it is bland and nutritious in quality. To compensate for the small quantity taken at once, food may be eaten more frequently; but, even in this, great care and circumspection is required, so as not to overload the stomach, or to take food before the previous contents of the stomach are perfectly digested, and the organ has had a short period of repose. By strictly adhering to this rule, many formidable cases of chronic vomiting have been cured, and in other cases the patient's life has been made comparatively comfortable.

CHAPTER V.

FLATULENCE, ETC.

“INFLATIO”—“RUCTUS” (flatulence or belching). The sensation of distension or flatulence is caused by the extrication of gases from decomposition or fermentation of food in the stomach. If (as has been stated before) food remains in the stomach, it undergoes changes similar to any other organic matter when exposed to warmth and moisture, and gases are set free. Sometimes it appears as though gas was secreted by the stomach itself, for flatulence will occur when the stomach is empty of food; perhaps this is as much due to imperfect contraction of the muscular fibres as to any other cause, and is a very common occurrence in dyspeptic persons, when their meals are delayed beyond the accustomed hour. “Wind in the stomach” is a common complaint among those of weak digestion, and they usually attribute all their sufferings to this cause. These inconveniences are generally relieved, almost imme-

mediately, by some warm carminative, such as pepper-mint, cinnamon, or a clove; but to prevent their recurrence, it is necessary to be careful in diet, to eat slowly, and to masticate the food well. The flatulence that follows eating may be prevented by taking a little rhubarb before a meal, or what is perhaps better, and more easily taken, the following pill, commonly called a "dinner pill :"—

Take of Extract of Rhubarb . . .	2 grains,
Powdered Mastic,	
Cayenne Pepper, of each . . .	1 grain,
Oil of Wormwood . . .	1 drop.

Mix and make a pill, to be taken ten minutes before dinner.

Proper regulation of the periods for taking food will generally suffice in removing the flatulency occurring in an empty stomach. If some of the food eaten should return into the throat along with the eructation, and have an acid taste, a teaspoonful of sal volatile, in a little cold water, will be of service. When food is thus returned after eating, it is called "regurgitation," and explains the word "*ruminatio*" in our definition. This symptom is caused by a partial and irregular contraction of the stomach, arising from a temporary over-distension of its coats, and is a common occurrence when a meal has consisted of various kinds of food, or "tempting dishes."

CHAPTER VI.

HEARTBURN—ACIDITY—ACIDS FOUND IN THE STOMACH—CRAMP
—CAUSES OF CRAMP—TREATMENT—SYMPTOMS OF INFLAM-
MATION—SYMPTOMS OF POISONING—PRECAUTIONS TO BE
ADOPTED—GOUT IN STOMACH—WATER-BRASH—TREATMENT.

THUS far we have treated of symptoms of dyspepsia, which, though sufficiently annoying and troublesome, are not usually attended with much pain or suffering. The two next terms in the definition we have adopted, refer to affections which are sometimes of a very painful and distressing character, *Cardialgia* and *Gastrodynia*. The former consists of a certain amount of pain and uneasiness, commonly called *heartburn*; the latter a very severe but happily transient pain, known as *spasm* or *cramp* of the stomach. Heartburn is caused by the formation of acid in the stomach, and the fermentation or imperfect digestion of food. We know but little of the chemical affinities and processes which take place in the stomach, and many of the super-refinements of modern physic appear to be founded on the idea that all the chemical changes which take place in the laboratory, will likewise take place in the stomach. But there

are many things which show this view to be unfounded. The stomach is endowed with vitality, all its processes are vital actions, the nervous system of whose laws we know so little; and upon which we speculate so much, plays an important part in the process of digestion and assimilation; and chemical changes take place in the stomach for which we have no parallels in the operations of the laboratory. The eccentric Abernethy, in his lectures on this subject, after describing the various theories of the day in reference to the process of digestion, used to pause, and, with the utmost seriousness and gravity, say, "but, gentlemen, *I* say a stomach—is a stomach;" and to this day we have not found a definition more full of meaning or practical utility. Heartburn, unless when arising from organic disease, is easily remedied by a teaspoonful of sal volatile, a few grains of carbonate of soda, or a little warm water. Those who suffer from this affection, will do well to avoid all articles of food of an acid nature, or which are liable to become sour and decomposed; such as too *much* vinegar (a *little* assists digestion), milk, cream, excess of sugar, and watery vegetable substances. The fashionable habit of drinking tea so hot, that the throat must be macadamised to bear it, often lays the foundation for this and other symptoms of imperfect digestion. From this cause

the stomach loses its tone, its muscular fibres become relaxed, its nervous power weakened, and hence rapid decomposition of food takes place. This instance only serves as another illustration of the fact, that the further we depart from the simplicity of nature in matters of eating and drinking, the more are the penalties to which we become liable. Pain sometimes occurs when the stomach is empty, and it appears as though this was occasioned by some acidity in the secretions of the stomach, for flatulence is seldom complained of at the same time. It is described by those who suffer from it as a dull gnawing kind of pain. It is generally relieved by taking simple food, and may be effectually remedied by regularity in period, and equality of amount of sustenance taken. If there should not be any inclination for food, or should food have been recently taken, a tablespoonful of Dinneford's fluid magnesia, in a small wineglassful of water, will generally give relief. Again, there is sometimes a dull pain, accompanied with a sense of weight and uneasiness, almost immediately after a meal, which frequently continues until, by vomiting, the stomach is relieved. This symptom arises from an undue sensibility of the mucous membrane of the stomach, and too powerful contraction of its muscular fibres. Hot fluids are often the original cause of this state of stomach.

If, by a regular and restricted diet, an occasional dose of fluid magnesia, the use of mild vegetable tonics, and gentle exercise, this symptom is not removed, we have reason to suspect some chronic inflammation of the stomach, especially if there is much thirst, and pressure on the epigastrium increases pain. It has now become a case beyond the skill of "domestic medicine," and no further delay should occur in seeking proper advice. Another common symptom of dyspepsia is the occurrence of pain in the stomach, two or three hours after taking food, and which continues some hours. It is sometimes accompanied with pain in the right side; and the liver, for this reason, has often been unnecessarily blamed. This kind of pain sometimes arises, as in the former case, from chronic inflammation of the stomach; but more frequently from some kind of acid being left in the stomach after the process of digestion has been nearly completed, thus becoming a source of irritation. Muriatic acid is one of the healthy contents of the stomach, and is supposed by Dr. Prout to be derived from the salt or muriate of soda contained in the blood; he further conjectures that this acid is eliminated by a kind of galvanic action, similar to the one which takes place in the decompositions made by the action of the cell battery. If it were within the province of this paper, it could

be shown that there is a most striking similarity, in some instances almost an identity, in the phenomena of galvanic action and the effects of nervous influence. Under the influence of this mysterious power, muscles contract, divided nerves perform their office, and the process of secretion on various glandular organs is carried on. It has been successfully applied in drowning, to revive the apparently extinguished spark of vitality; and in cases of poisoning and suffocation, respiration has been carried on, and life saved by its operation.

Certain it is that muriatic, acetic, and lactic acids are found in the stomach, and that they must have been formed within that organ. The affection just referred to may be relieved by taking a dose of the fluid magnesia, or any other alkali. A cup of warm water or weak tea, by diluting the acid contents of the stomach, will sometimes give relief. Should the pain recur from day to day at about the same time after a meal, it will be well to take a teaspoonful of sal volatile, or the following powder, before taking food:—

Take of Carbonate of Soda	. . .	10 grains,
Powdered Ginger,		
Powdered Rhubarb, of each	. . .	5 „

Mix and make a powder, to be taken in a little Sherry or Madeira.

For the permanent relief of this symptom, when there is no reason to apprehend any inflammatory affection, the following pill will be of great benefit :—

Take of Powdered Sulphate of Iron .	1 grain,
Powdered Extract of Spicated	
Aloes	2 grains,
Cayenne Pepper	1 grain,
Extract of Gentian, sufficient to make into a pill,	

to be taken three times a day.

This state of digestion is sometimes accompanied by important changes in the secretion of the kidneys. The urine becomes turbid, and deposits matter, sometimes of an alkaline, sometimes of an acid nature. These various deposits are important guides in the treatment of this affection of the stomach ; but they are only of value to those, who, by study and experience, are able to avail themselves of the indications to be drawn from their appearance. It would, therefore, not answer any useful purpose to describe them in this place ; they are evidently signs that other organs besides the stomach are at fault, and that proper advice should be obtained. The next form of pain to be considered, is that more properly answering to the word "*gastrodynia*" in our definition, commonly called spasm or cramp of the stomach. This pain is not confined to the stomach, but shoots through to the back and between

the shoulder-blades. Spasm or cramp of this organ is sometimes caused by an aggravated form of flatulence, and large quantities of air are expelled. When arising from this cause, it comes on suddenly, and there are present many of the symptoms of flatulence before mentioned. Carminatives, and the treatment mentioned when treating of this annoyance, will generally give relief under these circumstances. Sometimes it appears to be a neuralgic affection, coming on usually about the same hour, whatever state the stomach may be in, and recurring from day to day. When this is the case, it generally requires a minute and careful investigation, and a long continued course of treatment. But the most frequent cause of cramp or spasm of the stomach, is from taking large quantities of indigestible food, fruit, rich soups, puddings, "made dishes," cucumber, and early and unripe vegetables. That portion of the large intestine (called the colon) which passes transversely across the abdomen, immediately under the stomach, is often implicated in cramp or spasm. If for a few days the bowels have been confined, the colon becomes loaded with effete matter, gases are extricated, causing distension, and the most excruciating pain is experienced. When, from the previous inactivity of the bowels, there is reason to believe in the

existence of this complication, an active purgative will soon give relief. A purgative enema, from the rapidity of its action, is sometimes preferable, when the pain is very acute and attended with vomiting. In the mean time the abdomen should be fomented with flannels wrung in hot water, and a sinapism applied to the pit of the stomach. Nausea and vomiting are frequently present. These symptoms may be allayed by applying heat and counterirritants to the epigastrium, and taking a few doses of the effervescing saline. In cases where a safe and speedy action of the bowels is necessary, we have generally found the following aperient answer the purpose:—

Take of Compound Extract of Colocynth	6 grains,
Extract of Henbane	2 „
Calomel	3 „
Oil of Carraway Seeds	2 drops.

Mix and make *two* pills, to be taken immediately.

In two hours after taking the pills give the following mixture:—

Take of Compound Infusion of Senna	6 ounces,
Sulphate of Magnesia	1 ounce,
Compound Tincture of Senna	$\frac{1}{2}$ „
Aromatic Spirit of Ammonia	2 drachms.

Mix, and take a fourth part every three hours until the bowels are freely moved.

It will be evident that a powerful purgative like the foregoing will be highly improper should there

be any inflammatory tendency present. The following symptoms will lead us to suppose the existence of such a complication : loss of appetite, and occasional or continued slight pain in the stomach for some days preceding the attack, shivering, accelerated pulse, thirst, dry or furred tongue, and pain increased on pressure. In this case, the medical attendant should be instantly summoned. In cases occurring on debilitated habits, and unattended with constipation, the hydrocyanic is very useful ; but this is a drug which should never, under any circumstances, have a place in the family medicine chest.

Although the stomach is so frequently abused, and exposed to sources of irritation, it is remarkable and very providential how seldom it is the seat of acute inflammation. What is generally called inflammation, is an affection of its mucous membrane of a chronic character. Acute inflammation of the stomach is, indeed, a fearful and rapidly fatal disease. It has been occasioned by drinking freely of cold water when the body has been over-heated ; but we most frequently see it as being the effect of some irritant poison. As it may be useful in saving life, leading to the detection of crime, or to those residing at a distance from a medical practitioner, to know something of the signs of this formidable disease, we shall, doubtless, be pardoned (although

foreign to our subject) if we introduce a slight sketch of some of its more prominent symptoms. When any irritant poison, such as arsenic, corrosive sublimate, tartar emetic in a large dose, or the undiluted mineral acids, have been taken into the stomach, or when there is acute inflammation of this organ from any other cause (and it is remarkable that when any considerable quantity of the three first-mentioned substances are introduced into the system by being applied to a wound, or from absorption by the skin, they cause the same inflammation of the stomach as if they had been swallowed), there is intense and agonising burning pain in the stomach and throat, intense thirst, vomiting or forcible attempts to vomit; the countenance is pale, and wears an anxious expression; the voice whining and husky, and the skin cold and clammy; the sufferer becomes faint, all muscular power is lost; there is tenderness and tension in the region of the stomach; the breath becomes horridly offensive; the pulse, though at first quick, soon becomes feeble, thread-like, and irregular; and death soon closes the scene. This form of disease generally runs its course in twenty-four hours, sometimes in twelve, and even in less—in proportion to the virulence and quantity of poison taken. There is generally a total and sometimes sudden cessation of pain

before death, which, in these cases, takes place by fainting. It is unnecessary to urge the importance of early medical aid under these circumstances. The messenger despatched for this purpose should be made acquainted with the symptoms as nearly as possible, and (in cases where it has been ascertained) the kind of poison taken, so that the medical attendant may come prepared with stomach-pump, antidotes, &c. In the alarm and confusion attending cases of poisoning, some one frequently starts off "for the doctor" without any idea of what is the matter; the surgeon arrives empty-handed, and by the time he, or some one despatched by him, has returned with the necessary appliances, much valuable time has been lost. In the meantime, the patient should be placed, and as much as possible retained, in the recumbent position, so as to lessen the tendency to fainting—to faint, is frequently to die. Any attempts to vomit should be encouraged by copious draughts of warm water, and a scruple of sulphate of zinc may be administered as an emetic. If vomiting does not occur, the white of raw eggs, mucilage, magnesia, or chalk and water, must be given freely, so as to suspend and dilute the contents of the stomach. Heat should be applied to the pit of the stomach, abdomen, and extremities; and friction used to the calves of the legs. All the matters

vomited, as likewise the vessel from which the poison has been taken—or when the symptoms occur soon after taking food, the remaining portions of such food—should be carefully preserved for the surgeon's inspection, so that he may be able immediately to detect the kind of poison taken. But to return to our subject. There is a kind of cramp or spasm of the stomach in a very acute form, occurring in gouty people, and commonly called "gout in the stomach." Brandy and other stimulants are frequently given to relieve this symptom, but as those subject to gout are very liable to low forms of inflammation from slight causes, and as cramp of stomach occurring in such subjects is frequently an inflammatory affection, stimulants ought to be given very sparingly, if at all. Unless the patient is much debilitated, a few leeches to the pit of the stomach will be of use. Great relief has been obtained by applying the *strong* liquor of ammonia to the epigastrium, so as to cause an immediate blister. The best way to apply this powerful vesicant, is to get a chip-box lid, or something of the same kind, about two or three inches in diameter, and fill it lightly with cotton wool or lint, saturated with the liquor. This may be applied to the epigastrium for three minutes. By using the lint in this manner, the action of the vesicant is confined to the part, and the fluid does not

run down the abdomen, causing needless irritation. The feet and legs, likewise, may be immersed in warm water, containing a little mustard, so as to act as a derivative. The other remedies for an attack of this kind, are some of them such as have no place in the medicine chest ; hence, advice should be obtained.

There is yet another symptom to be noticed in connection with pain or uneasiness in the stomach, PYROSIS, or "*water-brash.*" It consists in the eructation, or rather regurgitation of an insipid watery fluid, sometimes rather sour, and described by the patient as feeling cold in the throat. This a very common complaint among the poorer classes, or in those whose diet is composed chiefly of farinaceous or vegetable substances. An attack of pyrosis generally comes on when the stomach is empty, and is preceded by slight pain in the organ, accompanied with a feeling of constriction, or as if the stomach was drawn towards the back. The body is semi-recumbent, and any attempt to assume the erect position is attended with increase of pain. This affection is frequently a symptom of organic disease of the stomach or liver, especially of enlargement of the latter organ, when its development has advanced so far as to press on the stomach. When there is not any organic disease, this complaint will

generally yield to the administration of soothing medicines and astringents. We have found the following pill and mixture of service in these cases :—

Take of Compound Powder of Kino .	4 grains,
Oxide of Bismuth . . .	2 „
Extract of Lettuce . . .	2 „

Mix and make two pills, to be taken at bedtime.

Take of Infusion of Cusparia Bark .	4 ounces,
Infusion of Hops . . .	2 „
Carbonate of Ammonia .	$\frac{1}{2}$ drachm,
Tincture of Henbane .	2 drachms.

Mix. Take a fourth part twice a day.

Water-brash is often accompanied with constipation; and as the kino contains a small portion of opium, it tends rather to increase this state. It is therefore necessary, while taking the pills, to take an aperient the following morning. Castor oil, from its mildness and the gentleness of its action, is fitted for this purpose. The great objection to this medicine is its nauseous taste. However, in the following emulsion this objection is very much obviated, and in this form children will readily take it; and it will answer in any case where castor oil

is indicated. In a cool place it will keep a long time.

Take of Cold-drawn Castor Oil	.	1½ ounce,
Solution of Potash	.	½ drachm,
The White of one Egg,		
Pure White Sugar	.	3 drachms,
Cinnamon Water	.	6 ounces,
Aromatic Spirit of Ammonia		1½ drachm.

The ingredients are to be carefully mixed in a mortar. First the oil, potash, egg, sugar, and ammonia, adding the cinnamon water slowly and gradually. The dose for an adult is three tablespoonfuls, and a less quantity according to age.

CHAPTER VII.

CONSTIPATION—ABUSE OF PURGATIVES—TREATMENT OF CONSTIPATION—CONSTIPATION FROM TORPID LIVER—TREATMENT—HÆMORRHOIDS—DIARRHŒA.

THE words "*plerumque cum alvo adstricta*" refer to constipation. Costiveness is generally a concomitant, and frequently a cause of dyspepsia. Many of the before-mentioned symptoms of dyspepsia are relieved by means which ensure a regular and healthy activity of the bowels. It has been said before that bile, and, to a certain extent, the undigested portions of food, are the stimulants naturally required for the healthy action of the intestines. From this it will be evident that in attempting to relieve constipation effectually, we cannot do better than endeavour to imitate nature, and correct any irregularity in the secretions. Costiveness occurs as the effect of many different causes, but for practical purposes it will be sufficient to treat of it under two different states of the system—the one as the result of debility, the other caused by a deficiency of bile and other secretions.

There is no ailment in which the practice of domestic medicine has done more harm than in the treatment of constipation under the first-mentioned circumstances. Purgatives have been so repeatedly given, that they have at length become a natural stimulus for the intestines, and they have refused to act with their assistance. From this repetition the stomach has become debilitated, and a person otherwise healthy has become a confirmed dyspeptic. Suppose a man had engaged, within a given time, to be able to walk a certain distance, or perform any other feat requiring enduring strength, and to repeat this exercise at stated and regular periods for several weeks, would you give him wine, brandy, and other stimulants, before commencing his undertaking, so that he might accomplish it under the influence of temporary excitement, and suffer from corresponding debility after the first part of his task was performed; or would you, by nutritious diet, regular hours, gradually-increased exercise, and every other means calculated to make his muscles firm and vigorous, to inure him to fatigue, and to make his health sound and robust, endeavour to fit him for the performance of his feat? If the performance had to be accomplished but once, and the man's future health was of no consequence, the former plan might answer, perhaps at the expense

of the poor fellow's life ; but if the effort was required to be regularly and punctually repeated, you would doubtless adopt the latter mode of preparation. Now, the former of these supposed plans is not more absurd and injurious than is the common treatment of constipation in those of debilitated habits. A man or woman whose occupation is close and sedentary, whose every fibre is relaxed by confinement and impure air, as shown by the sallow, flabby, and greasy skin, languid movements, and disinclination for exercise, suffers from constipation. A powerful purgative is given ; and nine times in ten it is "a dose of salts," a "seidlitz powder," or some other cold or depressing drug is chosen for this purpose. The bowels act, attended with griping, and generally uneasiness, and succeeded by languor, depression, and loss of appetite. In a few days the same state of things again occurs, and another and perhaps larger dose is taken ; and this repetition goes on from time to time until some confirmed disease of the stomach, liver, or bowels is established, and at last medical aid is sought. The physician soon finds that there is a disordered state in the processes of digestion and nutrition, and that a long and tedious course of treatment is required to remove the effects of the medicines taken before he can remedy the original ailment—constipation. Perhaps

there is chronic diarrhœa, or a disease called lientery, in which the food rapidly passes through the whole intestinal tube, unchanged, and just as it was taken, thus showing the complete loss of tone and exhaustion of nervous power in the bowels.

In cases of this kind, the proper treatment does not consist in repeated purgatives, but in the administration of food and medicines calculated to give tone to the stomach and bowels, so that healthy secretions may be formed, and the actions of these organs governed by these secretions. In those of studious and sedentary occupations, especially where there is much responsibility and mental anxiety, constipation arising from debility of the mucous membrane of the bowels is a common occurrence. Those thus affected soon feel the influence of atmospheric changes, are pinched by exposure to cold, and completely exhausted by heat. The least excitement will destroy the inclination for food, they become low, desponding, and hypochondriacal, the appetite is variable and capricious, the breath fetid, they are subject to headache, and frequently refer the pain to the top of the head, the urine is copious and limpid, they suffer from noisy flatulence in the stomach and bowels, and without being positively ill, they are never well. All these are symptoms of general debility, and the constipation is one of

the results of the same cause. In the commencement of the treatment of these cases a purgative is generally necessary, but it must be a mild and warm one, must act indirectly through the secretion of the liver, and must be repeated two or three times until sufficient action of the bowels is obtained, rather than given in a large dose at once. The following will answer the purpose :—

Take of Mercury with Chalk (grey powder)	. . .	12 grains,
Powdered Rhubarb	. . .	12 „
Extract of Henbane	. . .	4 „
Powdered Ipecacuanha	. . .	2 „

Mix and divide into six pills, of which take two every night.

About 11 a.m. the next day a dose of the following mixture may be taken :—

Take of Compound Infusion of Gentian	3 ounces,
Infusion of Rhubarb,	
Decoction of Aloes, of each .	$1\frac{1}{2}$ „
Aromatic Spirit of Ammonia	2 drachms.

Mix. Let the dose be three tablespoonfuls, or a fourth part.

The diet should be light and nutritious, and should consist of milk, fresh meat, fresh fish, plain good broth, beef tea, &c. Regular exercise should be taken, the shower bath should be used twice or thrice a week, a glass of good old port wine or Madeira

after dinner may be allowed, or a little porter or bitter ale with dinner; however, if these things cause heat or feelings of discomfort, they must be omitted. The patient will be benefited by absence from business, and change of air and scene for a few weeks. When the healthy action of the bowels has been in some degree re-established, and there is return of appetite, quinine and iron in small doses, as in the following mixture, will be useful:—

Take of Sulphate of Quinine	. . .	8 grains,
Sulphate of Iron	. . .	6 „
Dilute Sulphuric Acid	. . .	$\frac{1}{2}$ drachm,
Tincture of Ginger	. . .	2 drachms,
Cinnamon Water	. . .	8 ounces.

Mix, and take two tablespoonfuls twice or thrice a day.

A mild alterative and aperient, such as the following, should be taken occasionally:—

Take of Watery Extract of Aloes	. . .	8 grains,
Blue Pill	. . .	8 „
Powdered Ipecacuanha	. . .	2 „
Oil of Aniseed	. . .	4 drops,
Extract of Hemlock	. . .	6 grains.

Mix and divide into six pills, of which take one at bedtime twice or thrice a week.

After recovery from this state of system, great care should be taken in avoiding anything likely to favour its recurrence; immediate attention should be paid to any irregularity in the action of the

bowels, however slight; laxative articles of diet, such as brown bread, or a few figs, should be taken occasionally.

That form of constipation, which arises from torpidity of the liver, is frequently found in those of plethoric constitution, and indolent and luxurious habits. Men of this kind are often aware of the evils resulting from their indulgence and inactivity, and imagine that a day or two's restricted diet, and "a blue pill and black draught," are a sufficient penalty for their previous excesses; but they often find themselves mistaken when too late. All the secretions, and even the blood itself, becomes depraved. They suffer from eruptions, boils, and carbuncles. The kidneys do not perform their duty; calculi form in these organs or in the bladder. They are liable to pain in the loins, gravel, and other diseases of the urinary organs arising from bad digestion and assimilation. The very appetites which they have so pampered, and taken such pains to gratify, fail; and they soon find the result of their luxurious habits, in a shattered constitution and a premature old age. They suffer from determination of blood to the head, and are liable to apoplexy; and any simple disease or accident is attended with serious symptoms, such as fever, inflammation, and erysipelas. The difficulty of treating

constipation in this habit of body does not depend so much upon the obstinacy of the symptoms themselves, as upon the neglect, carelessness, and self-will of the patient. When unable to indulge in his accustomed enjoyments, he will seek advice, obtain relief, and receive rules in reference to diet and calculated to keep him in good health. But this advice is soon forgotten, and it is not until overtaken by serious illness that he begins seriously to think of the preservation of his health. It sometimes happens that men of sedentary occupations, but of regular habits, generally retain a good appetite, and suffer from no inconvenience except constipation. In these cases (and they come more within the limit of our subject), torpidity of the liver and retarded digestion, resulting from confinement and want of exercise, are generally the cause. Those of this class will do well, by ensuring a regular and healthy action of the bowels, to render themselves less liable to the other symptoms of dyspepsia before mentioned. They should (weather permitting) rise an hour earlier in the morning, and if possible manage to obtain time for a walk before dinner. Supper, if taken at all, should be sparing and light, so that the stomach may have time to recruit itself while the mind and body are at rest, and nervous power is not required for any other purpose. In these cases an aperient

occasionally will do no harm, but the necessity for taking anything of the kind may be considerably decreased by exercise, and by regulating the quantity of food taken within the sensation of satiety. The following aperient pills may be kept, and a dose taken occasionally if necessary :—

Take of Compound Rhubarb Pill	. $\frac{1}{2}$ drachm,
Compound Extract of Colocynth	1 scruple,
Powdered Ipecacuanha	. 2 grains,
Blue Pill	. . . 12 „
Extract of Henbane	. . 10 „
Oil of Cloves	. . . 6 drops.

Mix and divide into 20 pills, of which take two at bedtime occasionally.

If the state of the bowels is neglected, and constipation allowed to exist, the breath become offensive, there is an unpleasant sensation or taste in the mouth on first awaking in the morning, and a sense of weight in the stomach after taking food, showing that the processes of assimilation and digestion are beginning to suffer. These are warnings which ought to be attended to in time, supper ought to be entirely prohibited, great attention should be paid to diet, the region of the stomach well rubbed with a rough towel or flesh-brush night and morning, and a dose or two of the aperient pill just mentioned taken. Constipation in this habit of body is often attended with those distressing annoyances known as piles or

hæmorrhoids. They are caused by the loaded state of the bowels preventing the free return of blood. From this cause, the veins in the neighbourhood of the rectum and anus become gorged and congested, and this state soon runs on to painful inflammation. They are likewise caused by any permanent obstruction to the return of venous blood through the liver, such as enlargement or scirrhus of that organ, or in short by any cause which prevents the free return of blood from the lower part of the abdomen. For the relief of this painful affection, it is necessary to unload the bowels, and to cause the liver to act more freely. The pain may be relieved by sitting over the steam of hot water, and applying a hot hop poultice to the part. The proper aperients in these cases are, the confection of black pepper, sulphur, or the following electuary :—

Take of Confection of Senna,
Confection of Black Pepper,
Sublimed Sulphur,
Simple Syrup, of each . . . $\frac{1}{2}$ ounce.

Mix, and take a portion about the size of a nutmeg every morning.

In those of robust habit, piles are a very common annoyance; but as they generally burst and discharge a quantity of blood, they tend to relieve the system, and prevent other disorders.

Diarrhœa is sometimes a symptom of dyspepsia, and is caused by the presence of some source of irritation in the intestinal canal; in fact the increased discharge from the bowels may be looked upon as an effort of nature to get rid of the annoyances. A dose of castor oil, or some other mild aperient, will generally be sufficient to remove this symptom. Should the diarrhœa continue after the irritating matter is removed, a dose (5 to 8 grains) of Dover's powder at bedtime, or a few doses of the following, may be taken with benefit:—

Take of Compound Chalk Mixture	4 ounces,
Tincture of Catechu,	
Compound Tincture of Cardamoms,	
Compound Tincture of Camphor,	
of each	1 drachm.

Mix, and take two tablespoonfuls every four or five hours.

CHAPTER VIII.

EFFECTS OF INDIGESTION—HYPOCHONDRIASIS—RELIGIOUS MONOMANIA—CASE—MORAL TREATMENT—MEDICAL TREATMENT.

THUS, then, we have noticed *seriatim* some of the more prominent symptoms of dyspepsia, and endeavoured to point out remedies applicable to each. But let it be impressed that the means suggested are but simple, and under proper administration harmless. They are not intended to supersede the necessity for proper medical attendance, or to lull the patient into a fancied security while serious mischief is going on.

Besides the direct and immediate symptoms of dyspepsia already discussed, there are many sympathies and disordered sensations occurring in parts remote from the stomach, but yet arising from imperfect digestion, mal-assimilation, and continued irritation in that organ. Indigestion is accompanied with headache, and pain in the head in various forms, confusion of thought, intense drowsiness, loss of memory, relaxed throat and uvula,

neuralgia in the face, toothache, &c.; and it must be allowed that the common practice of "giving a dose," by which means the stomach and bowels are relieved, is not always without its good effects in these affections. Every one is familiar with that distressing complaint known as a sick headache, in which the head and stomach suffer together; but which is removed by remedies tending to promote a healthy state of the latter. It has been stated before, that in disorders of the stomach, the kidneys frequently suffer; hence different kinds of urine, varying in specific gravity, quantity, and nature of saline ingredients, different chemical properties, as alkaline or acid, are voided. These differences indicate certain, and sometimes serious, derangement of the whole system, and furnish one of the symptoms of many distinct diseases.

9 Palpitation of the heart, irregularity of pulse, and difficulty of breathing often accompany a disordered digestion. These affections frequently accompany a flatulent or over-distended state of stomach. Under these circumstances the stomach opposes an obstacle to the free action of the heart and lungs, or presses upon the large vessels going to or proceeding from the heart, thus disturbing the flow of blood through them. Again, the stomach, and the vital organs within the cavity of the chest, are supplied

by branches of the same nerves, and are associated with them in their actions. Now, it is a law of the nervous system that impressions made on any nervous trunk, shall be (by what is called the reflex action) communicated and perceived by all the terminations of that nerve; and these effects may manifest themselves by pain, loss of power, muscular contraction, or spasm, according to the peculiar function of the nerve first acted upon. It is by no means an uncommon occurrence for a man to seek medical aid under the impression that he is suffering from a confirmed and organic disease of the heart, when this organ is perfectly sound, and he is suffering from continued dyspepsia, with the nervousness and mental depression attendant on this protean complaint. Dyspepsia, likewise, often occurs in connection with phthisis, and some diseases of the other sex, especially in diseases of a debilitating nature. Phthisis has been said to be caused by dyspepsia, but we imagine the more correct manner of stating the case would be to say, that by a constant disordered state of the stomach, and imperfect assimilation of food, the whole system has become weakened, and thus reduced to a state favorable for the development of the germs of diseases already present in the constitution.

But there is a complication, or rather effect of

an advanced stage of dyspepsia, more fearful than any of the symptoms of dyspepsia already mentioned. We mean that state of mind called hypochondriacal—a state of mind that has forcibly, and with truth, been designated “the bane of intellect and the curse of genius.” “Who shall minister to a mind diseased,” or remove that incubus from the understanding, which makes the man, formerly of strong nerve, fear even his own shadow? Hypochondriacism has been termed a species of insanity; but, thank God, means (used under the guidance of His Providence) are in existence by which this mental affection may be generally relieved, if not quite removed. Cullen admirably defines hypochondriacism as “*DYSPEPSIA cum languore, mastitid et metu ex causis non æquis*,” and in the following words explains and enlarges his meaning:—“In certain persons there is a state of mind distinguished by the occurrence of the following circumstances: A languor, listlessness, or want of resolution and activity with respect to all undertakings; a disposition to seriousness, sadness, and timidity as to all future events, and an apprehension of the worst or most unhappy state of them; and, therefore, often upon slight grounds, an apprehension of great evil. Such persons are particularly attentive to the state of their own health, to every, the smallest change of feeling

in their bodies, and from any unusual feeling perhaps of the slightest kind, they apprehend great danger, and even death itself. In respect to all these feelings and apprehensions, there is commonly the most obstinate belief and persuasion."

Almost the worst form of disease (at least of curable disease) is more preferable, both for the patient and the physician, than this morbid state of mind. In the one case there is something evident and tangible—in the other only a disordered imagination which invents pains, and a distorted state of the reasoning powers which believes these pains and annoyances to be real, and believes too with such intensity, that the sufferings of the patient are quite as great as if positive disease existed. It will not do to treat the complaints of the hypochondriac as if they had no existence. You must appear to believe him, and, without adding to his gloom, cheerfully sympathise with him. However simple the medicine he takes, you must endeavour, by seizing the least expression of relief elicited from him, to make him believe that he receives benefit from its administration. Should there be any pursuit or amusement, no matter how frivolous, which before-time has interested him, you must endeavour to make it appear of the utmost importance, and by these and

every other means that may suggest themselves, strive to fix his attention on anything but himself. It frequently happens that this state of mind is connected with gloomy views of religion—the poor sufferer imagines himself an outcast and beyond the reach of divine mercy. He searches the Bible, and appropriates every passage expressive of the Almighty's anger to himself. This is a most painful complication, and its treatment requires the utmost delicacy and judgment. If you treat his ideas with ridicule, he will avoid you, and look upon you as an instrument of Satan sent to tempt his soul; and if, on the other hand, you appear to agree with him in his distorted views, you but perpetuate and deepen them. The kind and friendly attention of a sensible clergyman of the Church of England will be of great service—not the exhortations of the self-righteous, or the gloomy and ascetic. When this state of mind continues, and the patient becomes morose and taciturn, the patient must be carefully watched, but yet with such delicacy that it may not appear that he is under “surveillance.” It has sometimes happened that in this state of mind, without any hope in this world or the one to come, imagining that no state can be worse than the present, and that their final doom is inevitable, they have endeavoured to lay hands

upon themselves; or at other times, by refusing all sustenance, endeavoured to destroy life by starvation. We remember a lady, who resided in the north of Lancashire, of excellent education, and before her sickness remarkable for cheerfulness of manner. For some months she had suffered from various nervous and dyspeptic symptoms, by which she had become much debilitated. About this time one of those outbursts of religious enthusiasm, known as a "Methodist revival," occurred in the town; illiterate men and fanatics stood in the corners of the streets, mounted temporary rostrums, held prayer meetings, and dealt forth fearful denunciations of divine wrath, without mention of mercy, and declared that the Almighty had plainly spoken the forgiveness of their own sins; and that if their hearers would attend certain chapels, they should in like manner partake of God's mercy. Their language was dreadful, and the manner in which they addressed the Almighty more familiar (almost blasphemous) than they would have dared to address to their employers. By these means they obtained congregations, composed of servant girls, and weak-minded men, who, for a few weeks, showed an outward propriety of conduct, and then became seven times more wicked than before. It may be mentioned that each of these converts (whom they

actually called communicants) was obliged to pay one penny per week, besides sundry other contributions, for the good of the promoters of "the movement." The lady referred to, being of a wealthy and influential family, was besieged by two of these revivalists—the one a cloth-worker, the other a "reformed dog-fighter"—and by their repeated exhortations was induced to attend one of their prayer meetings. On entering the room (which was crowded) she was led to what was called "the penitent bench," and was told, that by kneeling and vociferating in company with some of the lowest characters in the neighbourhood, her prayers would become more acceptable; she was attended by several of "the chosen," who exhorted, prayed, and threatened alternately; and after remaining about an hour, amid the screams of women, and the groans, howls, and frantic exclamations of men, she was carried home in a state of insensibility. After a few days she recovered, but her mind was weakened—she became morose and taciturn—she had no hope—was doomed to everlasting punishment—the personification of the evil one was constantly at her bedside—and after this state of things had continued for some weeks, she determined to starve herself to death. Fortunately this design was frustrated, but to the day of her death she continued in

the same state of mind, and required constant watching. On one occasion a most worthy physician found one of the "prayer leaders" at her bedside, endeavouring to impress upon her that all her mental suffering arose from the "strivings of God's spirit," &c. He gently reminded this zealous revivalist that there was a proper time and season for everything; the result was that the physician was the following Sunday denounced from the pulpit as a "worldly man and an infidel." This case has been mentioned (although but indirectly bearing on the subject of this book) because it was one among several cases occurring about the same time in the same neighbourhood. But to proceed, Dr. Watson, in his lectures, when speaking of hypochondriacism, says: "It will not do to treat him" (the hypochondriac) "as if his ailments were imaginary. He disbelieves you, contemns your judgment, and deserts you,—to be fleeced, perhaps, by some villanous quack. You must hear what he has to say, show an interest in his case, and prescribe for him; assuring him that you understand his case, that it is curable, and that he will be cured if he follows your directions. If you can succeed in gaining his confidence the battle is half won." These instructions were addressed by Dr. Watson to his pupils, and the latter remark should be ever borne in mind

by those who have the care of one thus afflicted. Gain the sufferer's confidence. Whatever sacrifices you make, whatever inconvenience you are put to, still endeavour to gain his confidence. This once obtained, you will be enabled to engage his attention and secure his compliance with any suggestion calculated to do him good. Travel with him, seek change of scene, and no matter how frivolous the amusement or how ridiculous the pursuit or idea which engages his attention, join with him in it, and endeavour to gratify his taste. If you succeed in persuading him to travel in search of health, he is almost sure to find it. Under this most painful affliction the most cheerful man will become gloomy and morose, the liberal mean, and the sanguine desponding. The workhouse, the jail, death by poisoning, faithlessness in his best friends, and hypocrisy and falsehood among those nearest and dearest to him, will be his common topics of conversation; and, painful as it may be to those about him to hear his unjust suspicions and groundless charges, it is useless to contradict or attempt to disprove. The mind can reason under but one view of facts, and one self-coloured aspect of intentions.

In reference to medical treatment, the bowels should be kept freely open, and the action of the liver be maintained. The bowels are liable to ob-

stinate constipation, and sometimes require very powerful purgatives. The food should be plain, substantial, and nutritious, and varied in kind as much as possible, keeping in view these considerations. His periods for rest and eating should be regulated with the utmost nicety; wine and other stimulants should be sparingly allowed—they only raise the cloud for a short time, to be followed by a gloom more depressing and intense; spices and condiments should be avoided, and tea or coffee taken sparingly; cocoa and chocolate, with good new milk, are preferable. In addition to these means, cold bathing or the shower bath, the flesh-brush, and every means tending to promote a healthy action of the skin and invigorate the system, should be employed.

CHAPTER IX.

NO SPECIFIC CURE FOR DYSPEPSIA—FOOD—DR. BEAUMONT'S
OBSERVATIONS—KIND OF FOOD—PERIOD OF TAKING FOOD
—DRINK.

ALTHOUGH we cannot always persuade dyspeptic patients to comply with the rules laid down for the preservation and restoration of their health, still it is not the less our duty to give them. We at least have the consolation of having done our duty; they sooner or later suffer the penalty of their neglect, give us credit for our good intentions, and wish they had benefited by our directions. Patients generally want to have that which it is not in our power to give them, namely, some medicine which will relieve them from all their symptoms, discomforts, and uneasy feelings, and yet allow them to indulge their usual tastes and habits, when, perhaps, the disorder from which they are suffering has been caused by these indulgences. Such remedies have not been found; the empiric may boast that he possesses them, and

the pocket of his dupe may, ere long, experience their "cleansing" effects ; but the honest practitioner will frankly confess that for the successful treatment of disease, it is necessary that the sufferer should not only take medicines, but must likewise furnish his share towards a successful result, by implicit obedience to the directions given, whatever amount of self-denial they may require. Those advertisers who promise to cure "all the ills that flesh is heir to," "without hinderance from business," are faithfully sketched by Crabbe, in the following lines :

"But now our quacks are gamesters, and they play
With craft and skill to ruin and betray.
With monstrous promise they delude the mind,
And thrive on all that tortures human kind.
Void of all honour, avaricious, rash,
The daring tribe compound their boasted trash.
Tincture or syrup, lotion, drop, or pill,
All tempt the sick to trust the lying bill ;
And twenty names of cobblers, turned to squires,
Aid the bold language of these blushless liars.
There are among them those who cannot read,
And yet they'll buy a patent and succeed :
Will dare to promise dying sufferers aid—
For who, when dead, can threaten or upbraid ?"*

The first and most important rule to be observed by those suffering from or liable to indigestion,

* Crabbe's 'Borough' (Physic).

is to restrict the quantity of food taken at one time to that which the stomach can easily digest. The great secret of success with the late Mr. Abernethy in the treatment of his dyspeptic patients, was the strict obedience he exacted in regard to his rules concerning diet and exercise. His everlasting blue pill and black draught did good—relieved; but it was his strict attention to diet and regimen that cured. The firmness and eccentricity of his character enabled him to obtain command over his patients; and woe betide the unlucky wight who ate what he was forbidden to eat, or did what he was forbidden to do.

An unfortunate man, under the care of Dr. Beaumont, of Philadelphia, received a severe wound which penetrated into the stomach. The man recovered and lived some time, but the opening communicating with his stomach remained unclosed. Dr. B. kept him under his observation for some months, and being able to observe the process of digestion while actually going forward, had the opportunity of collecting a number of most important facts in reference to this process. Some of his observations led him to the conclusion that within certain definite limits the supply of gastric fluid was exactly regulated by the demand for it. So much aliment evoked so much gastric juice. But the amount of the latter was never greater than the

quantity required to digest the proper amount of food required for the necessities of the system. From these facts we may learn, that when too much food has been taken, not only do the muscular fibres of the stomach become stretched and their power diminished, but likewise that a portion of undigested matter remains in the organ, ready to undergo decomposition and putrefaction. Hence arise nausea, flatulence, and pain ; or this matter may pass downwards into the bowels, causing irritation and diarrhœa, or become a source of obstruction, and give rise to obstinate constipation. Another rule to be observed by dyspeptics, is to avoid a variety of dishes, and as often as possible to make a meal to consist of but one kind of food. It was ascertained by Dr. Beaumont that some kinds of food are more easily acted upon and dissolved in the stomach, or, in plainer words, more readily digested, than others ; and he has published a table, showing the degree of digestion which took place in different substances subjected for a given time to the action of the stomach. Those articles of food, therefore, should be taken which are most easy of digestion, and should not be mixed with others which require a longer period for their dissolution. There are two reasons why those of weak digestion should dine upon one kind of food : first, because

the admixture of food of various degree of digestibility is avoided ; and secondly, because the appetite is not provoked and tempted by a variety of flavours, and the person thus induced to eat more than the stomach can digest. When we consider the numerous resources of modern cookery, and the hundreds of tempting dishes, the secrets of which are only known to the "chef du cuisine," there is no wonder that dyspeptic complaints are so common. A very good and appropriate acrostic might be composed, not only on the word "dyspepsia," but likewise on all the symptoms of that disease hitherto mentioned, by taking the initial letter of the name of every dish which appears at a public or aristocratic dinner. If not "death in the pot," there is often disease under the dish-cover.

Another very important precaution to be observed by those liable to "fits of indigestion," is not only to allow the stomach sufficient time to digest one meal before another is taken, but likewise to give the organ a sufficient time to rest and recruit itself, relieved from the presence of anything requiring the exercise of its functions.

Mr. Abernethy, among many other valuable regulations, always insisted that his patients should interpose not less than six hours between one meal and another. He thus allowed from three to five

hours for the process of digestion, and the remaining time for the stomach to repose. But, however forcibly we may endeavour to impress the rules and regulations necessary for the preservation of health on those who "love good living," they are seldom, if ever, regarded with the attention they merit. With many it is the custom to breakfast at ten or eleven, take lunch at one, dine at six, have coffee at eight, and then take nothing more until breakfast the next morning; thus keeping the stomach incessantly employed for eight hours, to remain inactive for the other sixteen. Thus the stomach becomes a receptacle for effete and putrefying substances, the secretion of gastric fluid ceases from exhaustion of the organ, and the initiative is taken for a long train of dyspeptic symptoms.

Mr. Abernethy used to say, "that few of his patients could be induced to pay proper attention to their digestive organs, until death, or the fear of death, stared them in the face."

Dyspeptic patients are generally extremely anxious to know what they may eat—and *drink*. But before entering on this part of our subject, we will take a quotation from Boerhave, every word of which ought to be remembered by all, who not only *mean* well, but wish to do well. A proper appreciation of the principle laid down by this author would do much

towards removing many of the absurd and whimsical ideas in reference to diet, which are in the present day so prevalent. He who made all things well, and tempers the "wind to the shorn lamb," does not allow the earth to bring forth its fruit in due season, that man may, by partaking thereof, become liable to disease and death ! If some men *abuse*, it does not follow that others may not *enjoy*, those bounties which, by the exercise of industry and patience, are springing up around us. A man might kill himself by eating bread or drinking water IN EXCESS ; but if such a case were to occur, no sane man would infer that, in moderation, bread was poisonous or water hurtful. There is hardly one single article of diet, which, to certain men, and under certain states of system, may not cause inconvenience, or perhaps disease; but would it be logical to assert, that because a ripe strawberry once upon a time caused me to suffer from diarrhœa, that every one who wished to have the "*mens sanum in corpore sano*," should root up his strawberry beds, and grow cabbage and potato in their place ? Boerhaave says, "*To say that any one article of food is wholesome or unwholesome, without knowing the constitution of the man for whom it is intended, is like the sailor saying the wind is fair or unfair, without knowing the port whither he is bound.*" There is such a case on record as "poisoning by a

mutton chop." In this instance, no matter how the mutton was dressed, or however ingeniously it was served up, the patient invariably suffered from diarrhœa and spasm of stomach. Many of our readers eat oysters, lobsters, and other shell-fish, not only with impunity, but also with benefit; but we have seen colic, incessant vomiting, and inflammation of the bowels follow a lobster salad, and nettle-rash and diarrhœa the result of "half-a-dozen natives." It must be evident, then, that all dietetic rules must be general, and allow a considerable degree of licence; and that the exercise of sound judgment, and, when necessary, self-denial, by the patient himself, is the proper way to secure a good and healthy diet. It has been said that a man's stomach often robs his brain; but if a man has once suffered by his own imprudence, we do not imagine there is much to be stolen from the brain, when he offends against his own health and well-being a second time. Common sense and inclination forbid the taking of solid or animal food when fever or inflammation exist in the system; and therefore, in reference to the stomach as part of the system, all kinds of food which call upon that organ for powerful and continued exertion are improper when irritability, spasm, or chronic inflammation are present. In these states of stomach, the greatest benefit has been derived from a diet

composed of bland, farinaceous substances, in small quantities, at frequent and regular intervals. For instance, in cases of that morbid sensibility of stomach described under the word "gastralgia," the food should consist of milk with limewater, sago, either in the form of gruel or pudding, tapioca, rice-pudding, stale bread, captains' biscuit, and the wholesome "child's matutinal meal," bread and milk. But although light and farinaceous food is best fitted for the stomach when weak or disordered, it does not follow that it is the most wholesome or nutritious sustenance in a state of comparative health. By a process of false reasoning, and a misapplication of facts, it has been supposed by some that animal food ought to be but sparingly taken, and that the diet should consist principally of the "fruits of the earth." And as, now-a-days, every apparently new idea must claim the rank of a discovery, and be advocated by hot and zealous partisans, we have a sect of enthusiasts, calling themselves "Vegetarians," who believe that both the soul and body are benefited and purified, by total abstinence from animal food. However, the fact is, that in a healthy stomach, animal is much more digestible than vegetable food, and conduces more to the health and vigour of the body. A much smaller quantity will supply the

necessities of the system. In its nature and composition, animal food is more like the textures and organised matters it is called upon to renovate and supply ; and requires less "conversion" than vegetable substances, because it contains in abundance the very elements of which the body is composed.

CHAPTER X.

VEGETABLE FOOD.

VEGETABLE food is the chief support of all the beasts of the field which are given for man's use and to be consumed by him, and we may look upon the appropriation and assimilation of vegetable matter by them, as the process by which such vegetable matter becomes fitted for the support of man or carnivorous animals. The grass, corn, and herbs eaten by the ox or sheep, may be regarded as the instruments by which the juices and inorganic matters of the earth itself are brought one degree nearer to the state in which they are required for man's use. The blade of grass is nourished in the ground, during its growth it assimilates some of the inorganic matter of the earth, and becomes an organic substance. The sheep eats the grass, its muscles are developed, its frame enlarges, and thus the herb reaches a higher

degree of organism. Finally, man consumes the sheep, and the series of organic changes is completed. It is quite true that man is omnivorous, and appropriates articles of food from the animal, vegetable, and mineral kingdoms, but his organs of digestion have more resemblance to those of animals purely carnivorous than to any other class. It is well known that flatulence, acidity, and other unpleasant sensations, are a common result of food purely vegetable—showing that it soon decomposes, and is imperfectly digested; still, a mixture of the two kinds is useful. Ripe and well-boiled vegetables contain many elements which are useful for the growth and reparation of the body, and help to dilute and assist the digestion of more solid and nutritious matters. All animal substances which have been subjected to any artificial process before being cooked, become indigestible in proportion to the extent and complication of the process. Hence, ham, salt beef, cured tongue, sausages, and pickled meat or fish, rendered but slightly liable to the putrefactive process, by applying agents which corrugate their fibres and absorb their juices, become hurtful in proportion to the length of time they are intended to keep. Generally speaking, good middle-aged mutton, neither too near the extremely tender flesh of the lamb,

nor partaking too much of the toughness of a patriarch of the flock, is the most readily digested of all animal food. Beef is next in digestibility to mutton; and pork, in any form or of any age, the most indigestible of the three. As a general rule, the flesh of young animals is not so digestible as that of more mature ones, and roast meats suit the stomach better than boiled. The outside or charred portion of roasted meat is very unwholesome, and when baked, frequently passes the stomach unchanged; hence, fried flesh, from the coagulation which takes place during the process of "browning," is not fitted for a weak stomach. All raw vegetables, such as cucumber, pickles, and many of the ingredients of the luxurious salad, are to be avoided by those who are prone to dyspeptic symptoms.

It unfortunately happens that in our endeavours to show dyspeptics the kinds of food they ought to eat or avoid, we sometimes do mischief by fixing the patient's attention too seriously upon himself. A man has been known to make his own sensations, the hourly variations in his pulse, and the difference in the weight of his body from time to time, almost the sole study of his life. His chief enjoyment has appeared to be in the society of those of infirm health, and in giving a description

of his own ailments, in return for the dreary account of real or imaginary sufferings elicited from others. This must be avoided, and if, in addition to the general rules stated to the patient himself, any more strict or particular regulations are required, they must be given to some prudent friend or attendant in whom confidence can be reposed. It has been said before, that there is a disordered state of mind accompanying confirmed dyspepsia, which is manifested by an unfortunate facility in the invention and appropriation of symptoms, and a firm belief in their actual existence; hence, everything should be avoided calculated to lead the patient to watch the effect of medicines or articles of diet upon his own feelings. It is not prudent, when one member of a family requires a restricted diet, to load the table at which he sits with various delicacies and tempting dishes of which he must not partake, while he eats his solitary chop or sago pudding. Dyspeptics are frequently men of excitable and irritable temper, and are not likely to be benefited by being every day reminded of their infirmities. As much as possible, the meal should be composed of articles of diet of which the dyspeptic can partake, and thus be induced to join in the cheerful and social conversation of the domestic circle. Those things which are

good for him will not be unwholesome or unpalatable for others. Some dyspeptics are more anxious to ascertain what they may drink than what they may eat: whether malt liquor—ale, porter, or bitter beer; wine—whether port, sherry, Madeira, &c.; or spirits—brandy, gin, &c. In some instances these questions, repeatedly and anxiously put, lead to a supposition as to the previous habits of the patient; and if this supposition be well founded, we may expect his symptoms to be of a troublesome and stubborn character.

No positive rules can be given on this subject; for although, as a general principle, they are all hurtful, still, previous habits, the inclinations of the patient, and the prejudices of those about him, render it impracticable to secure strict attention to any long-continued abstinence.

In those advanced in life, and who for years have habituated themselves to a moderate allowance of exciseable articles, it would not be altogether safe or prudent to withhold them entirely. The system has become accustomed to their use, and requires their assistance for the performance of certain functions. Under these circumstances, our only plan is to limit the quantity to that amount which is sufficient to protect the system from too much depression or debility, and to take care that the

fluids taken are pure and good, and not calculated to weaken or disorder the stomach.

Bitter ale has lately been (to use the trade expression) "much quoted," not only as an allowable beverage, but likewise as a positive means of cure in some forms of dyspepsia. Doubtless it has been of service in some cases, partly as a substitute for more hurtful things, and partly because of the wholesome bitter it contains; but we do not consider it entitled to the great distinction which the advertisements of the day would have us award. It is not all the symptoms of dyspepsia that are benefited by a bitter, and many of them are aggravated by a stimulant, both of which principles are contained in this beverage. Much of its fame has resulted from the custom before adverted to,—"It was recommended to me, so it is sure to do you good." In some cases of dyspepsia, a small quantity of wine free from acid, or good ale, appears to assist digestion; and a glass of bitter ale during the forenoon, or as a dinner beverage, has sometimes been of service. It would be difficult to particularise the kind of malt liquor, wine, or spirit, which is most useful. Of course those are preferable which are the most free from acid or contain least extraneous matter. The patient's own sensations and experience are the best criterion of the kind of exciseable liquor

which is most beneficial to him. If any one kind should produce heartburn, headache, drowsiness, unpleasant heat, or other uncomfortable sensations, he will not repeat it; and this remark, with an injunction to practise moderation, and, if necessary, self-denial, concludes our remarks on this subject.

Before proceeding to treat of other disorders to which those of sedentary habits are liable, we may be allowed again to repeat the importance and necessity of regular exercise, and plain and nutritious food. The directions which have been given for the preservation and restoration of the tone and functions of the stomach apply likewise to the maintenance of the general health of the individual: and what are genius, station, wealth, "troops of friends," and the possession of all the good things of this life, without the enjoyment of health?

We will conclude this section by quoting the words addressed by Horace Mann to a young friend who sought his advice when about to enter on the practice of his profession—the law. They apply with equal force to the young physician, and with greater propriety to him who "has the cure of souls."

He says,—“First you need health. An earnest student is prone to ruin his health. Hope cheats him with the belief, that if he can study now with-

out cessation, he can do so always. Because he does not see the end of his strength, he probably concludes there is no end. A spendthrift of health is one of the most reprehensible of spendthrifts. I am certain I could have performed twice the labour, both better and with greater ease to myself, had I known as much of the laws of health and life at twenty-one as I now do. In college I was taught all about the motions of the planets as carefully as though they would have been in danger of getting off their tract if I had not known how to trace their orbits; but about my own organisation, and the conditions indispensable to the healthy functions of my own body, I was left in profound ignorance. Nothing could be more preposterous. I ought to have begun at home, and taken the stars when it should have come their turn. The consequence was, I broke down at the beginning of my second college year, and have never had a well day since. Whatever labour I have since been able to do, I have done it all on credit, instead of capital—a ruinous way, either in regard to health or money. For the last twenty-five years, so far as it regards health, I have been put, from day to day, on my good behaviour; and during the whole of this period, as a Hibernian would say, if I had lived as other folk do for a month, I should have died in a fortnight. . . .

“Health has a great deal to do with what the world calls talent. Take a lawyer’s life throughout, and high health is at least equal to fifty per cent. more than brain. Endurance, cheerfulness, wit, eloquence, attain a force and splendour with health, which they never can approach without it. It often happens that the credit awarded to intellect belongs to the digestion. Though I do not believe that genius and eupepsy are convertible terms, yet the former can never rise to its loftiest heights unaided by the latter.

“Again, a wise man, with a great enterprise before him, first looks round for suitable instruments wherewith to execute it; and he thinks it all important to command these instruments before he begins his labour. Health is an indispensable instrument for the best qualities and highest finish of all work. Think of the immense advantage you would have in a suit in court, if, after a week or fortnight’s investigation of facts, you could come in for the closing argument, on the last day, fresh and elastic, with only so much more of momentum and fervour for the velocity and glow you had acquired.”

In conclusion, let it be remembered, that the maintenance of good health does not so much depend upon the observance of certain fixed rules, applicable to all, as upon proper attention to the peculiarities

and capabilities of each individual constitution. Much harm has been done, both among children and adults, by what has been termed "hardening the system." If all were physically constituted alike, this plan would be useful; but, as it is not so, we must endeavour to maintain health by being guided by our own experience of what is useful and wholesome, and by attending to the "many little things" upon which all that is great or good, in regard to our own happiness and well being, is founded.

CHAPTER XI.

DISORDERED SENSATIONS.

HAVING now endeavoured to give an account of some of the pains and ills arising from imperfect digestion and assimilation, we come to another class of diseases, or (perhaps more correctly) "disordered sensations," to which those of sedentary habits are liable. It has been before shown, that when one organ, or system of organs, is constantly or repeatedly called into play, to the desuetude of others, disease and disordered function must eventually occur, either in the neglected or exercised organs, or both. It has likewise been stated that, although many of the phenomena of the nervous system are self-evident, and observe regular and consecutive manifestations, still, that our knowledge of the laws by which the nervous system is governed is imperfect, and our ideas of the nature and source of nervous power are speculative and indefinite.

Hence, in treating of these anomalous symptoms which constitute what are commonly designated “nervous diseases,” we must be content to take facts as we find them ; and without occupying much time in speculations concerning their origin and cause, must strive to separate the real from the imaginary, and endeavour to point out remedies and palliatives applicable to them.

And, “*in initio*,” it will not be out of place to give a slight sketch of the physiological relations between mind and matter ; and endeavour to explain how it is that the immaterial part of man often exercises a powerful influence, for good or evil, upon his material and physical existence. Without attempting to ascertain the nature of the mind of man, or running the risk of becoming entangled in abstruse psychological speculations, we will content ourselves with stating that which has been the opinion of many generations, and of the truth of which many proofs will occur to every thinking mind, namely, that the brain is the material instrument of the immaterial mind ; that it is supplied with the necessary apparatus of vessels, membranes, and every other appurtenance of organised life ; and, consequently (allowing for certain peculiarities of structure), is governed by the same vital laws, and subject to the same organic changes as any other

part of the body. This being the case, it may suffer from the effects of an increased or diminished supply of blood ; or from exhaustion supervening upon long-continued exercise of function, as occurs during deep thought and continued mental application ; or from torpidity, the result of indolence and want of occupation. Again, it is well known that by the administration of certain agents which increase the action of the heart, and consequently accelerate the circulation of blood in the brain, the faculties of the mind become more active, and its perceptions more vivid ; that, on the other hand, by the exhibition of agents of an opposite nature, the circulation of the blood is retarded, and the man becomes torpid and unconscious ; and that life may be slowly or suddenly destroyed by means which gradually or quickly destroy the action of the heart. Again, the functions of the brain may be deranged, suspended, and even destroyed, by impressions made directly on the mind itself through the agency of the senses, without the intervention of the vascular system, or any material agency whatever : and these states of brain shall have precisely the same effects (*cæteris paribus*) upon the heart and its functions, as in the former case the heart had upon the brain and its functions. Anxiety will cause irregular action of the heart, as shown by "tumult and throbbing." The receipt of

painful news or fright will suddenly arrest and appear to suspend the pulsation of the heart, or reduce its action to a barely perceptible thrill under the hand, as in syncope or fainting ; and the sudden knowledge of some overwhelming misfortune, or irrevocable degradation, has been known to cause the mind instantly to desert its frail tenement, has arrested the vital current in its course, left the half-uttered exclamation on the lips, and, without a struggle, caused the spirit to return to God who gave it. These, however, are only some of the more striking evidences of the close connection between the mind and the body ; and are mentioned as tending to prove that, as the one reacts upon and governs the other, so there is a possibility of, to a certain extent, relieving a disordered state of mind by agencies which, in the first instance, act upon the body and its physical functions.

There are, however, many examples illustrative of the intimate connection between mind and matter ; of their reaction one upon the other, and which are more applicable to our subject. Take the industrious and anxious student, who, entered on the pursuit of that kind of knowledge which shall fit him for one of the learned professions, has determined to be "*aut Cæsar aut nullus.*" Whence arises that pale wan countenance ? Because, from constant

mental application, the brain has not been able to spare any nervous power to assist the heart in its action; hence the circulation of blood has become weakened and retarded, and blood not being propelled into the vessels on the surface of the body, the countenance, which before was tinged with the glow of health, has become "o'ercast with the sickly hue of thought." Here the mind has been over-exercised, and the body has become debilitated and unhealthy. On the other hand, observe the man who finds his chief enjoyment in the pleasures of the table, or in depravities of a more degrading character; mark his pimpled visage, his flushed or bilious expression of countenance. Perhaps he is on the verge of "*delirium tremens*," or is threatened with even more permanent mental alienation; or, at best, his intellectual powers are only equal to the low chicanery of the betting-ring or "board of green cloth," without one aspiration for those mental acquisitions which are becoming and manly. In this case, a depraved and vitiated state of the blood, and deranged function of nearly every organ of the body, has, through the medium of the nervous system, acted upon the brain; and the immaterial mind (as it were), disgusted with its material instrument, furnishes just sufficient of its influence and manifestations to raise the man above the level of the beast.

In health, but more especially in disease or debilitated states of the system, the passions and emotions exercise a powerful influence on the body. By their influence, the pulse may be increased or diminished in frequency, the sensations of hunger and thirst suspended, and the secretions of the body either checked or increased. The anxiety which attends the commencement of disease or any slight deviation from health in those of nervous and excitable constitution (especially when increased by the garrulity of friends who "know something of physic") will often mask the real character of the symptoms; and if the frequency of the pulse were the only indication of feverishness and increased arterial action, the most experienced practitioner would often be deceived; besides, the same passion or mental emotion which, at one time, and in a certain state of system, increases the frequency of the pulse, will, at another time or under a more intense degree of feeling, diminish it. Again, every one knows that the receipt of news, either of a pleasing or painful nature, or the emotions of anger or grief occurring just before a meal, will immediately destroy all desire for food; and that, under the pressure of continued anxiety or close mental application, a man will take but a very small quantity of food or drink for several days. As illustrations

of the effect of the passions and mental emotions on the secretions of the body, we may instance—fear causing diarrhœa and perspiration, anxiety increasing the secretion of the kidneys, grief or joy producing tears, other emotions causing constipation and dryness of the mouth and fauces ; and, lastly, it may be mentioned that jaundice, arising from obstruction of the secretion of the liver, has been the result of powerful mental emotion. The Indian method of detecting suspected offenders, by making them take rice into the mouth, and observing if after a time it is moistened, is founded on a knowledge of the effect which fear has in checking the secretion of saliva.

Thus, then, without attempting any theory, we have adduced sufficient facts to demonstrate that every function of the body may be directly or indirectly influenced by the state of the mind ; and that the mind may, in like manner, be influenced by the body. But not only are the various organs of the body, and their secretions, acted upon by mental emotions, but likewise the senses themselves may be so modified, or, at least, the impressions conveyed to the brain through the medium of the senses may be so altered and distorted, as to lead to real or imaginary disease. The imagination is the only intellectual faculty which exercises a direct influence on any of the organs of the body, and the organs which are governed by

its influence are those of the senses. "It acts by producing in them, or in the parts of the brain with which they communicate, the same state which is usually brought about by external objects actually present." All the organs of sense—the eye, the ear, the nose, the palate, the skin—may become the theatre of these false impressions; but the eye is the most liable to be affected by them. These false impressions on the organ of vision are called spectral illusions.

False impressions on the senses are most frequently manifested in those of debilitated and enfeebled body, and active and excitable mind; hence those of studious and sedentary habit are peculiarly liable to these affections. And in many instances so intense are these disordered states of imagination, that no process of reasoning will show the utter impossibility of their real existence, nor will even the act of bringing one sense to correct the false impression made on another succeed in convincing those in whom they occur of their complete absurdity. It is to these false impressions on the organs of the senses that we must refer the startling accounts recorded of the appearances of departed or distant friends, and of imaginary conversations held with them. No doubt, many of those who relate these stories as occurring to themselves, really believe the truth of their narratives;

and so far as *the state of their own senses at the time* when they are stated to have occurred are concerned, it is not very charitable to treat them as fabrications. Nay, some of the most startling and mysterious of "ghost stories" and supernatural appearances, have been given to the world by those whose characters and intentions were above suspicion. But they have been, many of them, men of excitable temperament, studious habits, and delicate health; some of them, men whose delight from childhood had been in the contemplation of the ideal and imaginary, and who (as recorded in their writings) looked upon this mortal body as a clog and incumbrance, and endeavoured by their readings, studies, and subjects of thought, to approach the immaterial and visionary. We have heard it adduced as a proof of the reality of supernatural appearances, that they have been known to occur to all the male or female members of one family, and continued to do so at intervals during the life of a generation; but we do not think it any more extraordinary for an excitable imagination to be a family peculiarity, than for insanity, gout, phthisis, and other hereditary tendencies, to be perpetuated—especially when the "traditions of the house" and the "records of the family" have tended to cultivate a taste for the marvellous and supernatural.

It has frequently happened that spectral illusions, and false impressions on other senses besides that of vision, have occurred to men who have possessed both the mental qualification and the presence of mind to reason upon them, and to call one or more senses into exercise to correct the false impressions made upon others ; as, for instance, to ascertain the existence of an object presented to the organs of vision, by finding if it answered to the sensation of touch, or of an impression on the organs of touch by testing it by the exercise of vision ; and it has always resulted, that the moment the mind has entered upon the process necessary for the comparison of the evidence of one sense with that of another, or ceased for an instant to contemplate the object or impression presented, that the illusion has disappeared, and

“ Like the baseless fabric of a vision,
Left not a rack behind.”

There are instances on record, of literary men, who, by an intense and continued exercise of the imagination, could call up spectra at their will : for instance, Goëthe, the German poet, states that he could command the appearance of these illusions, but that, being once produced, he had no power over them. He further says as follows : “ I may

here state that, when a feeble and sickly child, I possessed the power of creating ocular spectra in a very remarkable degree. . . . During this period my imagination was uncommonly active during sleep; occasioning dreams of a most fearful kind. As my health improved I lost the power of creating images at will, and since my seventh year have never regained it, though I have suffered occasionally from false impressions on the sense of hearing.”*

Müller, the great physiologist, states that the spectral illusions with which he was haunted were quite involuntary, but that by endeavouring to reason upon them and testing the evidence of one sense by that of another, they generally disappeared. Those who wish for further information on the subject of ocular spectra and (apparently) supernatural appearances, may consult Sir David Brewster's work on ‘Natural Magic,’ and Sir Walter Scott's ‘Demonology and Witchcraft.’ The false impressions made on the senses and imagination during sleep constitute dreams. These impressions, during the period they continue, have the same effects upon the action of the heart, the brain, and the secretions of the body, as if they were real and occurred in a waking state. A man will awake from

* Müller, part vi, p. 1397.

a fearful dream, bathed in perspiration, and with his heart beating irregularly and tumultuously ; and, in fact, all the physical changes before mentioned as the effects of fear, grief, anger, &c., may occur from impressions made on the brain during sleep. The majority of dreams may be accounted for by natural causes, such as debility, association of ideas during the preceding day, previous excitement, the suppression of some accustomed discharge from the body, and, above all, by that prolific parent of evil, indigestion and irregularity of life. A familiar instance of the effect of gastric derangement is furnished by incubus or nightmare—a most distressing sensation, and one which, in confirmed dyspeptics of a debilitated habit and excitable temperament, has sometimes become a most serious and formidable evil, keeping up constant debility and excitement, and even threatening reason itself. In certain disordered states of circulation within the head, or structural diseases of the brain itself, false impressions on the imagination and the organs of sense occur so frequently, and with such intensity, that they are believed and assumed as realities, and their intent or meaning is interpreted by the distracted mind according to the prominent illusion existing ; thus making the illusion compound, and constituting some form of monomania. In these

cases the faculty of comparison is lost, and there is a firm belief in all the impressions conveyed to the *disturbed* brain through the medium of the *disordered* senses; and the “essence of all aberrations of intellect is a firm belief in the reality of the workings of the fancy: belief, therefore, becomes the chief test of intellectual aberrations.”*

From what has been already stated, it will be evident that many of the so-called nervous diseases, or “affections,” as they are often vaguely termed, may be traced as originating from disordered states, either of the circulation or the secretions of the body. We will, therefore, now proceed to notice some of the maladies in which either local pain—affecting a nerve or series of nerves, constituting neuralgia—or where general nervous debility and imperfect function of the organs of the senses, are the more prominent symptoms.

* Hooper, ‘Physician’s Vade Mecum.’

CHAPTER XII.

NERVOUS AFFECTIONS PECULIAR TO THE SEDENTARY.

It would not be within the limits of this little book, nor would it be pertinent to our subject, to describe all the local pains or disordered sensations comprised under the term neuralgia and nervous affections. We, therefore, purpose only to notice those which the records of medicine, the physiological laws of the human body, and our own experience, point out as being peculiarly the maladies to which those of sedentary habits are liable.

It will be evident, from what has been said when speaking of the functions of the stomach, and the causes which increase or diminish the circulation of blood in any organ or part of the body, and likewise from what has been stated in the previous chapter concerning the intimate connection between the circulation of blood in the brain and the functions of that organ, that those of sedentary and

studious occupations—those who “work with the brain”—are peculiarly liable to disorders in the discharge of the function of the organ thus exercised. The symptoms or manifestations denoting such derangement constitute nervous diseases, either local or general, corresponding with the influence of the function which is imperfectly or irregularly performed. Now, the functions of the brain, so far as our subject requires a definition, may be defined as sensation, thought, and voluntary motion. Sensation may be morbidly acute, obtuse, or perverted. The natural and ordinary impressions received by the organs of sense, such as the eye, the ear, &c., may, from some imperfection in the nerves of the part, or from disease in those portions of the brain from which they appear to arise, be morbidly acute, as shown by pain and intolerance of light in the eye, or of sound in the ear; and this, too, without any visible disease in the organs themselves. In like manner, certain portions of the surface of the body, or some of its structures, may be painful when touched, or be morbidly sensible to atmospheric changes, without any appreciable alteration in the appearance or structure of the parts thus affected. On the other hand, there may be numbness in various parts of the body, pinching and pricking may be borne with impunity; or the organs of

sight, hearing, taste, and smell, may be unable to distinguish objects presented to their notice, showing deficiency of sensation. Among instances of perverted sensation, may be mentioned ocular spectra, imaginary odours, singing in the ears or sound as of rushing waters, dread as of impending evil, unusual flow of spirits or its reverse, and a host of annoying and indescribable feelings, usually complained of as "nervous sensations" or nervousness.

That function of the brain known as the "faculty of thought," may exhibit many varieties and degrees of disturbance, such as dulness and confusion in the reception of ideas, loss of memory, inability to direct the attention to any one subject, incapacity for the exercise of judgment, delirium in all its phases, and stupor even to insensibility. The symptoms which show disturbance of the function of voluntary motion are spasmodic or involuntary actions of the limbs, twitching of the muscles, tremors, distortion of the countenance, general debility of the muscles, and paralysis. All the foregoing are symptoms of increased, decreased, or perverted actions of the several functions of the brain to which they belong; but we are unable to discover the process, or disturbance in the brain itself, from which they originate; they may occur in every conceivable combination; and in the same individual, under

precisely the same apparent circumstances in every minute particular, different symptoms will occur at different times.

These, therefore, being the difficulties and perplexities we have to encounter in the treatment of nervous diseases, our practice must be founded upon a knowledge of probabilities, and we must be content to take for our guide the purport of a series or class of symptoms, when we cannot refer each individual one satisfactorily to its source; and knowing how intimate and mysterious are the sympathies existing between disordered actions in different parts of the body, and how it is that imperfect discharge of function in a part will soon extend itself to the whole, we must endeavour to attain the "*mens sana in corpore sano*" by exercising the knowledge and skill we possess, in an attempt to secure the latter, that having done so, we may reasonably hope to regain the former. Indeed, if we examine all that has been written on the treatment of nervous diseases, and all the various remedies which have, from time to time, been regarded as specifics, we shall find that the first step in all plans of treatment has been "to improve and restore the secretions of the body," either before or during the time when the supposed specific has been exhibited; and, as the first part of the process

has always been practised in successful cases, and a variety of additional means have been tried in unsuccessful ones, we certainly feel inclined to place more confidence in those remedies which tend to secure a "*sound body*," than in any medicine or mode of treatment of which its advocates cannot furnish any "*rationale*," and the "*modus operandi*" of which cannot be explained. To illustrate our meaning. A man of robust, plethoric habit shall suffer from "*tic douloureux*" (or increased sensation in some of the nerves of the face), but his bowels are confined, his tongue is foul, and he presents other dyspeptic symptoms. We immediately commence our treatment by relieving the bowels, and adopting other means to set his digestive organs right—and the pain leaves him; perhaps he dates his relief from the moment a purgative acts freely. Again, a pale, feeble, studious man shall suffer from the same distressing malady. In his case, in addition to means calculated to correct any disordered secretion that may exist, we give tonics to assist the enfeebled heart in its office—such as quinine, or the favorite carbonate of iron—and he quickly recovers.

Now, in both these cases our treatment has been directed towards the "*general health*" of the body, without any distinct regard for the most prominent

subject of complaint, the pain in the face ; and, by opposite means, we have succeeded in both instances. But many say, carbonate of iron is a specific cure for tic douloureux ! All that we can say is, that if those of robust health were as liable to this form of neuralgia as are those of debilitated habit and feeble circulation, blue pill and black draught would be regarded as specifics of equal virtue with quinine or carbonate of iron.

CHAPTER XIII.

NEURALGIA.

FROM what has already been stated, it will be evident that those of sedentary and studious habits—or, in other words, those in whom the brain is active and the body comparatively at rest—are specially liable to disorders arising from irregularity in the functions of the former. And first we will consider those of the function of sensation. There are diseases which consist of pain and nothing else, and in which there is no fever, inflammation, or appreciable alteration of structure of the part affected; and these pains, when they follow the course of a nerve, or are confined to a certain spot, are called neuralgic. Of this kind are the diseases named tic douloureux, sciatica, angina pectoris, pleurodynia (or pain in the side often simulating pleurisy), gastralgia, and several others. The cause and origin of all these pains is very obscure. Sometimes they

are caused by irritation in some part of a nerve, showing itself at the extremity of that nerve, of which we have a familiar instance in the pain and tingling occurring in the little finger when the inner part of the elbow joint is struck in a peculiar manner. In this case the nerve is irritated at the elbow, but pain is felt at the extremity of the nerve in the finger. Or the source of irritation may be in the brain itself; and there are cases on record of obstinate and agonising neuralgic affections, which have baffled all modes of treatment, in which, after death, some thickening of bone, or spicula projecting from the inner surface of the skull, has been found. The late Dr. Pemberton suffered from *tic douloureux* in such a severe form, that he was obliged to relinquish the practice of his profession; and after his death, an osseous substance nearly half an inch long was found projecting from the inner surface of the frontal bone. Again, irritation occurring either in the extremity or course of one branch of a nerve may cause pain in another branch of the same nervous trunk supplying a remote part of the body; as for instance, the pain occurring in the shoulder, when irritation or disease of the liver exists; and the various nervous affections arising from a disordered state of the stomach and bowels. A remarkable instance of the effect of irritation of the stomach

was related by Dr. Wollaston, as occurring to himself. "He had eaten some iced cream after dinner one day, and his stomach did not feel capable of digesting it. Some time afterwards, when he had left the dinner table for the drawing-room, he found himself rendered lame by a violent pain in one ankle. Suddenly he became sick, the ice cream was vomited, and instantaneous relief of the pain followed its ejection from the stomach."* Sir Benjamin Brodie relates another case. "A gentleman awoke in the middle of the night, labouring under a severe pain in one foot. At the same time certain other sensations, to which he was not unaccustomed, indicated the existence of an unusual quantity of acid in the stomach. To relieve the latter, he swallowed a large dose of alkaline medicine. Immediately on the acid in the stomach being thus neutralised, the pain in the foot left him." In the cases just mentioned, we can only account for the symptoms and their relief, by supposing that a morbid impression had been made upon the spinal cord by the nerves of the stomach, and this impression was transmitted by the brain to the nerves of the parts which were painful. Certainly, no direct nervous connection can be traced between the stomach and the foot.

* Dr. Watson's 'Lectures on the Principles and Practice of Medicine,' vol. i, p. 706.

And thus instances might be multiplied ; but sufficient has been said to show the importance of the rule before insisted upon, namely, to examine carefully, and to rectify, if necessary, the state of the digestive organs, as the first step in the treatment of all nervous diseases.

We have said before, that one of the distinctive marks of pure neuralgic pain, is the absence of all inflammation, swelling, or change of structure in the part affected. There are a few other characteristics to be noticed. The pain generally comes on suddenly, without any premonitory symptoms, and ceases almost in the same manner ; it is likewise usually of an intermittent, though sometimes of a remittent kind—and so regularly do the paroxysms occur in some cases, that the patients can, by observing a time-piece, predict to a few minutes, the time when their sufferings will return. In other instances, although the pain never entirely ceases, still it, for a certain period, so far relaxes in its intensity as to be tolerable ; and this intermittent and remittent type of the disease often furnishes a most valuable and practical hint in its treatment. It has been observed, that in low, damp localities, where ague and fevers of an intermittent and remittent kind are prevalent, that neuralgic affections, partaking of the same periodic characteristics, are not of unfrequent occurrence ;

and that, if they do not yield to the remedies exhibited in the first instance to rectify the general functions and secretions of the body, they are usually cured by those which are of use in the treatment of the periodic diseases peculiar to the locality. Again, one of the features of pure local neuralgia, is found in the effects of change of temperature. Indeed, so sensitive are many individuals of "nervous temperament," or liable to "neuralgic affections," that they become almost as faithful indicators of atmospheric changes as a barometer. During the prevalence of certain winds, or frosty or warm weather, they enjoy an almost perfect immunity from suffering, to suffer again when opposite states of weather prevail. Another peculiarity (and one that applies most forcibly to those to whom these pages are addressed) is that those of debilitated habit, and more especially still, those who owe the debilitated state of their bodies to close study and a sedentary life, are peculiarly liable to these and all other disordered states of the nerves of sensation. If we were to wade through the clinical reports of all the hospitals and dispensaries in London, we should find the great majority of cases reported under the heads "Neuralgia," and "Depraved sensation," commencing something thus — "A. B., of pale complexion, debilitated constitution, and fee-

ble circulation, 'habits studious' (perhaps intemperate also, as the case sometimes is), 'occupation sedentary' (here the occupation would be mentioned), was, after exposure to cold, suddenly seized with acute lancinating pain in so and so ;" and then in its proper place we should find, "tongue coated, breath offensive, appetite bad, bowels constipated, or relaxed" (they would rarely be pronounced healthy in their action), and so on. It is true we might now and then stumble upon "B.C. or F. G., of plethoric habit and full pulse," &c., but we should find the column headed "State of stomach and bowels," filled with a list of "things which should not be ;" and then if we turned to the treatment of the latter cases, we should see "Haust. purg. com." one day, and "discharged cured" the next ; whereas, in the former case, we should perhaps find the entries "relieved," "improving," or "pain much diminished," occurring several times before we reached the terminal report "discharged cured." This is no fancied picture.

"'Tis true, 'tis pity ;
And pity 'tis 'tis true."

CHAPTER XIV.

TIC DOULOUREUX.

WHEN sudden and acute pain, answering to the characteristics described in the preceding chapter, occurs in any of the branches of the sensory nerve supplying the face (technically called the facial branches of the fifth pair of nerves), it is called "tic douloureux," or "facial neuralgia." None but those who have suffered from this distressing malady can form a proper conception of its agony. The quivering features, blood-shot eye, and pitiful expression of countenance, may convey some idea of the suffering experienced, to those who behold the patient; but, as we once heard a strong-minded and heroic sufferer exclaim, "Imagination cannot picture a pain so intense"—and (he continued), "thank God it leaves me sufficient reason to know that He who gave life forbids me to take it away."

There are three places corresponding with the points at which the branches of the facial nerve

emerge from their bony canals (technically named foramen, or foramina), to supply the muscles of the face, in which the pain first appears, and from which it radiates. When the superior branch of the nerve is affected, the pain first shoots from a point nearly in the centre of the arch of the eyebrow, extending to the forehead as far as its middle, the upper eyelid, and sometimes to the ball of the eye itself. In this case there is a copious and involuntary gush of tears, the eye becomes "bloodshot," and there is throbbing of the arteries surrounding this organ; and when the attack recurs frequently, the redness of the eye sometimes becomes permanent. Pain commencing near that facial prominence known as the cheek-bone, with twitching and darting pain in the cheek and lower eyelid, extending to the nostril and upper lip, terminating in the middle line of the countenance, shows that the middle branch of the nerve is the seat of disease. When the lower or inferior branch of the nerve is affected, the pain originates in the side of the chin, radiating to the lips, affecting the gums and sockets of the teeth, the side of the tongue, and sometimes communicating with the other divisions of nerve extending to the cheek and ear. During the paroxysm, the features frequently become distorted, saliva dribbles from the mouth, and the muscles of the jaw become affected

with spasm, and are rigid and immoveable. When this painful disease is once established, the paroxysms may be brought on or aggravated by the slightest cause. The mere contact with the affected part, a breath of cold air, the noise of opening or shutting a door, the rumble of vehicles in the street, or even calling the sufferer's attention to his malady by questioning him about it, are sometimes sufficient to bring on a recurrence of the attack. Perhaps one reason why the three terminal branches of the facial nerve (the third division of the fifth) are peculiarly liable to neuralgic affections, is to be found in their proximity to the surface and the thinness of the integument covering them. They are thus exposed to the effects of vicissitudes of temperature, to injury, and to rheumatic diseases; and these anatomical distinctions, taken into consideration, along with the feeble circulation of blood (and consequent weakness of the "reparative power") existing in the surface of the body in those of debilitated habit, becomes an important feature, when endeavouring to ascertain the "why and wherefore" of this cruel malady.

A great number of remedies, all differing in their properties and modes of action, have at one time or other been in vogue as specifics in the cure of tic douloureux; but as many of them have fallen into disrepute, and others have only succeeded in a few

individual cases, we cannot see any reason to suppose that there is any one specific medicine or mode of treatment likely to be successful in all cases. The causes and peculiar characteristics of many diseases differ in each individual case, even when those causes are evident, and different plans of treatment have to be devised to meet these peculiarities. How absurd, then, it must be, to expect to find a specific remedy in the treatment of a disease, the causes of which are always obscure, and its primary origin frequently a matter of speculation ! In the treatment of tic douloureux, the first thing to be done is to ascertain the state of every function of the body, more especially those of the organs of digestion ; and even when the case is one in which there can be no doubt of the existence of the disease, still it is proper to correct the state of these functions, and get the secretions of the body into a healthy order, before anything is done directed more especially to the relief of the most prominent symptom—the pain. In this disease, it is true that the functions of the nervous system are disturbed, but in nine cases in ten, this disturbance is the result of some defect in the digestive organs. There are cases in which the nervous system appears to be the first to suffer, and where, from the want of rest, anxiety, and pain, occasioned by the disease, the stomach,

bowels, and other organs of the body, become deranged; but this is not the usual order in which they occur. Mr. Abernethy, when speaking of disorders of the nervous and digestive system as causes of disease, used to say, "The two are the common parents of a numerous progeny of very dissimilar local diseases. In tic douloureux, you must seek to put the digestive organs right, or to soothe the nervous system, according as the one or the other may seem to be the principal and primary cause of the disease. Take away one of the parents, and there will be no more propagation." It has often happened, in the treatment of this disease, when a variety of means have failed, that a powerful purgative, which at the time has unloaded the bowels and increased the secretion of every one of the organs concerned in the digestive process without any reference to their future state, has obtained a cure. Sir Charles Bell cured several patients with the following powerful pill, and it has answered in the hands of others:

Take of Croton Oil 2 drops,
Compound Extract of Colocynth 1 drachm.

Mix. Give 5 grains of this mass with ten grains of Compound Galbanum Pill at bedtime.

This remedy is merely mentioned to show the effect of the increased secretions of the body in obstinate

and obscure cases. It will frequently answer in those of plethoric habit, but it is not applicable to the feeble and debilitated. Dr. Elliotson states, as the result of his experience, "that in all cases of neuralgia, whether exquisite or not, unaccompanied with inflammation or evident exciting cause, iron is the best remedy,"—and as there are generally evidences of a weak and enfeebled constitution in those who suffer from tic douloureux and other nervous affections, the preparations of iron, as tending to invigorate the system generally, improve the constitution of the blood, and thus give tone to the nerves themselves, are, AFTER the state of the secretions has been attended to, the most calculated to afford relief. In the treatment, then, of pure facial neuralgia, we should first unload the bowels, correct any acidity existing in the stomach, ascertain that the biliary functions are properly performed, and urge the necessity of avoiding all causes, such as cold, damp, &c., which have been found to bring on or aggravate a paroxysm. The aperient and alkaline medicines mentioned in the first section of this book, when treating of the various forms of dyspepsia, will answer these intentions. The carbonate of iron is the preparation which has been most frequently and successfully used in the treatment of neuralgia. It may be given in doses commencing with half a drachm,

and gradually increased to a drachm and a half or two drachms. One great objection to the continued use of this medicine, is its bulk and its liability to cause sickness, pain in the stomach, and constipation ; still, when its use is once commenced, it ought to be taken perseveringly, and the annoyances occurring during the course must be either borne patiently or remedied by the means before mentioned as applicable to these disordered states of stomach. In cases where the carbonate of iron has been taken some time without benefit, or where there are other reasons for discontinuing its exhibition, we have found a combination of iron, quinine, and opium, of service. Of course this combination will not answer where there are any evidences of a disordered circulation within the head—or what is commonly called a “determination of blood to the head,” such as drowsiness, frontal headache, singing in the ears, throbbing of the temples, or giddiness. The form we allude to is as follows :

Take of Sulphate of Iron	.	.	4 grains,
Sulphate of Quinine	.	.	6 „
Diluted Sulphuric Acid,			
Tincture of Opium, of each	.		$\frac{1}{2}$ drachm,
Tincture of Orange Peel	.		2 drachms,
Cinnamon Water,			to 6 ounces.

Mix. Take a fourth part every six hours, or more frequently if the paroxysms occur with little intermittence or are only remittent.

The constipation occurring during the use of the foregoing mixture is best met by the administration of aloetic purgatives (provided the patient does not suffer from hæmorrhoids). Purgatives of this class not only unload the bowels, but likewise stimulate the action of the liver, and act on that part of the intestinal track most likely to be rendered torpid by the effects of iron and opium, and (if there is anything in the old theory of "revulsion") cause a determination of nervous influence away from the affected parts.

Take of Compound Rhubarb Pill,

Compound Extract of Colocynth,

Extract of Henbane, of each . $\frac{1}{2}$ drachm.

Mix, and divide into twenty pills. Take two or three at bedtime occasionally.

We have little faith in topical or external applications in pure local neuralgia. The only one from which we have ever seen any marked relief, is an ointment containing veratria, a deadly alkaloid poison from the vegetable kingdom, and one which ought never to be used in any way, or vended by any chemist, unless under personal medical sanction. If there is any tenderness or pressure in any of the three localities in which the pain generally originates, or in any of the parts to which it radiates, relief may sometimes be obtained by the application of

two or three leeches ; but neuralgia in the form and in the subjects under consideration, is not a disease to be benefited by the abstraction of blood, or any measures which weaken the circulation. Those of studious and sedentary habits have rarely any blood to spare ; and replace that which is lost but slowly. Blisters and cupping have been of service, but these remedial agents are more applicable to forms of neuralgia to be spoken of by and by. Tic douloureux may occur in a patient who, from hereditary or other sources, is liable to gout or rheumatism,—and the one disease may alternate with the other. In these cases, the remedies applicable to the constitutional maladies should be fairly tried, either alone, or in combination with those previously mentioned. Indeed, the fact is, that as they both are generally accompanied or preceded by gastric derangement, there is little if any difference in the preliminary treatment required ; and in the further application of medicinal agents, the only distinction to be made, is not to debilitate too much. We lately saw a well-marked case of what appeared to be pure local neuralgia, affecting the inferior division of the facial nerve, cured by colchicum and iodide of potassium, after the digestive organs (which were shockingly out of order) were put to rights ; but in a very short time the patient had a severe and well-marked

attack of gout, and has since had a recurrence. On enquiry, we find the latter disease to be both a maternal and paternal legacy. It was the fashion some long years ago, to divide the nerve affected with tic douloureux; but the success of this operation was so equivocal, even in the few cases in which it appeared to succeed, that it has justly fallen into desuetude. The little we know of the laws of the nervous system, is sufficient to show the absurdity of such an operation, unless, as sometimes occurs in the nerves of the stumps of amputated limbs, or from local injury, where there is evident change of structure in the nerve itself; but to divide the branch of a nerve simply because there is pain in one of its extremities—the cause of which we do not know—is as reasonable “as to expect to cure gout by cutting the nerve which goes to the great toe.” The application of a piece of lint dipped in chloroform to the spot where the affected nerve emerges on the face, or along the course of its branches, will sometimes give temporary relief; but neither this nor veratria ought to be applied without the sanction or presence of the medical attendant. When a moment’s ease appears to be worth a diadem, chloroform is not a safe remedy in the hands of the distracted sufferer.

Thus, then, we have endeavoured to give an outline

of the treatment most likely to afford relief to those suffering from tic douloureux ; but as a general rule, we wish it to be borne in mind, that if the disease does not readily yield to purgatives, alkalies, regulated diet, and other means calculated to improve the organs of digestion and assimilation, it is better at once to seek professional aid, than to lose time in the exhibition of remedies which have no place in the "family medicine chest," the properties and uses of which are not understood by "the laity," and which involve a certain amount of responsibility during their administration.

CHAPTER XV.

SCIATICA.

HAVING said all that appertains to the nature and domestic treatment of "tic douloureux," we now come to the consideration of local neuralgia occurring in the hip, and constituting "*sciatica*."

This disordered state of the nerves of sensation is not always a pure local neuralgic affection. It has sometimes an inflammatory, sometimes a gouty or rheumatic origin, and may sometimes be clearly traced to a disordered state of the kidney, or other exciting cause within the abdomen. In *sciatica*, the pain commences in the hollow of the buttock, just below the head of the thigh-bone, and follows the course of the sciatic nerve, extending to the knee and adjacent parts; in fact, the pain in the knee is often as much a matter of complaint as the pain in the hip. Having said all that need be said concerning the nature and pre-disposing causes of local

neuralgia, when treating of tic douloureux in the preceding chapter, we may at once proceed to the treatment of the form of neuralgia now under consideration. Those of studious habits, enfeebled constitution, and disordered digestion, are peculiarly liable to this form of disordered sensation. Indeed, we never saw, heard, or read, of a case of sciatica, in which evident gastric derangement did not exist; hence, the first step in the treatment of this disease, is to correct all deviations from a healthy discharge of function in the digestive organs, and especially to correct any tendency to a superabundance of acid in the stomach. The old humoral pathologists used to speak of "*acrid humors*" as causing this, that, and the other disorder or disease,—and if we modernise their dialect, and substitute the expressions "free acid in the stomach," "acid circulating with the blood," and "acid in the secretions of the body," we shall find their ideas much more worthy of serious attention, and less deserving the sneers of the "young Æsculapian party," than has sometimes been supposed. In those in whom there is a predisposition to arthritic disorders, sciatica often alternates with gout, and therefore, in these cases, the proper mode of treatment is evident, but it is not one which we think fit to give to our readers; not that there is any mystery or "secret method of

cure" in the legitimate practice of medicine, but because we consider that colchicum, calomel, and opium, are not safe remedies in the hands of the uninitiated. After the bowels have been freely relieved, and any disorder existing in the digestive organs corrected, the painful parts may be fomented with a hot decoction of poppy heads, or a cataplasm of hops may be applied, or the hip-bath used; and if these means do not afford relief, a few leeches, or a series of sinapisms may be applied to the parts where the pain is most acute—but all remedies beyond these simple means do not belong to the practice of domestic medicine. Another and a most distressing form of local neuralgia, is one named hemicrania, or headache, confined to one side of the forehead and temples—known in the vernacular as the "megrin." In this disease there are generally evident indications of disordered stomach, as shown by sickness and vomiting, loss of appetite, pain in the stomach, unpleasant taste in the mouth, &c. It is likewise very regular in the recurrence of its paroxysms, which come on at a certain hour every day, and continue for a certain period. The exciting causes of this affection are all in their nature those which debilitate the system, especially those which diminish the quantity or vitiate the quality of the blood—such as hæmorrhage and discharges

of various kinds. The other sex are peculiarly liable to this form of neuralgia, and the reason of this peculiarity is to be found in the debility and nervous excitement attending pregnancy, suckling, and other functions peculiar to the sex. This form of neuralgia is generally very easy of cure. After attention to the considerations before insisted upon regarding the state of the stomach and bowels, it will usually yield to the administration of steel, the use of the shower-bath, and other remedies which give tone to the system. The triple salt of quinine and iron, prepared by Davenport, near Russell Square, is an excellent tonic medicine in these cases. We have given it in the following form with success :

Take of Citrate of Quinine and Iron .	1 scruple,
Infusion of Quassia . . .	6 ounces,
Tincture of Orange-peel . . .	2 drachms.

Mix. Take a sixth part twice or thrice a day.

This and other preparations of iron ought to be taken soon after a meal. Sometimes hemicrania may be clearly traced to the same causes which give rise to intermittent fevers. Under these circumstances it is called brow-ague, and yields to the remedies which are applicable to ague affecting the whole body. A favorite, and sometimes a very useful medicine in the cure of this and other

aguish affections, is "Fowler's drops," a preparation answering to the "*Liquor Potassæ Arsenitis*" of the London Pharmacopœia—but it should not be used unless under medical supervision. Arsenic in any form, or under any combination, is a very powerful medicine, either for good or evil—and one of the first qualifications to constitute any drug "a safe family medicine," is that, if it does no good, it shall do no harm. Whilst on this subject, we may mention a form of nervous headache, which, without being strictly periodic, is increased or brought on by the least excitement or the most trivial causes. It occurs in those of pale complexion, weak circulation, and enfeebled body, and is always attended with great excitability and irritability of temper. Although we most frequently find this form of headache in the other sex, still it is by no means an uncommon occurrence in men of excitable temperament and studious habit—especially when the subjects of study involve much anxiety—as for instance, where they are necessary to qualify for some strict examination or other trying ordeal. In these cases the pain is sometimes referred to the summit of the head, and described as a sensation of weight, attending with throbbing, in the temples and forehead; and then complained of as being accompanied with a feeling as if the head was bound

tightly with a cord. Of course, the first step in the treatment of this affection, is to remove the exciting cause, and to abstain from mental application for some days. We have heard the anxious student, when told that he must lay aside his books for a few days, exclaim, "I cannot—I cannot spare the time; I shall be disgraced!" But let us answer the student thus affected (and we speak feelingly), that to work under these circumstances is worse than wasting time. That which is done is not well done; the attention is distracted; the ideas endeavoured to be impressed are imperfectly and badly arranged; and in the event of an examination being close at hand, every hour's application after a certain time, diminishes the probabilities of success. The patient becomes nervous and morbidly timid, the result of physical weakness and a disordered state of the nervous system generally. Under these circumstances, time is gained and the chances of success much increased by abandoning all study, for at least forty-eight hours. The nervous system has then time to recover itself, remedies calculated to remove the pain have time to act, a few hours' good, sound healthy sleep are obtained, and the body and mind being thus recruited, the dread of failure and nervousness disappear; the studies are followed "con amore," and the time which has been spared

is regained in a manner alike more profitable and pleasurable. A gentle walk, a shower-bath, a good dinner of plain food with a glass of good wine in better company, and, of course, attention to the digestive functions, will generally cure this form of headache. A teaspoonful of sal volatile in camphor-water will often give relief, but the former plan is to be preferred.

Before leaving the consideration of diseases arising from increased sensation in the nerves of a part, we will say a few words about "face-ache," which although not strictly a pure neuralgic affection, still is a most severe and distressing malady, and one of which, perhaps, many of our readers have had painful experience. In this disease the pain is not so acute as in *tic douloureux*, nor is it of that burning, stabbing character; still it is "bad enough" to render the strongest among us alike unfit for business or pleasure. It varies in intensity from a constant gnawing, teasing pain, to a degree of severity barely tolerable. The patient can rarely point out any one spot in which the pain is most intense; but although shifting about from one part to another, or extending over a considerable surface, it generally occupies the jaw and lower portion of the face, and is sometimes most acute in the temple and in front of the ear. Sometimes it appears to originate from carious teeth,

and if there is tenderness and swelling in the vicinity of old decayed stumps, we may (when the more acute symptoms have subsided) extract them ; but we have seen one suspected tooth after another extracted without any apparent benefit. By some this disease is called a rheumatic affection, and as its commencement is frequently to be clearly traced to exposure to damp and cold, it may in some cases be a local rheumatic affection ; but we never saw much benefit accrue from the general treatment of rheumatism when applied to this disease. Whatever may be its origin, it is often a very distressing and intractable complaint. The first thing we do when consulted about a case of this kind, is carefully and minutely to examine the gums, and if we find tenderness or swelling in any particular part, especially if it corresponds with the spot to which acute pain is referred, to lance them freely, so as to obtain blood from the part, and we encourage the flow of blood by repeatedly washing the mouth with warm water. If, after the pain has for a time been diffused over the face, it becomes violent in one particular part, and is of a jumping, pulsating character, an abscess is very likely to form in the corresponding portion of the gum ; this should be freely opened as soon as the existence of matter is ascertained, and instant relief will generally be obtained. Some-

times these abscesses or gum-boils are of great size, especially when they form just under the cheek-bone ; and the external swelling or thickening of the parts will continue a long time after the abscess is discharged and relief obtained. That facial protuberance called the cheek-bone is hollow, and contains a cavity lined with a membrane, which, when but slightly inflamed, is acutely painful. Collections of matter sometimes form in this cavity and cause enlargement of the bone itself. When pain in the face has continued for some time, and is occasionally of a throbbing or shooting kind, and there is gradual enlargement of the face, surgical aid should be sought. It may be but the effect of cold, or decayed teeth, or inflammation of the membrane lining the sockets of the teeth, or it may be a pure neuralgic affection ; but it likewise may be organic disease of a serious character, and the sooner it is discovered the sooner can means be adopted for its permanent cure.

There are a great many and different popular and domestic remedies for the relief of face-ache. Every village gossip knows some infallible specific, and every family recipe-book contains some valuable prescription for the purpose ; from which facts we infer that the disease is a very common one, is no respecter of persons, and does not pay much respect

to any one plan of treatment in every case. In the general treatment of this painful disorder, we should imagine there are three considerations to be attended to: 1st, to remove the cause, if we can ascertain it; 2d, to ease the local irritation; 3d, to correct any deviation from a healthy state in the system generally.

In nine cases in ten, the origin of this disease is attributed to that truly English source of many maladies—exposure to cold or change of temperature—and frequently with truth; but it is likewise often connected with indigestion, or some intestinal irritation. Now, in either case, a gentle purge cannot do any harm, and therefore we should commence our treatment with a dose of rhubarb and magnesia, or the purgative the patient is in the habit of taking, and has found to agree with him. Pain may be alleviated in a variety of ways; the state of the affected parts having been first ascertained. If there is much swelling and inflammation, confined more particularly to a definite spot, we may apply a leech or two to the part thus affected, and we have seen marked relief from their application to the gums and inside of the lips. Where the swelling and pain is more diffused, warm applications of a sedative nature, such as decoction of poppy heads, or a poultice composed of hops, will be of service.

We must remember, that when inflammation is present in these cases, it is more painful than active—we mean, that the nerves are more in fault than the blood-vessels, and, therefore, even local depletion must not be carried too far. Loss of blood causes nervous irritability, and nervous irritability is a prominent feature in face-ache. A certain amount of fever, or rather a feverish state, generally accompanies an acute attack of face-ache, and is aggravated towards evening. To relieve this, we must endeavour to soothe the nervous system, and reduce the rapidity of the pulse, and this may be done by increasing the secretions of the body, especially that of the skin; salines and diaphoretics answer this purpose, and do not depress too much. We have given the following :

Take of Solution of Acetate of Ammonia	1½ ounce,
Wine of Ipecacuanha . . .	40 minims,
Tincture of Hyoscyamus . . .	2 drachms,
Spirit of Nitric Ether . . .	2 „
Camphor Mixture,	to 6 ounces.

Mix. Give a fourth part every four hours.

In milder cases, when the bowels have been freely opened, and the feverishness is evidently connected with catarrh, we have applied the poultice of hops, given the foregoing dose every six hours during the day, and administered the following pills at bedtime :

Take of Dover's Powder . . .	5 grains,
Powdered Camphor . . .	2 „
Extract of Henbane . . .	3 „

Mix, and make two pills, to be taken at bedtime.

The diet during this treatment should be mild and free from stimulants ; sago, light pudding, broth, &c., are proper. If there is headache, the Dover's powder is not admissible, and the henbane may be increased to four grains, omitting the powder.

Dr. Watson, when speaking of the treatment of face-ache, says, "Some years ago, I was instructed by an experienced old apothecary, that the face-ache might be almost always and speedily cured by the muriate of ammonia—a medicine that we seldom give internally here, although it is so much used in Germany ; and I have again and again availed myself of this hint, and been much thanked by my patients for the good I did them with this muriate of ammonia. It does not *always* succeed, but it *often* does."* We have tried this remedy in four cases, and in three of them with marked relief. It may be given in the following form :

Take of Infusion of Hop . . .	6 ounces,
Muriate of Ammonia . . .	2 drachms.

Mix. Take a fourth part three times a day.

* Watson, 'On the Principles and Practice of Physic,' vol. i, p. 117.

In cases where the pain becomes aggravated towards night, we have seen the following anodyne draught of great service given at bedtime, after the bowels have been relieved. As will be observed, it contains a preparation of opium, which, although one that has been devised to prevent the headache and other disagreeable effects following the use of this drug, still we do not advise its administration to those who have found opium to disagree with them, or where there is headache :

Take of Carbonate of Ammonia	.	10 grains,
Battley's Sedative Solution		
of Opium	.	15 drops,
Compound Spirit of Sulphuric		
Ether	.	$\frac{1}{2}$ drachm,
Camphor Mixture	.	10 drachms.

Mix, and make a draught, to be taken at bedtime.

When the pain has subsided, great attention should be paid to the general health, exposure to vicissitudes of temperature should be studiously avoided, and the least intimation of a return of the attack should be instantly noticed.

Thus, then, we have briefly noticed some of the disordered states of that function of brain known as sensation, as shown by pain or increased sensibility in a part. But if pain continues for some days, and does not yield to the remedies applied, then the personal attendance of a medical practitioner be-

comes necessary. Wandering or fixed pains in various parts of the body, and other evidences of disordered sensation, are frequently important symptoms of insidious disease in the brain itself, or of serious derangement in some of its functions. We have given this caution, because in these, as in all diseases treated of, it is our intention only to speak of them and the means likely to give relief, in their most simple forms, and in the absence of better and more personal professional advice. We do not profess to know a certain remedy for all, or even for half the ills that "flesh is heir to," and it would be a source of deep regret, if, by anything we write, we should lull any of our readers into a dangerous security on the one hand, or cause unnecessary and unfounded alarm on the other. There is a time and place for all things. Too much physic is bad—and too little is sometimes dangerous.

"Ibis tutissimus in medio."

CHAPTER XVI.

PERVERTED SENSATION.

WHEN describing some of the diseases resulting from increased sensibility of the nerves of a part—such as tic douloureux, sciatica, &c.—we mentioned those in which sensation is diminished or perverted, and others which are manifested by some disorder in the functions of thought and voluntary motion. Many of these affections are plainly connected with, or are the consequences of, inflammation or change of structure in the brain and spinal cord, or the membranes covering them. Consequently they are diseases of imminent and serious importance; and therefore it does not come within our province to say much about them or their treatment. These affections vary in kind from numbness in a part to total loss of sensation and power of voluntary motion in a considerable portion of the body, constituting other diseases, called hemiplegia, paraplegia, and local or general paralysis.

To enter into a description of these maladies, or to show what symptoms denote disease of the brain, or what indicate disease of the spinal marrow ; and then again whether these indications denote inflammation, or effusion, or change of structure, such as tumours, abscess, or softening in the brain and spinal marrow, would involve us in a labyrinth of theories and technicalities, would have no legitimate place in a popular book like the present, and would neither interest nor benefit our readers.

Loss of sensation and of voluntary motion is of more consequence as a symptom of disease than pain. The latter is frequently a local disease, dependent on a local and evident cause, but the former is rarely so, and often denotes disease at the origin of the nerves in which these symptoms are manifested ; and hence should at once be made known to the usual medical attendant. But, besides the nervous affections described in the foregoing part of this section, there is yet another to be noticed. It is one which cannot be described in terms intelligible to those who have never experienced it, and although often made the subject of unkind remarks, unpleasant sneers, and unfounded suspicions, is, in some cases, an affection as real and distressing as any that have hitherto been noticed,—we mean those sensations which are implied by the expres-

sion "How nervous I feel!" and which are only known in their real suffering to the debilitated, the anxious, and the studious. In this state of the nervous system, the most trivial circumstance will annoy; a thoughtless word said in the purest jest will cause mental pain; the most trifling opposition will appear an insurmountable obstacle,—with a will disposed to study and acquire information, the least mental application requires a forced exertion; the act of thinking is unbearable; the attempt not to think is a task; and the simple mental process required to hear a question and frame a reply, even if that reply be but a monosyllable, is irksome. Along with these sensations, without any prominent dyspeptic symptoms, there is loss of appetite, sleeplessness, and general physical debility. Frequently the best tempered man becomes irritable and captious; and his irritability is increased by the knowledge that he has nothing of which to complain, and because he does not command the sympathy of those about him. Should this mental state continue long, evidences of disordered stomach and bowels manifest themselves; the countenance becomes sallow; there is constipation, and a sensation of weight, or dull, aching pain on the right side; the tongue becomes furred; there is an unpleasant taste in the mouth; on awaking in the morning, a host of dyspeptic

symptoms appear, and instead of "nervousness," there are all the symptoms which have been described when speaking of hypochondriasis as a result of indigestion.

The treatment of this nervous state is difficult, and requires much tact and delicacy; and it is likewise one where judicious domestic treatment is more likely to be beneficial than regular professional attendance. A man thus afflicted does not like to describe, or rather he cannot describe his symptoms; he has also a great dread of ridicule, and is deeply annoyed if his medical attendant or any one else "pooh poohs" his complaints. It is likewise very difficult to persuade him to take medicine—he has no belief in its efficacy—for (to use an expression we have heard more than once in these cases) "I do not know what to complain of, and therefore no one can know what is the matter with me."

It is true that this kind of "nervousness" is sometimes but a manifestation of civilized affectation, a "very sham," by which a depraved mind endeavours to command constant attention and sympathy. This is a complaint often met with where the finished boarding-school "Miss" has, by a piece of good fortune—due to a pair of bright eyes, a diplomatic mamma, and an assumed "manner"—become a "honoured wife;" and where, knowing

how deficient she is in all those domestic accomplishments which make a home attractive, she tries to command the constant anxiety of her affectionate but infatuated husband, by being nervous, weak, and poorly, very poorly; or, in our own sex, where a "pet parson," or a would-be genius, endeavours to make us believe that his intellectual exertions have been really stupendous, and he is actually working himself to death, when in reality he is but dreaming, and has not acquired the foundation of all true and useful learning, namely, a knowledge of his own ignorance.

These cases deserve to be treated with the most unmitigated contempt,—although we are sorry to admit that there are those in our own profession who, for the sake of a few paltry fees, or an ephemeral popularity, will pander to these absurd and imaginary symptoms. If those who never feel content unless they can command an apparent commiseration, were made to feel that the inventing of a symptom or complaint is as much a breach of good manners and common honesty as a deliberate falsehood; and if those whose irksome duty it is to attend upon these imaginary sufferers, were to practise the *fortiter in re*, instead of the *suaviter in modo*, we should hear less of those extraordinary diseases which, for want of a better name, we must call

“fashionable nervousness.” But still there are cases where, from close application, anxiety, and confinement, and perhaps disappointment, and unmerited neglect, the over-taxed mental energies give way ; and, instead of vigour and animation, there is nervousness, debility, and all the symptoms previously described. It is to these cases we would direct our attention, for they are often of a more distressing nature than those in which bodily pain is the most urgent symptom.

And for these cases there is a cure ; for, we would hope, there is a healthy but depressed mind to be invigorated, and a good, but overburdened heart to be soothed and encouraged. The first step in this process is a total abandonment, *pro tempore*, of all intellectual pursuits, of all ambitious longings, and of everything which taxes the powers of thought and memory ; and the next is, sunshine. The broad, open, light of day, as reflected from the great book of nature, of which every field and coppice is a leaf, every tree and flower a letter, every seed bringing forth fruit after its kind, a line ; and then there is another and a brighter sunshine, the sunshine of the heart, the kind words, the gentle and considerate conduct, the unostentatious kindness which does much and says little. These cases are not benefited by being made to feel that they are objects of pity ;

or by being daily and hourly reminded of their pale looks and physical debility ; they do not like it, and it is not prudent to endeavour to direct their thoughts to themselves. Change of scene, cheerful company, social amusements, and a quiet domestic life, are all beneficial, as tending to occupy, without exerting, the mind. The intelligent of the other sex have often a pleasing aptitude in the management of these cases ; and happy is that man who, when suffering from mental weariness and shattered nerves, has a kind and cheerful sister, or a sensible and affectionate wife, to smooth the wrinkles on his brow, recall his anxious thoughts from their application, and make him feel for a time that, if there are things worth working for, there are likewise beings worth living for.

The loss of appetite, and other evidences of disordered function, may be met by vegetable tonics, mild aperients, and other remedies mentioned when treating of dyspepsia. The paleness and general debility is best remedied by the administration of some preparation of iron,—of which the Compound Mixture of Iron, the *Mist. Ferri Comp.* of the London Pharmacopœia, in doses of two or three table-spoonsful twice or thrice a day, is generally the most useful. These remarks comprise all we can say on the general treatment of that kind of unaffected

nervousness which arises from close mental application, anxiety, and want of fresh air and exercise; and we are content to give an outline of the treatment most likely to be beneficial in those cases, hoping that we may safely leave the filling up and practical minutiae to the discretion of the kind, the sensible, and the humane.

CHAPTER XVII.

THE EYE.

As yet we have treated only of diseases which owe their origin to the effects which confinement, close study, and anxiety, have upon the system generally, as exemplified by disorders of the digestive organs and of the nervous system. But if the general health suffers from the causes before detailed, so must any individual organ, exposed to the same influences, likewise suffer, and the eye, next to the brain, is the organ most constantly exercised in reading and writing. We, therefore, purpose to notice some of the diseases of the eye to which those of studious and sedentary habits are liable.

The only anatomical and physiological remarks necessary, before proceeding to our subject, are, that the eye has lids, and that the membrane covering both the eyelids and the eye itself (called the conjunctiva), has blood-vessels, nerves, and a lubricating secretion peculiar to itself. Now, the eyelids

are meant to protect the eyes, as during sleep, or as a defence from injury; and the lubricating fluid is secreted to prevent the occurrence of irritation or pain during the motion of the eyelids upon the sensitive membrane covering the eye. The eyelids are formed in part of a circular muscle (called a sphincter), which, when not under the control of the will, has a tendency to contract, thus diminishing the opening in its centre. The action of this muscle may be compared to that of an elastic India rubber ring, which contracts when any distending force previously applied is removed. Hence, "a drooping eyelid," a partially closed eye, and a quivering of the muscles surrounding the eye, are symptoms of a deficiency of nervous energy, and may result either from general debility, as after long-continued and depressing disease, or from pressure upon, and consequent obstruction of, the function of the brain itself, as instanced in the stolid, heavy countenance of the drunkard, and the half-opened eye of the man suffering from apoplexy. The reflections of external objects are received upon a nervous expansion at the posterior part of the eye, and the impressions thus made are conveyed to the brain, by means of a thick, short nerve, termed the optic nerve. The nervous expansion just mentioned is, in reality, a network of the minute terminal filaments

of the optic nerve itself, forming a delicate white membrane, called the "retina." The optic nerve has extensive roots in the substance of the brain, is in intimate relation with the origins of other nerves of special sense, and is accompanied by an artery for its own special use and nutriment. This artery is contained within the same nervous sheath as the optic nerve, being, as it were, bound up with it. From this anatomical arrangement it results, that any congestion or irregularity of circulation in the blood-vessel, at once exercises pressure, or in some manner affects the function of the nerve. Black specks floating before the eyes, indistinct or imperfect vision, a halo surrounding any object to which the eye is directed, and mistaken perceptions of colour, are, in many instances, referable to some irregularity in the flow of blood through this artery, acting upon the delicate nervous filaments with which it and its ramifications are in such close proximity.

A familiar instance of the effect of temporary cessation of circulation in this vessel, is furnished by the gradual failure of vision and peculiar swimming sensation immediately preceding fainting or syncope, and also by the appearance of mist or fog surrounding objects, which is a common occurrence after profuse hæmorrhage or debilitating disease. The eyeball, together with the muscles necessary

for its motion, and the nerves and blood-vessels necessary for its secretions, its preservation, and nutrition, are contained within a bony cavity, termed the orbit. At the posterior part of the orbit is a beautiful, soft, elastic cushion, admirably adapted to protect the delicate structures of the eye from the effects of heavy blows or external violence; were it not for this admirable provision the eye would be constantly exposed to serious and ruinous injury, by impinging on the hard, unyielding structures by which it is surrounded; and when we remember the tremendous blows to which the organ is exposed, in pugilists or from accident, we cannot but admire the simplicity and perfection of this provision. During long-continued and wasting illness, this "fatty" cushion, along with other parts of the body, is absorbed, and hence the sunken hollow eye of disease or deprivation.

It does not come within our province to treat of any of the more serious and important diseases of the eye, for they immediately command the attention of the sufferer, and are not often neglected, treated with palliatives, or made cases for the practice of domestic medicine, as diseases of the stomach and bowels frequently are. Having given a brief sketch of the anatomical constitution of this organ, we merely propose to notice some of the more

simple annoyances and unpleasant symptoms to which it is liable, as the result of long-continued exercise. These slight ailments should always be remedied as soon as possible, for many serious diseases have thus arisen in symptoms, which at the time are considered trivial and of little importance. It has been stated that the eyelids are furnished with a secretion intended to facilitate their movements. The supply of this fluid is dependent upon a proper supply of blood to the vessels from which it is poured out; and that its effects, when secreted, may be properly manifested, it is necessary that the sensation of the parts lubricated by it should be in a healthy state. If the vessels by which it is furnished contain too much blood, or become congested, the secretion is decreased; and the same result follows; if they contain too little. Again, if the secretion is perfectly normal, both in quantity and quality, but at the same time the sensibility of the membrane covering the eye is increased, there will be uneasiness and irritation. Now it has been shown, that when any part of the body is overtaxed, its nervous supply becomes exhausted. The small blood-vessels supplying the eyelids and ramifying upon its inner surface, are dependent upon a proper supply of nervous power to enable them to maintain their tonicity or contractile power, so as to prevent too

large a quantity of blood being propelled into them; therefore, it will be evident, that when their contractile power is exhausted by constant exercise, congestion must inevitably take place. Hence the unpleasant itching, dryness, and sensation as if some dust were in the eyes, following close reading, especially by artificial light. The itching and dryness is occasioned by want of secretion; the sensation of foreign bodies by the pressure of the enlarged vessels. The cause of these unpleasant symptoms being known, their prevention becomes easy, and those who have frequently suffered from this annoyance should take warning in time, and not persist in habits of long-continued or night-reading, until more serious affections are induced, and the eye itself is threatened with disease. The itching, &c., just referred to, may generally be relieved by bathing the eyes with cold water, or by the following lotion:—

Take of Sulphate of Zinc	.	.	.	1 scruple,
Rose Water	.	.	.	6 ounces.

Make a lotion, to be applied occasionally.

These symptoms, when neglected, easily become aggravated. The irritation and congestion pass into inflammation; the eye becomes “blood-shot,” there is short pricking pain in the eye, dull aching pain in the eyebrow, intolerance of light, and a

copious flow of secretion, depraved and acrimonious in character, as shown by its causing smarting and soreness of those parts with which it comes in contact. Even if these symptoms do not supervene, the eye is in a state ripe for disease, and is ready to become inflamed from the effects of slight atmospheric variations, and other causes, which would not have any effect upon the healthy organ. Should this inflammatory state be neglected or improperly treated, the discharge becomes purulent, and of a yellow colour, the intolerance of light increases, and sometimes small ulcers form on that portion of the eye in front of the pupil, obscuring vision, and when healed, leaving opaque spots, seriously obstructing the access of light. The pain in the eyebrow, spoken of above, sometimes becomes a distressing symptom, and extends to the temple on the affected side; should this be the case, two or three leeches may be applied, taking care that they are good and fresh. The patient must be kept in a darkened room, or, in milder cases, a shade may be worn over the eye. The diet should be spare and unstimulating, the erect position should be maintained, and the bowels freely opened. Feverish symptoms should be subdued by the administration of salines and diaphoretics, and the eye should be constantly kept wet with the following lotion:—

Take of Solution of Diacetate of Lead

(Goulard)	.	.	.	1 drachm,
Wine of Opium	.	.	.	1 „
Rose Water	.	.	.	8 ounces.

Make a collyrium.

The best method of applying this collyrium is to tie a piece of broad tape round the forehead, to which is stitched a few folds of lint, so arranged as to hang over the affected organ; the lint being saturated with the lotion will, when the patient inclines his head backwards, be in close contact with the affected part. To prevent the eyelids adhering during sleep, they may be touched with a little pure Lucca oil the last thing at night, and in the morning gently bathed with a little tepid water. After the pain and intolerance of light have subsided, and the discharge has become diminished, the small vessels of the conjunctiva will frequently remain enlarged, and of a dusky red colour. This appearance arises from loss of tone in the vessels themselves, the result of previous acute inflammatory action. To remedy this, local astringents and general tonics are required. The zinc lotion already mentioned will answer the first indication, and the exhibition of the citrate of quinine and iron will be found a very appropriate tonic. After perfect recovery from an attack of this kind, the

eye should be shaded for some days, and great care should be taken not to expose the organ to influences likely to cause a return of the disease.

The foregoing description of inflammation of the membrane covering the eye, and reflected upon the lids, has referred to the disease in a comparatively mild form, arising from neglect of premonitory symptoms, which, in a healthy man, would have caused little inconvenience, but which, in a constitution weakened and disordered by the effects of close confinement, late hours, and irregular habits, have become aggravated to a degree calling for immediate relief. But, independent of the predisposing causes already noticed, those of sedentary habits are liable to suffer from inflammation of the conjunctiva, from the same causes which give rise to the disease in those of sounder constitutions and more healthful habits. Exposure to a current of air, wet feet, atmospheric influences, exhibit their influence on all in some degree or other; but upon the sedentary these effects have two important peculiarities. The first is, that comparatively trivial causes give rise to serious diseases; and the second, that when disease is once established, its acute form is of short but painful duration, and its chronic stage long, tedious, and complicated. The nervous system is either in a state of excitement or else is

very excitable, and the vascular system is defective in power, the blood deficient in quantity and depraved in quality. These are important considerations in the treatment of disease. Several diseases of the eye yield rapidly to copious bloodletting, and the exhibition of medicines which depress the whole system (we mean when these diseases occur in the robust and healthy); but the adoption of these measures in those whose constitutions have suffered from the effects of sedentary habits, would be in the highest degree hurtful, and would lead to complications, or perhaps lay the foundation for diseases of more vital importance than the original ailment. In those of debilitated habit, any local inflammation rapidly causes general nervous excitement; they may bear pain with fortitude, but it is by a state of nervous tension, which leads to a most painful and distressing prostration; and if bloodletting and a lowering plan of treatment does not increase the nervous excitement (which it generally does), it at least leaves the reparative powers of the system, the "*vis medicatrix naturæ*," in a state the least favourable to repair the ravages of disease, or to resist the occurrence of complications.

The foregoing remarks apply to all local inflammations occurring in those of weak habit of body, and to none with more pertinence than to inflam-

mation of the membrane covering the eye, resulting from exposure to cold, &c. It fortunately happens that this disease exhibits an appearance which serves to show us how far domestic treatment may be carried with advantage, and when further aid should be sought. Under the membrane described as the conjunctiva, there is another tissue, called the sclerotic coat or membrane. In structure it is firm, dense, and, to a certain extent, unyielding; and hence, when inflamed, the pain is more acute, is of a lancinating or darting character, and is attended with more pain in the temple and eyebrow, and more disturbance and irritation of the system generally. In inflammation of the conjunctiva, the enlarged vessels, which give the blood-shot appearance, ramify in all directions in the membrane, and are of a dark red colour; but when the sclerotic is inflamed, the vessels are of a hue more approaching to pink, are small, and perfectly straight, and radiate from the centre to the circumference of the eyeball. In technical terms, the former appearance denotes the disease called "conjunctivitis;" the latter (the straight radiating vessels), a deeper-seated form of inflammation, called "scleritis." Perhaps it is rare to see a pure case of either form of disease, the membranes being in such close relation that when one is inflamed the

other suffers in some degree. Still, the description given will serve as a guide to the degree and importance of the disease existing, and will show whether the inflammatory symptoms yield to treatment or extend to deeper-seated tissues. In reference to the treatment of inflammation of the conjunctiva, resulting from external causes, little need be added to that already advised. Soothing applications, warm or cold, as seems most grateful to the patient, absence of light, perfect rest, moderate diet, and attention to all the secretions of the body, will be necessary. If general catarrhal symptoms are present along with the local inflammation, they must be met by saline diaphoretics and other appropriate treatment. In addition to a free use of the lead lotion, or, perhaps, two or three leeches, the following mixture will tend to soothe the system generally, allay feverishness and thirst, and cause gentle perspiration:—

Take of Bicarbonate of Potash	.	.	2½ drachms,
Tincture of Henbane	.	.	1½ drachm,
Spirit of Nitric Æther,			
Aromatic Spirit of Ammonia, of each		2	drachms,
Camphor Mixture, to		8	ounces.

Mix. Take a sixth part every four or six hours, in a state of effervescence, with *one* tablespoonful of lemon juice.

There is a very painful and annoying local inflammation of the eyelid, which, though common

to all, more frequently attacks the schoolboy and those of debilitated habits—we mean a small abscess, usually called “a stye.” Just behind the eye-lashes are a series of minute openings, communicating with the “lachrymal gland,” serving for the passage of tears, and copiously discharging fluid when the eye is irritated by the presence of any foreign body. Occasionally, from exposure to cold, or as a result of the inflammatory symptoms already mentioned, but most frequently as a concomitant of imperfect digestion, and consequent depraved secretion, one or more of these small ducts become clogged up and obstructed; irritation is caused by the presence of fluid which cannot escape, and which soon becomes vitiated and acrid; inflammation follows, matter is formed, and thus the disease is plainly manifested. These small abscesses are acutely painful, and in excitable subjects often give rise to a good deal of feverishness and excitement of the whole system. The local treatment of this complaint consists of warm soothing fomentations, light poultices applied between muslin, and, when matter is perfectly formed, squeezing the matter out by equable pressure between the backs (not the edges) of the thumb-nails, or by making a small puncture in the situation of the obstructed duct. But for permanent cure, and getting rid of the constitutional

symptoms which nearly always accompany this local disease, the functions of the stomach must be brought to a healthy state. The liver must also be acted upon ; and, in the adult, we do not know of a more speedy means of correcting the digestive functions under these circumstances than the popular "blue pill and black draught." The diet must be simple and abstemious, and if loss of appetite or acidity remains after the action of the pill and draught and relief of the symptoms, bitter vegetable infusions, with soda or potash, as prescribed when treating of dyspepsia, will be necessary. In boys, a few grains of grey powder and rhubarb, and a restriction in diet for a few days, will answer the same purpose. Boys, and likewise adults, of light complexion and scrofulous habit, are sometimes affected with chronic inflammation of the eyelids and disease of the small glands supplying the eyelashes. This complaint (vulgarly termed *blear eye*) is an unsightly and often a very troublesome and obstinate affection. A variety of plans have been suggested for the cure of this disease ; and when it has become so confirmed that local applications have ceased to have any effect, that plan has answered best, and been most successful, which has been founded upon a careful study of constitutional peculiarities, and directed so as to improve the general health. There is always debility, lax fibre, and some

imperfect performance of the functions of digestion and assimilation. It often appears to be hereditary, several children in the same family suffering at a certain age, and hence another reason for seeking its cause in some constitutional peculiarity. When this disease is neglected, the eyelashes frequently become inverted, causing irritation and inflammation of the membrane covering the eye, and from this cause, and the presence of an acrid secretion, which forms round the roots of the hairs, disease of a very troublesome character is originated. The domestic treatment of these cases consists in keeping the eyelids perfectly clean, and not allowing the secretion to dry upon them; in avoiding exposure to cold or strong light; and in the avoidance of all kinds of food which are not wholesome and easily digestible. A great many specifics have at one time or other been advertised for the cure of this unsightly complaint; but as it frequently has its origin in some constitutional defect, and as constitutions differ almost as much as faces, no good can be expected to result from the use of any local application until the health of the system generally is established. It is therefore better at once to seek proper advice, than to allow this chronic disease to become a permanent inconvenience and disfigurement.

The lids and other parts surrounding the eye being very freely supplied with small blood-vessels, they soon become discoloured from the application of external violence, constituting ecchymosed or black eye, an appearance which generally hints at violence or pugilism, is always unsightly, and very often, with propriety, considered disgraceful. This discoloration arises from rupture of some of the vessels, and consequent effusion of blood under the skin; and when the blow has been severe, or been received directly upon the eye, there is also effusion of blood from rupture of some of the vessels of the conjunctiva, giving this organ a blood-shot appearance. The application of cold is the usual treatment of this accident, and whether it be cold water, cold beef-steak, or (as suggested by Mr. Pickwick's travelling acquaintance) cold lamp-post, does not much matter, although, perhaps, the latter is too public and inconvenient to be often resorted to. Pugilists usually puncture the part with a lancet, and then suck the effused blood from the opening. In severe cases a few leeches may be applied, but the application of a cold lotion is generally sufficient. The following will answer the purpose:—

Take of Muriate of Ammonia,

Sulphate of Soda, of each . . . 2 drachms,

Spring Water 1 pint.

This lotion should be either made in small quantities, or used while the ingredients are being dissolved, as the intensity of the cold evolved during the solution soon disappears. If the swelling and discoloration continue to increase, we may infer that some larger vessel is ruptured, and medical aid should be sought, cold being constantly applied in the meantime.

Children of delicate habit, and likewise adults, whose health, from confinement and close study, has become deteriorated, sometimes suffer from pustules on the eye itself, constituting what is called "pustular ophthalmia;" when these pustules discharge their contents, they generally leave a troublesome ulcer, which, if opposite the pupil, may leave an opaque spot, and cause serious obstruction to vision. These ulcers may be plainly perceived by examining the eye by a side view. In these cases domestic treatment is not prudent, beyond the practice of cleanliness, and attention to diet, &c., as advised when speaking of chronic inflammation of the eyelids. This form of disease is generally accompanied by manifest evidences of disordered stomach and other deviations from health, and therefore should not be looked upon as a very simple disease.

But, besides the diseases already noticed, there

are others affecting the eye, and which threaten the total loss of sight. To the man fond of reading and study, and indeed to any one, this is a fearful calamity ; and although it does not come within our province to speak of the treatment of these formidable diseases, still it will not be out of place to notice a few of the causes from which they arise, so that our readers may avoid them. It has been before stated, that the eye is supplied with a nerve of special sense, called the optic nerve, the function of which is to convey the impressions made by external objects to the brain. This nerve enters the eyeball at its posterior part, at a point somewhat to the inner side of the axis of the sphere ; it then divides into an infinite number of filaments, which are spread out, forming a beautiful glistening membrane, called the retina ; and it is upon the retina that the images of all external objects are depicted, almost in the same manner as upon a mirror, and thus the sense of vision is completed. Now, delicate as these nervous filaments are, they are accompanied by blood-vessels equally minute, and are liable to congestion, increased action, and rupture, just the same as any other part of the vascular system. From continued use, or long exposure to excessive light, or from causes which debilitate the whole body, the power of the retina may be exhausted, and it may

become perfectly insensible, resulting in total blindness, and constituting a disease called *amaurosis*. Again, the circulation of blood in the small vessels, just described may be disordered—there may be congestion, and even inflammation, resulting from excessive use, determination of blood to the head, or general plethora, likewise causing total blindness, and constituting *amaurosis* of another kind. Those of studious and sedentary habits are most subject to the former type of disease. In this disease the most careful examination cannot detect the least trace of disease or alteration of structure in the eye itself. A very minute or a larger portion of the retina may likewise have its function temporarily destroyed. In the former case there is the sensation as if one or more black spots were floating before the eye, or obstructing the view of an object; in the latter but a portion of any object is perceived, or it appears distorted. Again, without total blindness, there may be cloudiness, and an indefinite perception of the distance or outline of any body, arising from partial insensibility of the retina. Fortunately, this disease is frequently curable when treated in its earliest stages, and the foregoing description has been given to enable those of sedentary habits to distinguish the slightest irregularities of function in this important organ, so that they may avoid the

causes which give rise to them. Cataract, short-sightedness, dropsy of the eye, &c., are not diseases to which those of sedentary habits are more liable than their fellow-men, and therefore no description of them is necessary in this place. When any of these do occur the best plan is at once to seek proper advice, with a full determination to act upon it, and to undergo any operation (and operations on the eye are not so painful as is generally supposed) which may tend to restore the function of so important an organ as the eye.

CHAPTER XVIII.

THE MAINTENANCE OF HEALTH.

IN treating of the diseases incidental to Sedentary Life, we have noticed those of the stomach and nervous system as examples of the effects of confinement and want of pure air on the general health ; and those of the eye as instances of the evils resulting from over exertion of one organ.

It would not come within our province, nor would it benefit our readers, were we to notice all the forms of ill health occurring as the result of sedentary habits ; for in addition to diseases which in their origin may be plainly traced to such habits, the sedentary are likewise liable to all the ailments—bodily and mental—incident to their fellow-men, such ailments presenting phases and peculiarities resulting from the effects of a sedentary life on the system generally.

It is now our intention to give a few hints for the preservation and restoration of the health of those

exposed to the influences mentioned above ; not to treat of diseases already existing, but to shew the means best calculated to prevent their occurrence, or to check them in their most simple and initiatory form. The maintenance of health is by no means so difficult, nor does it require so much skill as is sometimes imagined. Nature teaches and frequently forcibly inculcates the observance of those laws which she has laid down for the preservation of health, and she always warns before she permanently punishes any breach of those observances which are necessary for our well-being. Well would it be if her timely warnings were always noticed, and the suffering which must eventually be borne, thus averted. Instinct alone teaches the lower animals "what to eat, drink, and avoid," but man, the lord of the creation, the ruler of the beasts of the field, too often allows his desire for that which is pleasing to overcome his knowledge of that which is right. It has been observed of the drunkard, "that he allows an enemy to enter his mouth to steal away his brains;" and the meaning of this "old saw" may be extended to many "modern instances," where irregularities of diet, indigestible but palatable dishes, enticing condiments, and stimulating beverages, within the bounds of intoxication, but far beyond the limits of moderation, slowly but surely

undermine the health, cause diseases of important vital organs, and bring on a premature old age.

There are few, if any, articles of food (and the same observation may be applied to the fermented and unfermented beverages in common use), which are in their nature hurtful to all men, at all times, and under all circumstances. Difference of constitution, habit, climate, natural productions, and many other considerations, render it impossible to lay down anything more than general rules (and those too with a wide margin), as regards the kind and quality of diet most wholesome and nutritious; but, as regards quantity, and the diet best fitted for a man whose constitution and habits are ascertained, directions may be given with more precision. The beasts of the field and the fruits of the earth are given for the use of man; by the exercise of his reason, and the superiority of his nature, he adopts the former to minister to his comforts and necessities, and by the sweat of his brow he places the latter in a state most favourable to yield their harvest in perfection, and in their season. In the same manner the subtle processes which take place in the grand laboratory of nature, the combination of elements, and the elimination of new products, the processes of fermentation whether vinous, acetic, or putrefactive, all tend to useful purposes, supply something of use

in the animal economy, or answer some wise provision ; and those who would make the abuse of any one natural or artificial product, be it of the mill, the fermenting vat, or the distillery, an argument against its use, must either find fault with the perfection of all natural phenomena, or else degrade themselves below the level of the beasts that perish, and whose only guide is instinct, and the desire of self-preservation. We have been amused and diverted, but sometimes more annoyed than either, by the apparent sincerity and zealous warmth with which the advocates of "Total abstinence from all alcoholic liquors," have endeavoured to support their peculiar and narrow-minded tenets. According to their ideas, man is such a helpless being, so completely governed by his appetite, so totally devoid of all free agency, that he must either eschew the juice of the grape—the joyous beverage to procure which our Saviour wrought a miracle, that the youths and maidens assembled to take part in the festivities of the marriage of Canaan might not lack that which was wholesome and fitting the occasion—or else must become a consenting party to a custom which embitters and shortens his enjoyment of this world, and so far renders him callous to things of higher importance as to endanger his eternal salvation. Nay, we have heard a new reading of this and all

other passages of holy writ, in which wine is mentioned, namely, that the meaning of the word "wine," implies nothing more than the simple fresh expressed juice of the grape, answering in properties to a beverage something like the "syllabub" of a good old country housewife. We are not polemics, we abhor controversial divinity as much as we dislike a parliamentary debate, or a vestry squabble; but yet we beg to state it as our belief, that there is no difference in the beverage which is described as "making the heart glad," which is used to signify a state of mental and physical vigour, like unto that of a "giant refreshed with wine," which must be put into vessels or skin bottles adapted for fermentation, and which must have been used at a time when the fresh juice of the grape could not be procured. We state it as our belief, that the wine referred to in all these passages, and the wine so miraculously procured at the marriage of Canaan, refer to one and the same kind of liquor; and such being our belief, we cannot admit that wine in moderation is prejudicial to mankind, either as regards the health of their bodies, or the well-being of their souls. We would advise all those who endeavour to put a construction upon any portion of holy writ suiting their peculiar tenets, to read as disciples, not as teachers, and above all not to imagine themselves "wise above that which is

written.” But to resume. It has been shown in the preceding portion of this work that the desire for food is entirely dependent upon the state of the nerves supplying the stomach, and that the digestive and assimilative powers of the stomach and other organs engaged in the process of digestion are proportioned to the wants and necessities of the system; and it has also been shown that the necessities of the system are governed by the habits of life, climate, locality, and other peculiarities of the individual. And hence it will be evident (as before stated,) that no positive rules in reference to diet can be framed. Still it will not be difficult to offer a few suggestions for the guidance of those whose habits are sedentary, and which, by a little modification, may be made available for individual cases—such suggestions being founded upon the principles already detailed, and governed by the peculiarities of habit which are supposed to exist.

CHAPTER XIX.

PRECAUTIONS TO BE OBSERVED TO INSURE THE DIGESTION OF
FOOD.

It has been stated that the nervous system cannot at the same time supply the brain with the energy necessary for long-continued study and application, and, at the same time, afford a sufficient supply to enable the stomach to act with power and intensity; hence the food taken by the man of sedentary habits, should be of a nature easily digested, and further, the stomach should be allowed time to concentrate a certain amount of power upon itself before being called upon to exercise its function. In other words, a period of mental relaxation should be allowed to intervene between the cessation from business and the taking of food. Following out the same principle, it will be evident that the stomach should be allowed to enjoy a free supply of nervous energy, undisturbed and unobstructed by the exercise of any other important organ, for a

certain period after a quantity of food has been taken. In other words, a period of perfect rest and quietude should be allowed before resuming the occupations of the day, or occupying the mind with anything requiring the exercise of thought, memory, or judgment; and, provided any meal has not been eaten to satiety, a few minutes sleep will always be of use to the man whose employment is one which taxes the thinking powers.

On first awaking in the morning it is but rarely that the man of sedentary habits feels much, or a pressing inclination to partake of food, and thus, so far as the stomach is concerned, he often begins the day "at the wrong end." It will frequently be found that when the toils of the day are over, and an hour of domestic comfort and cheerful conversation has called the mind away from its previous occupation, that a supper can be eaten with enjoyment, perhaps increased by some one of those little dainties which the good wife, or the kind sister, so quietly sets upon the table. But the period of rest is at hand—when the brain and stomach alike need repose—the result is, that sleep is disturbed and uneasy, arising from a sympathetic action between the brain and the stomach, and in the morning the digestive organs are so tired, and their nervous power so deficient, that the first meal of the

day—the one occurring after the longest period of fasting—is the one least regarded. This is what we mean by beginning the day at the wrong end—breakfast should be a more substantial meal than supper. It frequently occurs that a man whose mind has been actively employed during the day cannot sleep for some time after he has retired to bed, he thinks of commissions and omissions—of things which might have been done better, and others which had been better undone, and by the time that exhausted nature has exerted her prerogative, and rendered him oblivious of all things—hours which ought to have been devoted to the renovation of all his energies, mental and physical, have elapsed, and he receives his call to rise in the morning, and again resume his labours for the day, with little inclination to obey, and a strong temptation to defer it until the latest moment. He rises with an unpleasant taste in his mouth, a disinclination to take food, and it is not until he has made a vigorous mental effort that he is himself again. Had he taken a supper requiring little exertion from the stomach, and had he by some means succeeded in diverting his thoughts from the occupation of the preceding day, he would have awoke with his whole system refreshed and renovated, and been able to partake of a breakfast proportioned to his

powers of digestion, and sufficient for the wants of his body.

To the vigorous and healthy, breakfast, the first meal of the day, is generally a welcome repast, and is partaken of with pleasure and enjoyment, and, moreover, "good digestion waits on appetite." The agricultural labourer or the brawny excavator, would imagine himself sadly out of sorts if he were to find himself without the inclination to drink a pint or two of coffee, and consume half a dozen eggs, with a few slices of bacon, before commencing his daily toils. In men of the habits just referred to, the enjoyment of a good breakfast is a sign of health, and the knowledge of this fact has often given rise to erroneous and hurtful ideas in reference to the weak and debilitated. We may always be assured that when there is no desire to take food there certainly is no power to digest it, or that its digestion will be more hurtful than beneficial. In those of sedentary habits the period which elapses between rising and sitting down to breakfast is one of languor and debility; the body and mind may be to a certain extent refreshed by the preceding hours of repose, but the nervous system has not resumed its perfect activity, and, consequently, cannot supply the stomach or any other organ with energy sufficient for any active effort. Many entertain the

mistaken notion that this inactivity may be shaken off and the stomach stimulated to originate the sensation of hunger by occupying the period between rising and breakfast in taking exercise; but instead of rousing the nervous system, this practice only tends to exhaust the little that is in operation, and unfits the stomach still more for the proper discharge of its functions. Here is another instance of the folly of supposing that habits which conduce to the health of one individual must necessarily be beneficial to another. We have known instances where a student has gone home after a hard working session, and his well-meaning friends have insisted on his "going round the fields" to ensure an appetite for breakfast, but have brought him home tired, depressed, and without energy, for the remainder of the day. It is possible that the man of sedentary habits may experience a slight increase of appetite from his early morning's walk, but he will find that having exhausted a certain amount of nervous energy during his walk he will have little left to assist the stomach to perform the act of digestion, and symptoms of indigestion will manifest themselves soon after he has taken his breakfast. Too long a period ought not to elapse between rising and taking food of some kind, even when no kind of exercise is taken, and in those whose

avocations keep them employed until a late hour, and who generally find their mornings meal to disagree with them, the indulgence of a small cup of coffee or cocoa, with a mouthful of dry toast, as soon as they awake, or about a quarter of an hour before they rise, will be beneficial. By this simple means the nervous system is more easily aroused, and the stomach acquires a certain amount of power. In reference to the articles of food most proper to furnish a wholesome breakfast for the sedentary man, nothing can be suggested better than the usual beverages—tea, coffee, and cocoa (each individual appropriating the one which he has found most beneficial); these, with dry toast, stale bread, and fresh butter, lightly boiled eggs, or fresh fish, will afford all that is required to recruit the system, and are none of them difficult of digestion. But of whatever kinds of food breakfast is composed the meal should be eaten slowly and deliberately, and the cares and anxieties of the day should not be allowed to occupy the attention. It has been stated that the periods allowed to elapse between meal times should be so regulated as to allow time for the perfect digestion of the food taken, and also a further space of time for the stomach to repose before being again called upon to act. To the healthy man luncheon is an unnecessary meal, but

for the man of sedentary habits and weak stomach, it is frequently necessary and useful. He rarely feels much inclination for breakfast, and if he is obliged to defer his dinner hour beyond the time before specified, it is proper that some light sustenance should be taken to prevent nervous exhaustion and depression. But his luncheon must be a sparing one, and considered rather as a necessary evil than as a means of administering to the gratification of his appetite. No animal food should be taken, or if it is, then it may be taken in moderation and made to supply the place of dinner. The sedentary man does not require, and cannot readily digest, animal food more than once a day.

Dinner is generally looked upon as the meal of the day—as the principal occasion on which to eat and drink the various articles of diet necessary for the support of the body. It is supposed by many, that because the healthiest and most robust classes of society habituate themselves to an early dinner, that such a custom must necessarily be conducive to health. This is another mistake, arising from taking a fact, without noticing its attendant circumstances. It must be remembered that agricultural labourers and others whose occupation is out of doors, rise early, after a sound and undisturbed night's rest, breakfast early, and then engage in

active and laborious exertion, during which their breathing is accelerated, their hearts called upon for a free supply of blood, their muscles in full play, and their skins freely perspiring. Under these circumstances, something is soon required to support the wear and tear of their physical energies, as well as to support the processes of growth and nutrition ; and thus, by the time of noon, a hearty meal is eaten with enjoyment, and digested with ease and rapidity, even though little rest is allowed after the food is taken. In them no concentration of nervous energy is required to assist the brain to perform the faculties of memory or judgment, and hence the stomach shares its nervous energy along with the muscles of the body, and does not suffer from the distribution. No rule beyond the one already noticed, which allows a period for digestion and a period for rest, can be laid down in reference to the time of day when the chief meal of the twenty-four hours should be taken. In all cases it must be governed by circumstances ; not so much those relating to the habits and pursuits of the individual, as to constitutional peculiarities, and the powers and integrity of the stomach itself. The less physical exertion made, and the more active the employment of the brain, the longer will be the period before the sensation of hunger is experienced,

and the stomach in a state fit for the reception of food requiring an effort to effect its digestion. It therefore appears more conducive to the health of those whose employments are of an anxious and thought-engrossing nature, that the chief meal of the day should be deferred until the mind can be set at liberty, so that the stomach may be allowed a period to recover itself before a quantity of food is taken, and likewise another period of undisturbed enjoyment of nervous energy, to enable it to perform the function of digestion perfectly and with comparative ease. It is not advisable to make the dinner hour so late as to be preceded by a long period of fasting, or to interfere with the hour of retiring to rest ; but it is better to fix the dinner hour about five or six o'clock, than to take a hearty meal amid the cares and anxieties of the day, and when all the nervous energy is concentrated upon the brain. Those whose constitutional powers will not allow them to support so long a period of fasting as is required in the observance of the plan just mentioned, may take a light luncheon, without any animal food, in the mean time. And here again it may be remarked, that to no man is the perfect mastication of food of more importance than to the sedentary. Mastication is the first process of digestion ; and, unless the food is well masticated,

the stomach is called upon to perform a duty which does not belong to it. The food does not become mixed with saliva, and reduced to that pulpy mass favorable for the action of the gastric fluids. It is not so readily assimilated, and tough masses of food remain in the stomach—giving rise to acidity, heartburn, or spasm—or else pass in an unchanged state downwards into the intestines, causing irritation along their track. A man who eats a hurried meal, or allows his mind to be employed while doing so, will generally bolt a portion of his food, and hence a reason for deferring dinner until the labours of the day are concluded, and there is no necessity for hurry or mental occupation. Of course it is not intended that a late dinner is proper for all. The invalid, or the man of infirm health, cannot support a long period of fasting, and ought not to take much food at one time, but in these cases all business should be abandoned, and all the circumstances of life should be made to yield to one end—the means most conducive to the restoration of health.

CHAPTER XX.

TEA.

AT a variable period after the chief meal of the day it is customary to take some light refreshment, and, from the name of the fragrant herb which furnishes the beverage consumed on this occasion, the period is commonly called "tea-time." It would not come within our province to notice all that has been said and written for and against the use of tea. It will be evident that as opinions are so different, every one is entitled to his own, and our's is that this luxury answers the purpose of an useful diluent, or a mild stimulant, or a gentle restorative, according to the circumstances under which it is taken, and with regard to the constitutional peculiarities of the individual. To some men, under certain peculiar circumstances, it may be hurtful, but the same may be said of every article of diet in common use; and there are other instances where excess in its use has given rise to disease, when a moderate consumption

would have been beneficial. It unfortunately happens that "tea," the only luxury in which the lower classes can indulge, and which with many is next in importance to the bread they eat, is easily and successfully adulterated, and that too frequently with substances highly prejudicial. In the report of the "Lancet sanitary commissioner," it is stated "that, out of twenty-four samples of *black* tea purchased in London, twenty were genuine and four adulterated." In reference to *green* tea (against the use of which we have so repeatedly warned our readers), the gentleman above mentioned, after careful and repeated examination of numerous samples, comes to the conclusion, "that in this country there is really no such thing as a green tea, that is, one which possesses the natural green hue considered to characterise that kind of tea;" a startling assertion, but one worthy the most implicit belief. The adulteration, or rather substitution, takes place before the leaves reach this country, for it has been ascertained "that all the green teas that are imported into this country are faced or superficially covered with a powder, consisting either of Prussian blue or sulphate of lime," both substances of a poisonous nature. Let those who value their health, and wish to avoid a train of evils dependant upon disturbance of the nervous system, avoid the

use of green tea. Coffee is frequently used instead of tea, and in moderation is a wholesome, though somewhat stimulating, beverage. Dr. Paris states that coffee "if taken after a meal is not found to cause that disturbance of digestion which has been noticed as the occasional consequence of tea; and that, on the contrary, it accelerates the operations of the stomach;" and for this reason coffee is more suited to answer the purposes of the animal economy than tea, especially for breakfast or the first meal of the day. When taken too strong it causes feverishness, headache, and nervousness, and is not proper for those of plethoric habit, or with a tendency to fulness of the vessels of the head; but this is no argument against its use in moderation, and with regard to constitutional peculiarities. Both tea and coffee are, when good and pure, useful articles of diet for the sedentary; they assist the conversion and assimilation of food, act as gentle stimulants and restoratives, tend to soothe the nervous system, and contain peculiar principles of use in eliminating the secretions of the body, and supplying others which, from the effects of confined habits, are frequently deficient.

Although much has been said about the unwholesomeness of eating supper, and although there is a general prejudice against the meal, still there is

something to be said on both sides of the question, and certain instances in which some kind of food is absolutely necessary before resting for the night. It is quite sufficient for the man of sedentary habits to take a moderate quantity of animal food once a day, and if he is obliged to defer his dinner until a late hour, and takes a cup of tea with bread and butter a few hours afterwards, supper will be to him unnecessary and unwholesome. But under different circumstances it is not prudent for the man of weak digestion to go to bed with an empty stomach, and uneasy gnawing sensations in that organ; if he do so, he will awake in the morning with debility and a feeling of exhaustion, and the stomach will be so enfeebled as to furnish little appetite for breakfast. Under these circumstances it is advisable to take a light supper of those articles of diet which have been found to agree best, and sit with greatest ease on the stomach. Dyspeptics frequently inflict unnecessary suffering upon themselves by adopting the idea that all suppers are unwholesome, simply because they are not recommended for the strong and plethoric. In the former case they are often necessary, but in the latter they are improper because they are superfluous.

Having offered a few suggestions which may serve for general rules for the periods when food

ought to be taken, so that health and digestion may be promoted, it may possibly be expected that something should be said about the articles of food and drink best suited for the sedentary. It is not a difficult matter to draw up "a table of diet" best suited for an individual whose constitutional peculiarities are known, or who requires the strict observance of certain dietetic rules as the best means of assisting a plan of treatment adopted for the restoration of his health, when suffering from any of the diseases incidental to sedentary life. But to particularise a list of those things which are best suited for all would be a fruitless endeavour, and would be calculated to do more harm than good—inasmuch as it would place unnecessary restrictions upon those who from experience know what is most easily digested, and best agrees with them, and would also cause the dyspeptic to think too much about his health and ailments. The food taken by man should contain, either in a free state or else in a form easily eliminated by the chemical and vital processes, which take place during the process of digestion, those elements and principles which will support the growth and nutrition of the body, and likewise supply carbon and hydrogen to take the place of the oxygen derived from the inhalation of air and other sources; for it is upon this chemical interchange of

elements during the act of breathing, that the heat of the body is originated and maintained. It would not come within our province to detail the physiology of "animal heat;" but to the man of enquiring mind, and who wishes to study an instance of the perfection and beauty of an important chemico-vital process, we do not know an enquiry more interesting and satisfactory than that of "animal heat."

For the support and growth of the body it is necessary that albumen and certain saline substances should be furnished;—these are supplied by the proper digestion of animal food,—such as the muscles of the ox or the sheep, eggs, or the curd of milk; and, in the choice of food of this kind, it will be evident that, for the sedentary man, whose stomach never has too much tone or vigour, those articles of diet are best from which the albuminous principles are most easily eliminated, or which contain them in their most simple forms. For the support of the "chemico-vital" process mentioned above, by which the heat of the body is maintained, and the purification of the blood completed, it is necessary that carbon, hydrogen, and other elementary substances should be taken into the system. These elements are formed by the oleaginous and saccharine matters furnished by the fat of animals, and by properly cooked and well selected vegetables. It is worthy

of remark that milk, the first food of man, and all animals of the large class mammalia, is the only article of diet which contains within itself (and that too in a state most easily eliminated and assimilated) all the various principles which are necessary for all the purposes of life. In this "primary food" we find water and salts, albumen or curd, sugar, and the fatty and oleaginous components of cream; and in these substances are contained all the elements, solid and gaseous, necessary for the growth, nutrition, repair, and purification of the whole system, at a time when the wants of the body are many, but its powers feeble and imperfectly developed. Man can exist upon a diet exclusively vegetable or entirely animal; but to do so and maintain his health there are many attendant peculiarities and circumstances to be considered. The habits and customs of civilised, and still more of sedentary, life render it impossible to command the attendant circumstances which must exist to render the exclusive use of either kind of diet safe or wholesome; and, therefore, he best consults his health and comfort who derives his support from the mixed diet which the Almighty has given him, and which his own experience and the customs of his fellow men have proved to be the most beneficial, and the best fitted for the state of life in which he is placed. An

author who has deeply investigated the subject, and examined the various kinds of food consumed both by man and the lower animals, thus concludes his researches :—"To apply these principles to man, we find him so constituted as to be able to maintain health and life on animal food alone, but we also find him fitted by organization to subsist on a mixed diet, such as is most in accordance with the habits and usages of civilized communities like Britain."*

It will be evident, from the statements and explanations given in the preceding chapters, that the following general rules in reference to diet may be adopted by the sedentary, and will be conducive to health :—

That the diet must be of a mixed kind, vegetable and animal.

That the preference must be given to those articles which the experience of the individual has proved to be most suitable.

That food must never be taken to repletion, on the one hand ; or the stomach allowed to manifest the sensation of gnawing and exhaustion, on the other.

That meal-times must be so arranged that the stomach may have a free supply of nervous energy

* Dr. Spencer, 'Dictionary of Domestic Medicine,' p. 248. (Groombridge and Sons, 1854.)

to assist in the process of digestion, undisturbed by the occupation and anxieties of the day; and that dinner should not be taken until the mind is perfectly unemployed, and the individual can remain quiet for a short time after the meal is concluded.

That a meal composed chiefly of animal food should be taken but once a day, and that the occasion should be dinner-time.

That after a noon or early dinner a light supper is conducive to sound and refreshing sleep, and to the enjoyment of breakfast; but that after a late dinner supper is generally hurtful, and always superfluous.

That perfect mastication of food, and absence of hurry when taking a meal, are necessary to prepare the food to be acted upon by the fluids of the stomach.

That tea and coffee (excepting green tea on all occasions and under all circumstances) in moderation and as usually prepared, are wholesome beverages, inasmuch as they assist digestion and answer other purposes already noticed.

And, lastly, that it is impossible to state any one article of diet to be wholesome or unwholesome without knowing the constitution and habits of life of the individual for whom it is intended.

CHAPTER XXI.

WATER.

NEXT in importance to a judicious choice and enjoyment of the bounties of Nature in the form of solid food, is the consideration of the various fluids which necessity and custom have brought into common use. And first in importance is water, without which no form of organic life can be maintained, and which to man is of vital importance, second only to the air he breathes. A landscape may present all the features calculated to make it a delightful study for the painter, and all the natural beauties which the most enthusiastic poet could desire; but, unless the rippling rill and bubbling fountain is not only present, but likewise pure, or at least free from noxious impregnations, it is not fitted for the residence of a man who wishes to maintain the health of both body and mind in their integrity. The stream may sparkle in its course, and the smooth pebbles on its bed may be seen clearly and

distinctly, but yet various mineral impurities may exist in quantities sufficient to render it an unwholesome beverage. The meandering rivulets of some parts of Piedmont are clear and pellucid, but the unsightly *goitre*—that enemy to the graceful outline of a woman's throat—are too sure proofs of the subtle poison with which their waters are impregnated. Or, as in some of the most romantic parts of Derbyshire and Warwickshire, where the same kind of water and similar deformities are so common—in the former county so characteristic as to originate the term “Derbyshire neck,” which is only a local synonym to the word *goitre*. The noxious impurities with which river or spring water are usually impregnated, may be briefly stated to be of two kinds—vegetable and mineral. To the effects of the former may be attributed dysentery, diseases of the mucous membrane of the bowels, fever, and cholera; to the latter *bronchocele*, otherwise *goitre*, or “Derbyshire-neck,” stone, and other diseases of the urinary organs. The omens drawn from the appearances presented by the bowels of oxen slaughtered by the Roman seers, were not without their important application. It would not be prudent to encamp an army, or found a colony in, on a locality where the mucous membrane of animals fed on the spot showed evidence of diseases caused

by the consumption of water charged with vegetable impurities. It need not be stated that rain water, being the product of a natural distillation, is, when in its pure state, free from all admixture, either mineral or vegetable; but it is not always that it can be procured in its original state. The showers which descend upon a large town are impregnated, not only with smoke, soot, and dust, but also (from the ease with which gases are absorbed by water) with various gases and vapours floating in the atmosphere. And even in the open country, where there are no factory chimneys and steam-boat funnels to pour forth their choking smoke, or a million pair of lungs to abstract the oxygen from the atmosphere, there are impurities in the tanks and reservoirs into which the rain water is received, and in which it is often allowed to remain for a long time. Science and private enterprise have done much—public opinion has done more—but still there is much to be done before an Englishman in a large town can drink a glass of pure wholesome water. The higher and middle classes can afford to qualify, or in some degree neutralize, the noxious properties of the water they consume, by the addition of wine or spirits; and thus an excuse for the use of ardent spirits is afforded to all classes of society, and habits of drinking are formed. But the poor

working man, who toils in the close factory or the confined warehouse, and earns barely sufficient to find bread and a roof for his little ones, suffers and perpetuates disease, because he cannot obtain a sufficient quantity of pure water to supply the loss of fluid which exudes from him—as the sweat of his brow. Many men whose avocations are sedentary—some from choice, others from the necessities of their health—are water drinkers, that is, as a beverage they take water in preference to malt or vinous liquors; and as their digestive organs are generally weak, and they are also prone to all diseases arising from mal-assimilation or impurities of the blood, the wholesomeness and purity of the water they drink is to them a question of vital importance. Of the two kinds of impurities usually found in river or spring water, those of a vegetable nature are the most fertile in giving rise to disease; but, fortunately, from their being generally mixed or diffused—not dissolved in the fluid—they may be removed by a properly constructed filter. A small amount of mineral impregnation does not necessarily render water unwholesome; and there are waters which contain saline ingredients of use in the treatment of some diseases; but any considerable amount of mineral impregnation is sure, sooner or later, to give rise to disorders of the digestive and urinary

organs of those who constantly consume them. If no other water than such as is thus impregnated can be procured, a considerable portion of its mineral impurities may be got rid of by boiling. By this simple means, all those earthy and metallic salts which are retained in solution by the carbonic gas contained in the water, are precipitated; and although the fluid, carefully poured off when cool, so as to leave all insoluble matters behind, is less pleasant to the taste, it is a great deal more safe and wholesome. We strongly advise all those of sedentary habits, and especially those who readily suffer from irritation of the bowels, or have had symptoms of gravel, or other disorders of the urinary organs, never to use any kind of water as a beverage, unless it has been previously boiled, and allowed to remain at rest until all insoluble matters have subsided; and further, on no account to take any quantity of water which, either by colour, taste, or smell, gives reason to suspect vegetable or animal impregnation, even though the water has been previously filtered. But still, to those in the enjoyment of a tolerable health, and who can procure water sufficiently pure, there is no beverage more beneficial, or which will better supply the fluids of the body. It is a custom with many to take a draught of cold water the first thing in the morning,

and for those whose stomachs will bear it without inconvenience, this is a good and commendable practice. It has been found to give tone, to increase appetite, and it nearly always acts as a gentle and salutary laxative.

CHAPTER XXII.

MALT LIQUORS—ALE.

THE beverages next to be noticed are those derived from the fermentation of a decoction of malt and hops—ale, beer, and porter; and perhaps in all classes of society they are in more common use as an article of diet than water. Good ale, when properly brewed, free from adulteration, and not containing too much alcohol, is a beverage well adapted for the generality of men, and is by no means hurtful to the sedentary, when in their ordinary state of health. The bitter contained in “honestly brewed” ale assists to maintain the tone of the stomach, and thus tends to counteract the debilitating effects of anxiety and a sedentary life upon that organ; and the slightly stimulating properties which it possesses do not, when taken in moderation, tend to produce subsequent languor and depression. From the combination of these properties, ale has been found a very useful and agree-

able restorative during the progress of recovery from long continued and debilitating disease, especially when the digestive organs have been implicated, and are just beginning to resume their healthy functions. There are constitutions to which all fermented liquors, and especially those obtained from malt, are pernicious : those suffering from plethora, fullness about the head, chronic cough, and asthma, will find stimulants to aggravate their disorders; and to those liable to gout, renal affections, or flatulency, the sugar and free vegetable found in malt liquors are hurtful. All malt liquors that have begun to turn sour, showing the commencement of acetous fermentation, are bad, and the practice of adding a little carbonate of soda to neutralise the acid only makes the matter worse. Carbonate of soda, and indeed all alkalies, when frequently taken, debilitate the stomach and impoverish the blood ; and this should be a warning to those who, when suffering from slight acidity or heartburn, immediately fly to some alkaline preparation for temporary relief. We know confirmed dyspeptics who owe their maladies entirely to this practice.

Porter does not much differ in properties from ale, but being an article of such general consumption may perhaps require a little further notice. The dark colour of genuine porter is derived from the

malt used in its preparation being highly dried, and partly carbonised ; but this colour, as well as its stimulating properties, are (or we would rather say, have been), in many instances, owing to various adulterations—some of them of a most scandalous and dangerous character. The substitution of quassia, gentian, or wormwood, for hops, although a fraud, and punishable under the excise laws, is a comparatively trifling offence compared with the introduction of nux vomica and strichine, on account of the intense bitter which they furnish. The vegetable kingdom does not furnish poisons more intense and deadly than the two just mentioned. Tobacco, cocculus indicus, poppies, and henbane, have been used to render the liquor intoxicating, and so furnish the besotted with evidence of its strength ; oil of vitriol, alum, green vitriol, and salt, to give an appearance of age ; the refuse of sugar casks, pearl-ash, and Scotch soda, to make it froth, and give it “ a head ;” and lastly, treacle, burnt sugar, and coriander seeds, as a substitute for malt, are adulterations which have been *proved* and *admitted* to form part of “ the art and mystery ” of a retail beer-seller’s business. But still, so long as honest tradesmen exist, (and, if England could not count them by thousands, she would long ere this have ceased to be the first commercial country in the world,) good and whole-

some porter can be procured by those who are willing to pay a fair and remunerating price. When porter can be procured good it is to be preferred to any other kind of malt liquor, and is allowable in many instances where ale would be injurious; it is not so liable to irritate the kidneys, and in some forms of renal disease has been found a valuable tonic; and not being so prone to acetous fermentation as ale, will often be grateful to the stomach, when other kinds of malt liquor give rise to acidity and heart-burn. For these reasons, porter is an admirable beverage for those among the sedentary who are not water drinkers, and may be taken at any meal of which malt liquors usually form a part. There are brewers who will furnish good porter in small barrels suited for the consumption of a small family, and where the price of bottled porter is a domestic consideration; it is better to have it direct from the brewers in this way, unless a beer-seller is at hand who will furnish a wholesome beverage.

In concluding our remarks concerning malt liquors, we would not have it understood that we advise the use of ale and porter for all; those who have not yet accustomed themselves to drink them, must not imagine that it will be more conducive to health to do so. Let them be content with the moderate degree of health which their occupations and habits

allow them to enjoy, but let them also allow those who differ from them and take their occasional glass of ale or draught of porter, to do so, without questioning their prudence or finding fault with their custom. And on the other hand, let the man who derives benefit from the exciseable articles he patronises, use them in moderation—never endeavour to press them upon others, and not accuse his brother of niggardliness and bad fellowship because he chooses to abstain from them.

If much anxiety is manifested by those suffering from or liable to dyspepsia, in reference to what they may eat, there is always as much, and frequently more concern shown in reference to what they may drink; and, therefore, it may not be unacceptable if we notice the uses and abuses of wine and spirituous liquors. It is well known that all wines owe their stimulating and inebriating properties to the presence of alcohol, and that the various flavours, appearances, and effects of different kinds of wine are due to essential oils, natural or adventitious colouring matters, vegetable extractive, the various combinations of alcohol, and also to the secondary changes resulting from age, climate, and temperature. To say that wines are never adulterated would be a startling assertion but; that they are not sophisticated to the extent which some imagine,

and others wish us to believe, has been demonstrated by scientific research, and by a long and repeated series of investigations. Still, whatever may be our opinion of wine in the abstract, and however much we may be opposed to those who, to suit their own prejudices, term it poisonous and hurtful, we believe that as a general rule the habitual use of wine is not judicious for those of sedentary habits and who work more with the head than the hand. It is not denied that many a brilliant idea and beautiful imagination have owed their birth to the exhilarating effect of a generous wine; but it is maintained that all mental labour, especially those varieties which require the exercise of memory, judgment, and discretion, are best and most satisfactorily performed under the influence of an even current of ideas, unaided by imagination or impulse. The excitement caused by wine is sure to be followed by corresponding depression; and a distressing and enervating languor soon follows upon excitement and exhilaration. But still wine, like every other natural production, has its uses, and is sometimes an absolute necessary. There are men who from habit, or from natural debility of the stomach, require wine to assist in the digestion of food; and these are cases where for a time it is necessary to substitute wine and water or weak brandy and water,

for the porter or other beverage taken by the individual when in his usual health. For instance, in a case where, as the consequence of long-continued mental application, and the result of a train of dyspeptic symptoms, the liver has become overloaded, and the kidneys irritated, all saccharine matters are improper, and yet a certain amount of stimulant is required; and hence we are obliged to forbid malt liquors, and give wine or a small quantity of brandy in their stead. Again, when a man of weak constitution has been exposed to intense cold, or even to a moderate degree of cold for any length of time, the small vessels of the skin become exhausted, and generally depression of the vital powers takes place. Here, again, wine is a most excellent restorative, and tends to avert the evils which must otherwise result. The moderate use of wine is also beneficial to the individual who is placed in circumstances which prevent him enjoying his usual amount of rest, taking care that the necessary use does not degenerate into abuse, and become a confirmed habit. For the choice of wines which are likely to be least prejudicial to those who from necessity or habit require them, it may serve as a guide to state that those which contain the smallest amount of free or uncombined alcohol, and are the most free from acid, are to be preferred. The

light wines imported from the Continent, and which contain only the alcohol derived from fermentation of the juice of the grape, are the most wholesome, and are frequently more exhilarating and refreshing than those which contain the alcohol which has been added to increase their strength. The effects of the various combinations of alcohol have been already noticed, and it has been found that "different wines, although containing the same absolute proportion of spirit, will be found to vary very considerably in their intoxicating powers." Brisk sparkling wines act powerfully on the nervous system, even though the amount of spirit which they contain is small, and therefore are not suited for the sedentary. Hock and all dry acid wines are also improper, as tending to cause disorder of the urinary organs, and induce indigestion. Home made wines, from the quantity of sugar and acid which they contain, are likewise to be avoided. When wine becomes necessary the choice may be made from Sherry, Madeira, and Port, of moderate age, and which can be warranted by the vendor as being free from any alcoholic mixture beyond that produced by fermentation of the juice of the grape. In reference to ardent spirits, such as brandy, whiskey, &c., it may be stated that as a general rule they should never be taken by those of sedentary

habits, unless medicinally, or sanctioned by the medical attendant. In conclusion, the same rules and exceptions in reference to habit, constitutional peculiarities—noticed when speaking of malt liquors—apply also to the use of wines and spirits.

CHAPTER XXIII.

NECESSITY OF A PURE ATMOSPHERE.

IN the commencement of this work, when treating of the causes which render those of sedentary habits liable to their own peculiar class of diseases, we mentioned the want of pure air as a fruitful source of ill-health.

In many instances something may be done to remedy this evil, or at least to render its effects less pernicious. It is well known that during sleep much air is breathed, and also that during this period man is more readily affected by the impurities and noxious exhalations floating in the atmosphere; and hence it is strongly advised that those who during the day are pent up in the counting-house, or employed in the close crowded streets of large towns, should, if their circumstances will permit (and an effort should be made to make circumstances yield to an end so

desirable), sleep in a locality where a more pure atmosphere exists. We do not advise a long, fatiguing walk before and after business hours, and have already stated that exercise immediately before a meal is not beneficial to those of sedentary habits; but still the small expense incurred in riding a few miles out of town (and in London there are numerous facilities for so doing) will be doubly repaid by the health and mental vigour which will result. During the daytime, even in large towns, the air being in motion, and the individual moving from place to place, the effects of an impure atmosphere are not so evident; but at night, when the temperature is diminished out of doors, and so many hours are spent in a close bed-room, which not only contains impure air, but is also further deteriorated by exhalations from the body, and the consumption of the small amount of oxygen existing, the results are extremely unhealthy. Nothing contaminates the air with greater rapidity than the perspiration, both sensible and insensible, which takes place during sleep; and in a small room the quantity of carbonic acid gas which becomes formed soon accumulates to a dangerous degree. All bed-rooms, whether in town or country, should be large, lofty, and freely ventilated. Unfortunately, the reverse is too frequently the case, and even the little venti-

lation which is practicable is often prevented by blocking up the chimney, and closing every aperture which can admit a breath of air. The man of sedentary habits, who wishes to enjoy good health, will endeavour to secure a roomy bed-room, containing a bed without hangings and drapery of any kind, and will prefer a moderately hard mattress to a soft and luxurious but debilitating feather-bed. Those who are afraid to leave their chamber-doors open may secure them by a chain-bolt, and thus, with an open chimney, secure some degree of ventilation. Many act as though they imagined the meaning of the word "ventilation" to be "the admitting air into a room:" this is but a part of its signification. By the term ventilation, when used in reference to health, is signified the adoption of means by which the air contained in an apartment can be renewed, the air that has been breathed and deteriorated, along with all other exhalations being removed, and fresh and pure air being admitted in its place. This can only be accomplished by means of two apertures and two currents of air; and, as warm impure air ascends, and cold pure air remains below, one opening must be near the top, and the other near the bottom of the apartment.

Among the various appliances which tend to the maintenance of health, and are useful for those of

sedentary habits, may be mentioned the shower-bath and cold sponging. Baths of this kind are generally more suited for the debilitated than immersion. The best time for their use is early in the morning, but not immediately before breakfast; and they should be succeeded by vigorous friction of the body by means of a rough towel, so as to produce a sensation of warmth, and thoroughly cleanse the pores of the skin. If a feeling of cold and languor follows their use, they should be at once discontinued, and not resumed until the system is strong enough to originate that healthy reaction of which the sensations of warmth and vigour are evidences.

CONCLUDING REMARKS.

Thus, then, we have endeavoured to show how some of the diseases to which those of sedentary habits are liable, may be successfully met by domestic treatment, and have endeavoured to point out those indications which require regular professional attendance.

It will be evident, from what has been already stated, that, although close confinement, impure air, and mental labour, tend to debilitate the

stomach, causing dyspepsia, with all its attendant evils, and exert some influence, direct or indirect, upon almost every organ of the body; still, that much may be done to secure the enjoyment of a fair degree of health, without unnecessary self-denial or privation of comfort.

As it is in the general affairs of life that circumstances, unimportant in themselves, frivolous, and barely worth a moment's consideration at the time of their occurrence, make up the total of happiness and misery, comfort or discomfort; so it is in regard to the little precautions and apparently trivial observances which conduce to the maintenance of health, and the man of sedentary habits must either accustom himself to the habitual observance of everything conducive to his health, undisturbed by occasional impulses, either of excess or abstinence, or else be content to bear the penalties which are sure to be inflicted if he attempts the more luxurious habits of those whose constitutions and occupations differ from his own. If, in the various employments of life, perfection is attained by adopting the old saying, "Every man to his own trade," it is quite true, that, in reference to health and well-being, the maxim may be altered to—"every man to his own constitution and habits of life." A man whose occupation is sedentary does not exhaust his blood

and consume his sinew and muscle by active physical exertion as the agricultural labourer or the smith does; and if, under the influence of a good appetite (supposing him fortunate enough to possess one), he consumes large quantities of food, his system will receive an excess of nutriment, which, not being required for any healthy purpose, will become an excess of blood, causing plethora,—or of fat, resulting in an unhealthy and unsightly obesity,—or else will tend to develop those noxious elements which produce gout, gravel, and biliary diseases. Some men who, from various circumstances, are obliged to exchange a life of activity and physical exertion for one of a sedentary kind, but wish to maintain the appetite, and live in the same manner as when under the influence of their previous habits, and will frequently seek, by artificial means, to originate the desire for food: this is wrong; the diminution of appetite which they experience is a salutary provision of nature; and if, disregarding her injunctions, they endeavour to create an artificial desire for food, the excess beyond that which is required for the support of the body will vitiate the blood, produce a bloated unhealthy appearance of countenance, and become the source of many serious diseases. Hence, it is evident that loss of appetite is not always a sign of ill health;

but, on the contrary, a means by which, without self-denial, a man may adopt those habits which are most conducive to his well-being, and are suited to the circumstances in which he is placed. It has been stated, that the man of sedentary habits ought not at any time to eat to repletion, and it may also be added, ought never to drink to exhilaration : the former imposes upon the stomach that which, instead of a duty, becomes a task, and the latter is followed by depression and languor ; still there is no necessity for the sedentary to restrict themselves or deny themselves the enjoyment of many of the luxuries of life. All that is required is to be moderate and temperate in all things, and not to forget the influences which constitution, habit, and other circumstances have upon each individual case.

No particular kinds of food have been mentioned as being wholesome or unwholesome ; for, having endeavoured to elucidate the principles upon which all dietetic rules must be based, it has been thought better to leave their practical application to be determined by experience and common sense.

In this little work, we have put forth but few claims to originality or novelty, and shall be well satisfied with the results of our labour if, by

the arrangement and explanation of facts well known, we have been enabled to offer a few suggestions, by the adoption of which those who work more with their heads than their hands may escape from, or be able to detect in their earliest stages, the diseases incidental to a sedentary life.

THE END.