



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>





A FEW OBSERVATIONS
ON
NERVOUS AFFECTIONS;

SHOWING
THE USE AND ABUSE OF HOMŒOPATHY,
HYDROPATHY, AND ALLOPATHY.

BY
RICHARD DAWSON, M.D.

LICENTIATE OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON;
MEMBER OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND;
LATE PHYSICIAN TO THE INSTITUTION FOR THE
TREATMENT OF CALCULUS, DIABETES, AND THE
VARIOUS DISEASES OF THE GENITO-
URINARY SYSTEM.

LONDON:
SIMPKIN AND MARSHALL,
10, STATIONERS' HALL COURT, LUDGATE HILL.

M.DCCC.LIX.

157. u. 34.

LONDON:
WERTHEIMER AND CO., PRINTERS,
CIRCUS PLACE, FINSBURY CIRCUS.



TO
ROBERT VENABLES, M.D., M.A., OXON.,

INCEPTOR CANDIDATE, ROYAL COLLEGE OF PHYSICIANS, LONDON;
PHYSICIAN TO THE ROYAL KENT DISPENSARY, AND
LECTURER ON FORENSIC MEDICINE—
ETC., ETC., ETC.

MY DEAR SIR,

I am perfectly aware that the dedication of a book to a man, whose high professional standing and literary attainments have stood the test of thirty years, must be considered a trifle. Still you will allow me to add my mite to the many proofs, you have received from the profession and the public, bearing testimony how highly they appreciate your discoveries. I should, indeed, be ungrateful, were I to allow any opportunity to pass without acknowledging the great assistance, you have afforded me in my inquiries into the many abstruse and difficult subjects, connected with the higher branches of medical science, during the last sixteen years I have had the great advantage of enjoying your uninterrupted friendship.

Believe me, with the greatest respect and esteem,

Your ever grateful friend,

15, *Finsbury Circus*,
May, 1859.

R. DAWSON.



P R E F A C E.

SINCE the publication of the previous Edition of this work, it has occurred to me to make several important additions to it. In doing so I have carefully revised it, and adapted it to the present form. This, however, does not affect the principles which were before laid down, they confirm them.

Many years ago, my attention was specially directed to the treatment of nervous affections, from witnessing, while on the Continent, the successful practice of M. Lallemand. I saw cases, which had been treated for years, both in London and Edinburgh, with only temporary relief, perfectly cured by him in a few weeks.

The originality and the simplicity of the treatment adopted by that learned professor led me, on my return to England, to place it before the profession, and being the first in this country to call attention to the subject, there is scarcely a form of nervous disorder which has not repeatedly come under my care. These unusual advantages have enabled me to make a few observations which, I

trust, will be found useful in practice. I have good reason to believe that, if the principles I have endeavoured to inculcate, had been thoroughly understood and attended to, much misery would have been prevented.

Had my purpose been a large volume, it would have been easy to increase the number of these pages; but having no such object in view, I have been as concise as possible, and have confined myself to the detail of such facts as appear to me to have escaped the notice of others. Wood-cuts are introduced to illustrate those points which seem to require such illustration.

If what I have written should prove useful, and direct the attention of the profession to that much neglected class of affections, vaguely comprehended under the term "NERVOUSNESS," my object will be attained.

15, FINSBURY CIRCUS,

May, 1859.

CONTENTS.

| | PAGE |
|---|------|
| Dedication | iii |
| Preface | v |
| Introductory Remarks | 1 |
| Abuse of Purgatives | 2 |
| Homœopathy in the Treatment of Constipation | 2 |
| Causes of Nervous Disorder | 5 |
| Intense Study a frequent Cause of Nervous Disorder | 6 |
| Effects of Reading at Dinner | 6 |
| Late Dinners and too free Indulgence at Table | 6 |
| Irregular Meals | 7 |
| Insufficiency of Food a Cause of Nervous Disorder | 8 |
| Importance of studying the Temperaments in treating Nervous Affections | 9 |
| Variety of Temperaments | 9 |
| Nervous Temperament | 10 |
| Lymphatic ——— | 11 |
| Sanguineous ——— | 12 |
| Biliary ——— | 13 |
| Influence of the Passions | 15 |
| Abuse of Mercurials and Purgatives | 16 |
| Irregularities in Diet | 17 |
| Bad Effects of Meat Suppers | 18 |
| Abuses in the use of Cod Liver Oil | 19 |
| Influence of Excess, and of Deficiency, of Bile | 19 |
| Cases of Affections of the Liver | 21 |
| Use of Warm Bath and Dry Cupping in Conjestion of the Liver | 22 |
| Causes of the Skin becoming Yellow in Affections of the Liver | 22 |
| Importance of Discriminating between Apparent and Real Hepatic Disease | 23 |
| Liver Disorders resulting from Climate | 23 |
| Inflamed and Irritable Duodenum | 24 |

| | PAGE |
|--|------|
| Liver Affections as they prevail in China, Bombay, New York, and the Mauritius | 25 |
| In some Forms of Liver Affection opposite Effects produced by similar Causes | 26 |
| Sanguineous Temperament | 27 |
| Tubercles in the Lungs | 30 |
| Tubercles may remain in the Lungs for many Years without producing Injury | 31 |
| Case of threatened Consumption | 31 |
| Treatment of Incipient Consumption | 32 |
| Consumption Incurable when arrived at the Third Stage | 34 |
| Influence of Pure Air | 34 |
| Bad Effects of Vitiated Air | 35 |
| Quantity of Oxygen breathed per Minute | 36 |
| Importance of Pure Air in the Treatment of Consumption | 37 |
| Bad Effects of Tight Lacing | 38 |
| Necessity of attending to the Functions of the skin in Nervous Affections | 40 |
| Disordered Stomach a Cause of Consumption | 43 |
| Cod Liver Oil in Consumption | 45 |
| No infallible Remedy in Consumption | 46 |
| Change of Climate in Consumption | 46 |
| Mental Indigestion | 47 |
| Use and Abuse of Hydropathy | 54 |
| Importance of Healthy Action of the Kidneys in Nervous Affections | 64 |
| Great Advantage of Analysing the Urine in Nervous Disease | 65 |
| Urinary Deposits | 66 |
| Urinometer | 67 |
| Curability of Diabetes | 70 |
| Case described by Mr. Lobb | 71 |
| Nervous Palpitation of the Heart | 76 |
| Case of a Medical man suffering from this Derangement. | 76 |
| Injurious Effects of Carbonate of Soda in Nervous Affections | 79 |
| Case in Illustration | 80 |
| Concluding Remarks | 90 |

NERVOUS AFFECTIONS.

SIXTEEN years ago, I directed attention to the discoveries made by Professor Lallemand in the treatment of nervous affections; and have had, in consequence, unusual opportunities of witnessing every variety of nervous disorder. These advantages, and their results, have been sufficient fully to satisfy me, that there is no universal or unvarying plan of successfully treating these diseases. Remedies which cure one patient, prove entirely useless with a second; and with a third, positively injurious. Stimulants, I find, are highly beneficial to some; sedatives agree best with others; and in many cases, a well regulated diet, pure wholesome air, active exercise, and bathing are the only means which can be depended upon.

I am, nevertheless, thoroughly convinced that many valuable remedies have fallen into disrepute, and have been altogether laid aside, because they have been held up as equally suitable to every form of nervous disorder.

There are, and always will be, peculiarities of constitutional temperament,—hereditary, congenital, or acquired,—and in order to meet their varieties, our treatment must be varied according to the particular circumstances of each case.

We find some practitioners recommending the use of certain medicines; and this on no fixed principle. Some, for instance, rely wholly upon morphia; others upon kreosote; and others look up to hydrocyanic acid as the panacea. The followers of Hahnemann believe in Homœopathy as the only effectual means of curing disease; and the disciples of Priesnitz have confidence only in the virtues of water.

Abundant opportunities almost daily present themselves to me of witnessing the efficacy of these different kinds of treatment, as pursued by the most celebrated of their followers; and I am convinced, that they are all—when judiciously applied—productive of more or less benefit. It is neither just, nor consistent with the principles of true science, to condemn without a trial any mode of treatment, simply for its novelty, or its originality; or because certain of its professors may be weak enough to maintain its universal infallibility. It is the duty of every scientific physician to investigate most carefully every means that may seem calculated to benefit his patient; and my own experience assures me that there is something useful to be found, in particular cases, both in hydropathy and homœopathy.

I have repeatedly seen patients, who stated that for years they have been in the habit of taking large quantities of opening medicines, in order to keep up the due action of the bowels, without effecting the purpose; and I have known them derive infinitely more benefit, in a few weeks, from “globules,” and strictly attending to the admirable dietetic rules prescribed by Hahnemann, viz., giving up the use of wine, spirits, and all such stimulants, than could possibly have been derived from the adoption of all the routine discipline so commonly insisted on.

It may be said, and doubtless with a great deal of truth, that the abstinence from wine and ardent spirits, together with strict attention to diet, were really the means of cure; and that the minute doses of medicine in the globules were merely incentives to regimen. Upon this, as a purely practical man, I need only observe, that it matters very little to the patient what are the means by which his health has been restored. Provided it is perfectly re-established, it cannot interest him much, what has been the particular plan of treatment efficacious in the cure. If persons, however, will not be satisfied without taking large quantities of medicine, it is as well to gratify them with "globules," or something equally harmless, that so they may sustain no injury, while they pursue a rational mode of living, and one conducive to health.

From this, I do not wish it to be inferred that I am a believer in, or a follower of, Hahnemann, or that I would recommend any one under all circumstances to rely upon his doctrines. In active and inflammatory cases, I would never trust them. It must be remembered, however, that I am now writing upon nervous diseases, and not upon inflammatory disorders; and these latter are by far the most frequent that come before the physician. What I desire is, that every practitioner should, regardless of its source, adopt that which is beneficial, and which is proved to be useful; and that the Homœopaths should not be deterred by party feeling from availing themselves of the means which are used by the Allopathic practitioner when occasion requires. That there are such occasions, is most evident. One fact occurs to me to mention, in the hope that the followers of Hahnemann may consider it.

There prevails a great dread of the exhibition of mercury; and I am often called upon to state whether syphilis is curable without it. My answer is, that I cannot dis-

pense with its administration in the cure of Hunterian Chancre. I am then met with the reply, that Homœopathic physicians, independent of its aid, cure the disease. Having firmly stated and maintained my own views, I can only leave it to the patient's option, to decide what course he will pursue. Upwards of thirty cases that I have known have been treated homœopathically by some of the most eminent Homœopathic practitioners in London; but, as far as I could discover, without deriving the promised relief. In three cases only out of the thirty, had the disease been at all controlled; and in these three, it was very apparent, that Allopathic means had been employed. The condition of the gums, and the state of the breath showed plainly that considerable doses of mercury had been administered.

There cannot be a doubt that the Allopathic administration of morphia, when judiciously prescribed, is highly beneficial; but the head-ache, constipation, general distress and suffering, which its habitual use often occasions, more especially when it is improperly administered, have done much to bring an active and valuable remedy into disrepute.

In certain conditions of the stomach, kreosote will bring on sickness, vomiting, and considerable disorder of the digestive organs; yet many cases have occurred to me in which this remedy has acted almost like a charm. Thus, I have seen it relieve on the instant gastrodynia—one of the most painful and distressing affections from which a patient can suffer—even after every other means had wholly failed. I need hardly observe here, that before any plan of treatment can be selected with reasonable prospect of success, it is absolutely necessary first to become fully acquainted with the nature of the cause, and the peculiar circumstances of the case.

It has been already stated, that the dietetic and sana-

tory measures inculcated by homœopathy, the invigorating influence of hydropathy, and the various means at the disposal of and resorted to by the allopathist, may, all and each, when properly applied, be of the greatest benefit; and, on the contrary, if they are indiscriminately adopted, or injudiciously used, they may prove not only inert, but often very injurious. It must, therefore, be apparent that, before we can determine, with any prospect of success, the treatment of disease, we must diligently inquire into its nature, so as to ascertain the cause, and, if possible, remove it; for if this be allowed to continue in operation, it will be vain to expect that the effects will cease; still less can we hope, that they will be permanently subdued. Suppose that there has been success in checking or suppressing the effects, as may sometimes happen, without previously subduing the cause, the mischief is only aggravated, and derangement in the system confirmed, which, no subsequent efforts would be sufficient thoroughly to eradicate. My meaning may, perhaps, be rendered more intelligible by the following illustration. Purging may be occasioned by cold applied to the skin, when it is hot and perspiring. The perspiration being suddenly and over-precipitately checked, purging is set up on the part of nature to compensate the suppressed action of the skin, and thereby relieve, at least in part, the system by the removal of noxious principles. A similar derangement of the bowels may arise from taking too much food into the stomach. Here, then, we find the same effect—relaxation of the bowels—produced by two causes differing altogether in their nature and mode of action. If we treat the disorder of the bowels thus occasioned by the same means, we should most assuredly fail of success. The causes in each case being so very different, the treatment should be varied, and

suited to the peculiar circumstances of each. Instead of checking the purging in the first instance, by the administration of astringents, absorbents, the warm bath and the exhibition of medicines, calculated to restore the suppressed or suspended action of the skin, will be more in accordance with the true principles of treatment. But in the second case, in which too much food, or food of an indigestible nature has been the cause of the derangement, the appropriate treatment will be the immediate evacuation of the stomach or bowels by an emetic or a suitable laxative.

One very frequent cause of nervous affections is, intense or unseasonable application of the mind, as in reading during dinner. By this untimely exercise of the brain, the blood is abstracted from the stomach, at a time when it is more particularly required there to enable the viscus to secrete and supply a sufficiency of gastric juice. Such patients cannot be benefited except they alter their habits, for so long as they force the current of blood towards the brain when the vital fluid is required elsewhere for the purpose of digestion, the digestive organs will be impaired, and will very imperfectly perform their office. Thus, nervous derangement will continue.

Another and very common cause of nervous disorder prevails much amongst gentlemen engaged the whole of the day in the City. They come to London in the morning, and seldom take any food until they return home to a six o'clock dinner. They then indulge too freely in the pleasures of the table, and burden the stomach with more food than the gastric juice can dissolve; consequently a considerable portion of the food remains undigested, and, undergoing spontaneous decomposition, gives rise to the evolution of different gases, in large quantities, in the stomach,—painfully distending the organ and causing

belching, acidity, acrid eructations, and hiccup. Unless we remove the cause by a more suitable mode of living, the effects will not cease. Medicines may relieve but they will not cure the patient.

Nervous disorders, proceeding from another and very different cause, frequently come under my care. They are attended with violent nervous headache, severe palpitations of the heart, accompanied with a sense of sinking and exhaustion. They occur most frequently in tradesmen, drapers for instance, who are engaged many hours during the day in active exercise of both mind and body, and who at certain seasons cannot spare time for refreshment until a very late hour, when the energies of the frame have become completely exhausted. Even at this late period they are frequently disturbed and called away, before they have had time to finish their repast. Under such circumstances, the frame is enfeebled and overpowered before there is any opportunity for refreshment. The stomach naturally participates in the general debility, and in consequence becomes unequal to healthy digestion. Such individuals emaciate, become feeble, and ultimately are prostrated both in mind and in body. Medicine in these cases is of little or no use: nothing but a more natural mode of living can restore such persons to health and strength. Indeed it is surprising to see how speedily they recover, when the cause of disorder has been removed by a change in the mode of life.

Analogies drawn from the inferior animals often lead us to the knowledge of the true principles of cure. Experience has taught the groom the evil consequences that result from feeding the horse immediately after severe exercise; and physiology unfolds to us the *rationale*:—the blood requisite to enable the stomach to form and secrete a sufficient quantity of gastric juice for the purpose

of digestion, has not yet reverted from the muscles, whither the current of blood had been more abundantly directed, to increase the muscular energies and activity, and proportion them to the exertions they were called upon to make while under the stimulus of severe exercise. Hence it is necessary to allow the animal sufficient time for repose, that the muscular system may return to its ordinary state of quiescence. The animal may then be fed not only with safety, but with advantage; the stimulus which the food creates brings an increased afflux of blood to the stomach; gastric juice is secreted more copiously and poured in sufficient quantity into the cavity of the viscus; and, acting with energy upon the food, readily dissolves it, and prepares it for its final formation into nourishment. The same laws hold good with respect to man; and thus it is that analogies often lead to the adoption of true principles, as well as to their explanation.

Many patients suffer from nervous disorder, originating from another cause, namely insufficiency of food. It is very much the practice with opulent merchants, to bring their sons with them into the City from a very long distance, after having breakfasted at an early hour in the morning. A biscuit, with perhaps a glass of wine, serves instead of luncheon, and no other refreshment or sustenance is taken before they return home to a late dinner. Such a mode of living may agree very well with the father, advanced in life, and engaged in sedentary occupation at the desk; but this protracted abstinence will, by no means, suit the youthful activity of the son constantly employed in more laborious occupation. These young persons moreover are yet growing; consequently they require more nutriment, and at shorter intervals, to enable them to meet and supply the demands for the formation of new material.

Neither should it be forgotten, that the times for taking food, as well as the quantity taken, should be regulated by, and adjusted to, the mode of life, and age of the individual. What agrees with one person, may prove highly injurious to another. Hence it must be evident, that he who trusts solely to medicine in the treatment of such cases, must fail in effecting a cure. The only sure plan consists in removing the cause, by allowing a more liberal as well as a more frequent supply of food.

The *temperaments* are a study absolutely necessary on the part of the physician, who aims at even ordinary success in the treatment of disease. If we treat with precisely the same remedies four different persons, all suffering alike from the same nervous disorder, but all of them having different temperaments, and neither take into account the peculiarities of each, nor the effect of the remedies upon the constitution, nor the nature of the disease, we act like a mariner expecting to reach his destination, by steering in a direct line by compass for the point at which he wishes to arrive, totally regardless of lee-way, currents, or any other controlling causes. If, therefore, the merchant must institute strict inquiry into all the circumstances before he incur either risk or responsibility, it is as indispensably necessary for the physician to take into account, not merely the general nature and character of the disease, but also the various concomitant circumstances and peculiarities of each particular case. It is the study of these circumstances, and due attention to them which constitute the accomplished and trustworthy physician; and which alone can insure him success in practice.

In the study of all disorders, we must regard and carefully review both the history of the disease, and the history of the case. The first makes us acquainted with all the general phenomena, and tendencies of the disorder:

the second brings us into relation with all those specialities, which require peculiar modifications of treatment.

In the nervous temperament, we find that the brain is large and well developed, and its energies, and those of the nervous system, are the most predominant, and take the lead over those of all the other organs. The features are sharp and prominent; the eyes large and expressive; the mouth betokens intelligence and frequently there is

Fig. 1.



NERVOUS TEMPERAMENT.

a full and intellectual forehead; the skin thin and transparent, with flossy silky hair; the muscles small, but well marked, with quick and active motions; the face generally pale, and frequently expressive of anxiety; the brain and whole of the nervous system are in a high state of activity.

Such persons are for the most part quick and intelligent; highly sensitive to every kind of impression; and are readily excited and as easily depressed. At one time you may find them enjoying themselves to the fullest possible extent, and in a very short time afterwards perhaps they will be in tears.

Fig. 2.



LYMPHATIC TEMPERAMENT.

The dispositions of persons in whom this temperament predominates, are much modified by the circumstances in which they happen to be placed. Confinement, especially if the occupation is sedentary, never fails to produce evil effects upon the constitution.

Individuals of this temperament* (fig. 1) are highly sensitive to all those agents which act upon the nervous system. Such persons require to be treated with great care and delicacy.

Fig. 1.



SANGUINEOUS TEMPERAMENT.

In the lymphatic (fig. 2 page 11) in which the abdomen is remarkably large and prominent; the brain dull and inactive; the body round and soft; the action slow and heavy; the skin muddy and flabby; the circulation weak and languid; the muscles soft and flaccid; there exists a great aversion to either mental or bodily exercise, and the energies of every kind are very feeble.

* The sketches of the different temperaments have been copied from Combe's valuable work on Phrenology.

Thus persons of this temperament differ materially in these particulars from persons of the former. Indeed so little excitable are people of the purely lymphatic temperament, that it is not without the greatest difficulty they can be aroused or induced to exert themselves; and when at length prevailed upon to do so, they soon become

Fig. 4.

**BILIARY TEMPERAMENT.**

exhausted. Hence in such cases a timely recourse to stimulants is not only necessary, but may prove highly advantageous.

Persons of the sanguineous temperament (fig. 3) differ widely from those of the lymphatic. In the former, the lungs and heart are large; and the power of the latter organ conspicuously predominates over all the others in

the system. The pulse is strong and regular; the veins turgid, full and blue; the chest large; the complexion fair and florid; the muscles firm; the hair reddish, chesnut or auburn. Impressions made on the nervous system are vivid; the imagination is luxuriant; the temper passionate, but not vindictive; and individuals of this class, though readily excited, are as easily appeased.

Now, if a patient of the sanguineous temperament be treated in the same way as one of the lymphatic, when suffering from the same disease, and under exactly similar circumstances, the consequences will be most deplorable. Wine, for instance, spirits, and such stimulants, so useful in the latter case, are wholly inadmissible in the former, where the heart and arteries are already too prone to over-action. The use of stimulants by the patient of sanguineous temperament would, almost to a certainty, bring on inflammation; or we should by such means incur the risk of doing some violent injury to the heart or some other part of the circulating system. A spur may be necessary to enliven the dray-horse; but might prove very dangerous with the thorough-bred high mettled racer.

The biliary temperament (fig. 4) again differs in many respects from the foregoing thus briefly noticed. In persons of this temperament, the liver is large, and its functions are readily called into activity; and there is a great tendency to a redundant secretion of bile. The pulse is stronger and more frequent than in the purely sanguineous. The veins are prominent, the sensibility is acute; and there is great constitutional energy. Such persons frequently and for a long time ponder on the same subjects.

The skin is generally dark or sallow, with occasionally a yellow tinge; the hair black, or dark brown, and often short and crisp; the muscles firm, and well developed; the temper abrupt, but not liable to such extremes of

excitement as in the purely nervous; the conceptions are bold, and there is a firmness of purpose in the pursuit of any project. Persons of this temperament are not so readily exhausted as persons of the nervous or other temperaments. In attaining the object they wish, they are dauntless and persevering to the last.

In treating persons of biliary temperament, suffering from nervous affections, and in whom the secretion of bile is in some way or other faulty, we must not confine our attention exclusively to the conditions of the stomach and bowels, as the only cause of such disorders.

The purely anatomical and physiological therapist,—knowing that the veins, which coalesce to form the great trunk that entering the liver, supplies it with the blood from which the bile is for the most part secreted, come from the stomach, spleen, and intestines,—might feel disposed to believe that deranged states of bile are, therefore, necessarily connected with, or caused by, the conditions of these organs. These conditions, no doubt, will explain, to a certain extent, how too much food, or food of an indigestible nature, affect the liver, derange its functions, and so vitiate its secretion, and thus bring on a train of nervous symptoms. Still, such are not the sole causes of deranged bile; and as the morbid effects cannot be relieved until we have ascertained and removed the cause, we must endeavour to discover this by inquiring most minutely into the history and all the other circumstances of the case as has been already explained.

The various passions, whether of a depressing or exhilarating character, have great influence in inducing nervous disorder. Sudden emotions, too, have the same effect; and the more sudden and violent they are, the greater are their pernicious results, not only upon the system at large,

but upon the nervous portion in particular—ranging from mere temporary trepidation or excitement to the most inveterate mania or confirmed insanity. Thus, jealousy, abused confidence; fear, sudden alarm, prolonged or continued apprehension, anxiety, grief, joy, unexpected good fortune, and similar emotions, exert, very frequently, a most dangerous agency. So powerful are the effects that violent emotions of this kind produce upon the nervous system, that the functions of different, and even distant, parts become not only sensibly, but deeply, implicated. Very strong impressions upon the mind, with the concomitant conflict in the nervous system, have so acted even upon young persons as to turn the hair grey or quite white in a single night; and, in other cases, the skin, instead of exuding the ordinary perspiration, has “sweated blood.” These results sometimes supervene so rapidly, and come on so suddenly, as to exempt them wholly from any interference, and place them beyond all possible attempts at prevention or arrest.

A deranged state of the stomach and bowels, clearly referable to the abuse of purgative and mercurial medicines, is a prolific source of nervous disorder in persons of biliary temperament. Costiveness by no means invariably indicates the necessity of having recourse to opening or purgative medicines. Many persons live almost entirely upon food, nearly the whole of which is not only convertible, but actually converted into nutriment, and completely assimilated, thus leaving little or rather no residue to pass off through the bowels. If, then, in such circumstances, it be deemed advisable to move the bowels, the more rational plan will be to alter the nature of the diet, and substitute more of a vegetable, while we reduce, in a corresponding degree, the amount of the concentrated and nutritious food. Vegetables contain less of the nutrient principles, and, consequently, leave a larger amount

of residue; upon the expulsion of which superfluous material, the action of the bowels may be more naturally, and far more legitimately and advantageously employed, than in responding to the irritating influence of drastic purgatives.—“It is in cases of this description,” says Combe, in his excellent work on the Physiology of Digestion, “that the physician is more frequently consulted, and that he has the best opportunity of shewing his discrimination and judgment. If he and the patient are satisfied with simply procuring relief, he has ready means at hand in any of the ordinary purgatives; but if a cure is their object, they must go back to the root of the evil, and begin by restoring the digestive organs to health.”

Nervous affections, again, in biliary temperaments, are frequently produced by an increased secretion of mucus into the bowels. This arises from irritation of the mucous lining, and requires great care in the choice of purgatives: aloes, and the whole class of drastics, would tend only to increase the mischief; and their exhibition, therefore, is improper; a cautious and well directed resort to salines, on the contrary, will speedily remove the cause, and restore the patient to health.

Nervous disorder in biliary temperaments is clearly traceable to the secretion of bile being vitiated or otherwise deranged. In laying down plans, therefore, for treating such affections, we must not only determine their nature, but inquire into and ascertain the cause, and remove this, if possible. If, for example, we find, upon careful examination, irregularity in diet to be the fundamental cause of the evil, which is frequently the case, we should most peremptorily interdict all those kinds of food which either experience or science has taught us, tend to vitiate or derange the secretion of bile:—such, for instance, as a too free use of porter, sugar, cream,

butter, rich fatty meats, ardent spirits, and wine. These, it is well known,—and chemistry confirms the fact— increase the quantity of bile to an amount far beyond what is required for the purposes of healthy digestion; and, further, the most moderate experience has repeatedly shown, that this superfluity often lays the foundation of some nervous disorder.

To persons of biliary temperament, meat suppers taken late at night prove, in particular cases, very injurious. If they sleep in a close, confined, ill-ventilated chamber, at a time when the respiratory and circulating processes are slow and inactive, there is formed a large quantity of bile. The proportion of oxygen necessary to enable the lungs to burn off the carbon, being withheld through impurity, and a deficient supply of air, as well as from other causes, the liver is called upon to assist in excreting the superfluous carbon under the form of bile. The person, in consequence, awakes stupid, unrefreshed, and, generally, with a bad oppressive headache. Indeed, so liable are bilious persons suffering from this form of nervous disorder to the consequences above stated, that I have repeatedly seen a severe attack of headache brought on by the patient retiring to repose in an ill-ventilated apartment, immediately after taking a full meal. As a means of immediate relief under such circumstances, a saline purge is one of the most effectual; it drains the liver of its redundant bile, and thus affords instantaneous, but only temporary, relief. Permanent relief must be sought for by avoiding the exciting cause, by the inhalation of pure fresh air, friction and cleanliness of the skin, and warm bathing, which will facilitate the exit of carbon and other impurities through the other channels, the lungs and skin. By these means, and by avoiding late suppers, the liver will be relieved from the necessity of over-activity,

and of forming a superfluous quantity of bile; and, thus, the real cause of the disorder being removed, the effects will naturally cease.

Another fertile source of nervous disorders in biliary temperaments has frequently, of late, come under my notice:—the practice of taking large quantities of *Cod Liver Oil*. It would be well, before we indiscriminately prescribe such fashionable remedies, to consider how they are likely to act. The Laplander, dwelling in the arctic regions, where it is intensely cold, and where the atmosphere contains in an equal bulk, a larger quantity of oxygen, lives principally upon carbonaceous substances, as train oil, blubber, and fat. The Indian, on the contrary, who lives in the torrid zone, where the atmosphere is rarefied and for equal bulk contains only a small quantity of oxygen, selects rice, vegetables, and other diet containing little carbon, and it is found that such are best suited to the circumstances under which he lives. For the same reason *Cod Liver Oil* administered in summer, when the weather is hot and oppressive, more especially if it is given to a patient of biliary temperament, will seldom fail to aggravate the disease it was meant to cure.

Nature evidently intended that the liver should free the blood from those principles which form the radical or essential constituents of the bile, and apply them, so eliminated, to perfect or complete the function of digestion. But if more bile is poured into the duodenum than is necessary to this end, the excess acts as an irritant to the bowels, and occasions what is commonly called “bilious diarrhœa.” If, however, on the other hand, the bile is scanty in quantity, as often occurs with persons who have resided much in tropical climates, or who have for a long period inhabited the warmer latitudes; or suffered frequently and severely from agues; or indulged to a pernicious

extent in a too free use of alcoholic liquors, in consequence of which the liver pours out fibrin, which acting as a ligature upon the portal vessels impedes the flow of bile, the consequence is, that the bowels become constipated, the stools clay-coloured, the powers of digestion greatly weakened and otherwise impaired, attended with great loss of strength and flesh. The skin becomes rough, hard, and dry; the countenance assumes a sallow appearance, or a general yellowness pervades the skin; and true or confirmed jaundice is the result.

This is not unfrequently attended with the formation of gall-stones, which greatly aggravate the evil, and lead to very unfortunate consequences. An instance of this, and one of remarkable severity, has come under my observation, in which the gall-bladder felt like an uniformly hard solid mass; as if its cavity was wholly occupied by a single calculus. Upon opening it, however, the cavity was found filled with a number of distinct small calculi, the surfaces so moulded and fitted to each other, as to give to the touch the impression of a single solid mass.

The patient used to suffer, at intervals, the most excruciating pain; especially during the passage of gall-stones into the intestines, and this was usually attended with jaundice and other hepatic disorder.

In such cases, strict attention to regimen and diet should be enjoined; the food should be light but nutritious; the patient should abstain from all rich and fat meats, pastry, doughy puddings, and as far as possible from spirituous and fermented liquors. By carefully observing these rules, a person may live for many years, though he may have little liver remaining. But if those who are afflicted with serious disease of the liver will still persist in indulging in the pleasures of the table, and will

continue to violate those rules laid down for their guidance, they will speedily bring existence to an end, and perish in the extreme of emaciation and misery.

A gentlemen consulted me some time ago, suffering very severely from an affection of the liver, and for which, for several years, he had been taking almost every kind of medicine, without much benefit. I had every reason to believe, that this patient would never perfectly regain his health; yet I felt sure that much relief might be derived from the proper use of warm baths, dry cupping, and the external use of nitromuriatic acid. Friction to excite the skin, light nutritious unirritating diet, the occasional use of a pill, composed of aloes and rhubarb, horse-exercise, and residence in a dry pure air; were the means which seemed best suited to prolong life. He pursued the plan proposed for about five months; and in a note, which I received from him in the interval, he stated:—"the action of my bowels is now regular and nearly natural, and I very rarely experience the sickness after food; I gain strength every day, and I can sleep the whole night without being troubled with either sickness or nausea; I am gaining flesh; can walk a long distance without feeling fatigued, and I am not without hopes that I shall soon be quite well, and able to resume my practice."

This gentleman continued to improve; but a few months after this period, being solicitor to a railway company, he dined at several public dinners, and indulging rather freely in the pleasures of the table, drank too liberally of wine and spirits, and died, after six weeks' severe illness, greatly emaciated.

Although I am satisfied that this patient would never have reached a mature old age, yet I am convinced he might have lived for many years, had he conformed to

the dictates of common sense, and attended strictly to the directions given him.

A patient is now under my care suffering severely from nervousness, lowness of spirits, and great despondency, which the yellow tinge of the conjunctiva; the harsh, hard, dry state of the skin; the feeling of uneasiness after food, frequently attended with vomiting, and the clay-coloured stools, enabled me at once to refer to congestion of the liver as the cause. This gentleman had been under medical treatment for a considerable time, and had consulted some of the most eminent men in the profession, who all prescribed a variety of means — yet strange, as it may seem, notwithstanding the dry, hard, harsh and inactive state of skin, the use of the warm bath — so powerful a means of promoting the action of this organ — had never been, even once, suggested to him. He has resorted to its use, and his health is steadily progressing. Warm bathing, and dry cupping, evidently were the means of the improvement; and I have every reason to believe that the patient will perfectly recover.

It should be remembered, that when the blood is impeded in its course through the lungs, or when an impure and vitiated air is breathed, the venous blood does not become properly oxidized, and is not converted into pure arterial blood; the consequence is, that the face and skin assume a dark or purple hue. But should the circulation of the blood, through the liver, be obstructed, the portal blood, not being thoroughly freed from the principles which enter into the composition of the bile, entering, in this impure state, and mixing with the general circulating mass, contaminates the whole, and the skin becomes yellow. Acids, more especially the hydrochloric, and better still the nitro-hydrochloric, both

internally administered, and externally applied, I have found beneficial in such cases. Taraxacum may also be taken with great advantage. The body should be cased up to the neck in flannel, and frequent recourse had to the warm bath,

But we should be very careful in distinguishing between apparent and real hepatic disease. We are too apt to resort to calomel and opium, without due consideration of all the circumstances. I have seen many cases in which patients have been repeatedly salivated, when it would have been better to resort to other means.

Since the former edition of this work, my attention has been directed to many cases of disorder of the liver, producing severe nervous derangement, with such peculiarities, resulting from climate, that they are deserving of especial notice. During the last twelve months, several cases from the Brazils, have been under my care, all possessing certain peculiarities, which, if they are found to be constant, may distinguish the disorder as "The Brazilian Liver." One of the patients, I refer to, had resided some years at Rio Janeiro, another was from Bahia, and a third from Pernambuco. They all suffered from inflammation of the duodenum, accompanied with uneasiness after taking food. At the time the last named gentleman was under my treatment, his usual medical attendant at Pernambuco happened to be in England, and was induced to come to London, in order to see the method of treatment adopted with his patient. From him it was I learnt, that the symptoms, which were so forcibly attracting my attention, were very common in the Brazils. Whether the affection of the duodenum is referable, as I am inclined to suppose, to the administration of large doses of calomel, or whether it is to be referred entirely to the climate,

I hope to learn from an intelligent surgeon, who has recently gone out from England to attend upon the staff, employed under a friend of mine, in executing the contract for the construction of the Pernambuco Railway. The attacks appear to me to arise from the sudden change of temperature in that country. The action of the skin being suppressed by the sudden check of perspiration, the liver becomes affected, and inflammation, attended with biliary diarrhœa, sets in. To give relief, very large doses of calomel are administered, and frequent bloodletting resorted to. I cannot help thinking, that if the vapour-bath were used, (a ready form of which can be so easily contrived by means of a lamp and a blanket), the action of the skin would be restored, the congestion of the liver, and the irritation of the stomach and bowels at once relieved, and the great nervous depression would be prevented.

Sickness, two hours and a half after meals, great irritability, and nervous trepidation, attend these cases. The cause of this, is, no doubt, the passage of the food through the inflamed and irritated duodenum, into the bowels: for the unpleasantness always ceases after the food has passed through this portion of the intestine, and it is always decreased after a light unirritating diet, and increased by any indulgence in indigestible food. It is difficult for such patients to refrain from eating. The appetite is often so keen, and the feelings of exhaustion and debility so great, that large quantities of animal food seem to them the only means of securing strength. If this be permitted, the debility is sure to increase. The solid food irritates the bowels to such a degree, that severe diarrhœa is the result. The best treatment, I find, is, to wash the body all over, every night, with warm water, and common yellow soap, to use hot

fomentations over the colon, dry cupping, and farinaceous diet, and to pay great attention to clothing. Much exercise must not be allowed. When the irritation in the colon has been subdued, the diet may include chicken, and game, as well as the farinaceous food; and if the chyme pass into the duodenum without irritation, small quantities of animal food, may be taken, and moderate exercise. Violent exercise, so as to bring on exhaustion, must be strictly prohibited.

These cases are difficult to cure, and great care in diet should be continued, even after health has been restored.

The marshy swamps of China send their peculiar form of liver disease, which is not unfrequently followed by diabetes.

The climate of Bombay furnishes peculiar instances. Two gentlemen recently sent to me by Dr. Yait, of Bombay, had the lungs greatly implicated, but the duodenum and kidneys appeared to be in no way affected.

Some cases from New York have been marked by eruption on the skin. Thinking that this might be the result of accident; I inquired of Dr. Bower, of New York, who visited England a few months ago and called upon me; he informed me that it was a very usual complication of liver affections in that climate. From the prescriptions shown to me by these patients it appeared that arsenic, as well as mercury, had been extensively prescribed; and I am inclined to believe, that the remedy had a great deal to do with the eruption.

The Mauritius, also, has its phases of liver complaint. Three instances recently under my care, were attended with elephantiasis of the scrotum; in one case the scrotum was almost as large as the head of a child. The swelling was greatly reduced by the external application of esprit

de tan and camphorated spirits of wine. Small doses of iodide of potash and cod liver oil were, at the same time, taken internally. The gentleman after a short time being obliged to leave England for the Cape, I am not able to say how far the treatment succeeded. I gave him a letter of introduction to an eminent surgeon practising in the Colony; and from him I hope shortly to know the result. This was one of the worst cases I had ever seen; the other patients soon recovered under the treatment; but their disorder was not of so severe a character.

In some of the forms of liver affections, effects diametrically opposite are produced by similar causes. For instance, I have known the whites of the eyes and the skin become perfectly yellow in two days after the patient had sustained a severe pecuniary loss. The bile, in this case, instead of being poured into the intestine to prepare the food for nutrition, is absorbed and circulated in the blood; the bowels, which before were regular, become constipated; the motions are white; the skin is hard, dry and rough, like parchment; the urine is deeply coloured, and of a high specific gravity; there is severe head-ache, loss of sleep, and defective appetite. In other cases, mental depression has the contrary effect; then the bile is secreted in large quantities, and of an unhealthy character, causing griping and violent purging; there is great heat and itching at the anus, which are often relieved by bleeding piles; the skin, instead of being yellow is transparent; the urine generally copious and of a low specific gravity; the tongue red; the appetite depraved.

In the former case, the liver is extremely torpid; in the latter, it is in the opposite state of activity. In both cases, the patients are said to be bilious, and are treated precisely alike. Mercury is generally prescribed, but not, according to my experience, with that success which the followers of Abernethy would induce us to believe.

Persons who suffer most severely from nervous disorder, in which the lungs are implicated, are mostly of the sanguineous temperament; some however, though less frequently of the nervous, and occasionally even of the lymphatic. In these cases, the countenance is generally pale, the cheeks full, the nose and upper lip tumid. If the complexion is dark, the skin is in most cases sallow; but if fair, it has an unnatural white and waxy appearance. The veins are full, the eyes are large and prominent, and the eye-lashes long. There is usually a very placid and serene expression of countenance, and when the temperament is purely sanguineous, and the patient a female, there is remarkable beauty of expression. The head, generally speaking, is large in proportion to the trunk, which is often small.

The circulation is for the most part languid, as indicated by the weakness of the pulse; and the extremities are cold. The functions of organic life are all performed more or less imperfectly. Those which are immediately connected with nutrition, and more especially the digestive powers, are evidently seriously deranged.

Indeed the process of digestion is always affected to a greater or less extent, being either too slow or too rapid, or depraved, giving rise to the formation in the stomach or duodenum of principles, which cause great uneasiness and distress to the unhappy sufferer. The bowels are irregular in their action, and the evacuations are of an unhealthy character.

In like manner, the functions of the skin are almost always disordered; the skin itself being either lax, soft, and flabby, and constantly bedewed with a sort of clammy moisture; or, on the other hand, harsh, dry, and rough, and frequently covered with eruptions which are usually of a scaly character. The insensible perspiration is

defective, but when it is sufficient it merely deposits upon the surface the cold clammy moisture just noticed. It is, however, generally deficient. Partial perspirations are nevertheless not uncommon. These occur more particularly upon the feet, emitting a peculiar fœtid odour.

The tongue is redder than is natural, especially on the sides or margins, and the extremity or tip, where it is thickly studded with small red spots of a bright colour, peeping through the white fur with which the tongue is encrusted. In the first part of the morning, the coating is dry and brown, but after a time it assumes the appearance just described.

The appetite is very irregular and capricious. Sometimes there is a great desire for food, and at other times as great a distaste for it. The breathing is hurried, and the breath exhales a very faint disagreeable odour.

The bowels in most cases are relaxed, although sometimes they are confined; the evacuations are clay-coloured, often mixed with mucus, and contain crude or imperfectly digested food. The patient complains of clammy moisture in the palms of the hands, as well as on the soles of the feet, and even general and copious night sweats are not uncommon. The sleep is very seldom sound, and is disturbed by dreams; the patient awakes unrefreshed; and throughout the whole of the day he feels disinclination for the least exercise. There is also considerable morbid sensibility or irritability of temper, which is better expressed perhaps by the term "peevishness." The intellect is precocious, or early developed. Young persons in this state are very quick and intelligent.

It will generally be found, on inquiry into the patient's history, that an hereditary predisposition to consumption exists in his family. Should this not be the case, I have found that at some period of his life, he has

suffered from inflammation of the lungs; or has perhaps been fed upon improper diet, or has continually breathed an impure atmosphere, or has taken little exercise; or his clothing has been insufficient; or there has been a total disregard of cleanliness, and an immoderate indulgence in the use of ardent spirits. Or the patient may have been imperfectly cured of some syphilitic affection, or have been harassed by violent and depressing passions of the mind; or have suffered much and frequently from grief, disappointment, and anxiety. Or perhaps the constitutional powers may have been greatly impaired and reduced by dysenteric purging, or by other continued but unnatural discharges; or by lying in damp beds, or putting on damp clothes.

If these symptoms be neglected, and the causes which facilitate their advance and increase be not removed, cough will speedily supervene. The cough is at first, generally very slight, appearing only early in the morning or on first awaking, and hence often escapes any notice. After a while, however, it recurs at other times during the day, and the breathing becomes much shorter. To this succeeds expectoration, at first slight, but gradually increasing; and in this state the patient may remain stationary for months, neither getting much worse nor improving.

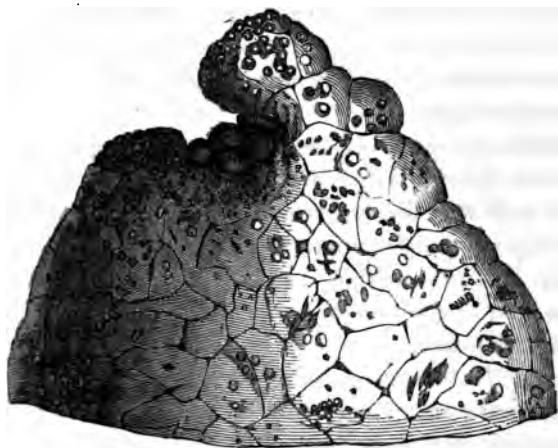
Slight exposure to cold, or some imprudence, or some abrupt and sudden change in the weather, will suddenly cause pain in the chest, at first occasional, but at last fixed and permanent, attended with a sense of constriction, and a difficulty or shortness of breathing, followed by a great deal of nervous excitement.

The circulation then becomes hurried, more particularly after a repast. Shiverings are frequent, and the extremities, especially the feet, cold. Reaction at length

succeeds, and there is a sort of feverishness of the remitting character, and the palms of the hands and soles of the feet, though generally burning hot, are found at night bedewed with a cold clammy perspiration.

The patient next morning awakes languid, feeble, and unrefreshed; and still such persons frequently change so much in appearance, and so often during the day, that they would hardly be recognised for the same individuals.

Fig. 5.



Thus, they appear ill and languid during the morning; but towards evening, or after slight exertion, or any excitement, the complexion becomes clear, and the appearance animated, with such a beautiful bloom upon the cheeks, that to the unpractised eye the patient seems to be in the best health.

If, however, the case be now carefully investigated, in all probability the lungs will be found to exhibit phenomena indicative of some mischief. The woodcut (fig. 5)

taken from Laënnec, conveys a good idea of the appearance and state of the lung at this period.

Tubercles may remain in the lungs for many years without doing any injury, provided the lungs be not inflamed; and thus, softening and cavity be prevented. Many remarkable instances of this kind have come under my immediate attention. One I may mention, which has been brought to my mind by meeting the patient's brother the other day, in travelling. The gentleman, born of healthy parents, was of the sanguine temperament. After a very anxious life in London, his digestive powers failed; he suddenly lost flesh; his bowels were irregular, and the motions of a very unhealthy character; his skin was soft and flabby, and perspirations were frequent; his forehead was covered with an eruption; his hands and feet were bedewed with moisture emitting a fœtid odour; his mouth was parched, and there was great thirst and craving for food, which never seemed to supply nutriment; the breathing hurried, attended with a constant feeling of uneasiness at the upper part of the chest; the sleep seldom sound, never refreshing, and invariably disturbed by dreams. Although this patient was naturally of a very active mind, and fond of business, he felt great reluctance to engage in it. Exertion always exhausted him. His temper was irritable and his pulse quick, generally ranging above a hundred. Previously to his illness, he had lived, for some years, in an unhealthy part of town, indulging freely in wine and tobacco. At this period he became subject to cough. At first it occurred only on his awaking; but after a slight cold, it became habitual, accompanied with considerable mucous expectoration, and the vomiting of a large quantity of arterial blood. He complained much of being always cold, but at night the soles of his feet and the palms of

his hands were in a burning heat. In the morning, they were covered with a cold clammy perspiration. Upon examining the right lung, there was dulness on percussion, the respiratory murmur was inaudible, and the apex of the lung was evidently inactive; but there was no softening, and not the least sign of a cavity. At this time he was living in a close ill-ventilated apartment, with every means used to prevent the possibility of his catching cold. He was taking opiates to relieve the cough, purgatives to act upon the bowels, tonics to regulate the appetite, and nightly draughts to produce sleep. My advice to him was to remove at once to a more healthy locality; to procure a well-ventilated dwelling, having a southern aspect; to pay great attention to the condition of the skin; to apply counter-irritation to the chest, mustard poultices and hot fomentations to the stomach (being careful not to allow any evaporation during the fomentation); to discontinue the use of port wine, and everything of a stimulating character, and to take a light nutritious diet. This treatment speedily relieved many of his inflammatory symptoms. He was then recommended a more nutritious diet, and exercise proportioned to his strength. All medicines of an irritating kind were discontinued, and as he improved, the fomentations were reduced in temperature, and cold bathing was substituted. He then left London for the country, where he remained some months, following the instructions I am inculcating; and at the same time amusing himself with agricultural pursuits. His brother assured me that he was now able to follow his business, and that he had been quite well ever since he returned—a period of eight years.

If the condition of the lung be clearly ascertained and understood, and appropriate means adopted for the re-

moval of the affection, under favourable circumstances the patient will be thoroughly restored to health. But if, as too often happens, valuable time is lost, and the condition of the patient is overlooked; or, if he is looked upon and treated as a nervous dyspeptic or hypochondriac, the disease will most assuredly advance. The expectoration, instead of being white and transparent, will become mixed with white *curdy* matter. It will assume a pale yellow colour, and occasionally appear streaked with blood. The cough will become more severe and troublesome, and the night sweats will be constant and profuse.

At this stage of the disease, the breathing is more hurried; the nervous excitement more constant, and the pulse more frequent; the strength fails; the muscles become flabby and lax, and considerable *emaciation* ensues. The patient is little disposed to any exertion or exercise, and feels exhausted by the slightest effort. Nervous pains, as they are called, are felt in different parts of the chest; or sudden and violent pains which instantly stop the breath, known by the name of "stitch in the side" frequently attack and greatly distress the sufferer. This is often produced by tubercles situated in the substance of the lung. Such persons become highly sensitive and nervous; the least disturbance or excitement, especially if sudden and unexpected, produces the greatest agitation. Under such circumstances there is frequently copious expectoration mixed with blood; and large quantities of blood are often coughed up.

If one lung only be affected, or one much more severely than the other, the movements of the chest, if exposed to view, will at once disclose to the experienced eye the lung which is most diseased, and the side of the chest on which there is the greatest amount of mischief. On the

healthy side the ribs will rise and fall regularly during respiration ; whereas on the more diseased side, they will be comparatively motionless.

But if the attention of the practitioner is directed to the removal of the effects, instead of the causes ; if he looks merely to allaying the cough, and combating secondary affections, the opportunity of re-establishing the health will be absolutely lost. When what is termed the third stage of pulmonary consumption is once fully established—indicated by the *night sweats* becoming profuse ; the bodily strength fast declining ; continued and exhausting purging ; *copious perspiration* ; incessant hacking cough ; constant pain or tightness of the chest, attended with shortness of breath—all hope of recovery is at an end. No one possessed of even the most limited experience, could hold out the slightest expectation of a cure. All that can be done is to alleviate the pain, and soften down, as far as practicable, the patient's suffering. The lungs in this stage frequently contain cavities, and pectoriloquy is audible in them both ; and they are studded with tubercles, as shewn in fig. 6.

Fig 6.



In the treatment of this class of nervous disorders, in which a principal feature is the implication of the lungs, it is absolutely necessary to search out the cause and remove it. When they arise—as too often hap-

pens in a dense metropolis like London—from an impure and vitiated atmosphere, we may as well expect, as Combe very appropriately remarks, “a fire to burn without air, or a fish to live out of water,” as a patient, under such circumstances, to recover, while the cause remains in uncontrolled and active operation. Yet seldom do we observe these points attended to in practice.

When it was the custom to bring up pauper infants in the London Workhouses, where the air was contaminated and extremely impure; of two thousand eight hundred of the children annually received into these establishments, two thousand six hundred and ninety died within the year;—a fatality almost incredible. This great and extraordinary mortality at last attracted the notice of parliament, and an act was passed, making it compulsory upon the *parochial authorities* to bring up the children in the country; and in consequence of this salutary enactment and its provisions, the mortality fell from 2600 to only 450 in the year.* Facts like these ought to be sufficient to impress the mind with the absolute necessity of securing a regular and sufficient supply of pure fresh air, as one of the principal and most powerful agents in the treatment of these affections; and that we should not, in spite of such evidence, trust to the influence of medicine alone.

Let it ever be remembered, that from twenty to thirty cubic inches of air enter the lungs at each inspiration, and that the average number of respirations in health may be considered as varying between fourteen and twenty in the minute. With this large consumption, there is effected at the same time a considerable vitiation of the contiguous or surrounding air; which takes place to a greater degree

* Combe's Physiology p. 67.

when the lungs are diseased, and the number of inspirations in a given time are increased.

The unprofessional reader will be surprised to learn that a single individual in health requires from sixty to one hundred cubic inches of oxygen per minute, to effect the decarbonization of the blood and fit it for the purposes of life. It must therefore be of the greatest importance, more especially during disease, that the atmosphere, so essential not only to health, but even to life, be pure and unadulterated.

Pure atmospheric air, consists of a mixture of oxygen and nitrogen, in the proportions by measure of twenty-one parts of the former to seventy-nine of the latter; to which may be added a mere trace of carbonic acid gas. But in ill-ventilated apartments, or crowded rooms, the relative amount of carbonic acid gas is greatly increased. Animal respiration, is itself a fruitful cause of the deterioration of the air. The inspired air, when emitted from the lungs, is found to be altered in composition and properties. The bulk of the air, emitted during expiration, very nearly equals that of the air taken into the lungs during inspiration; but on comparing the analysis of the air before inspiration with that of the air when expired, we find a marked and important alteration.

It has been already stated that pure atmospheric air consists of twenty-one parts by measure of oxygen, and seventy-nine of nitrogen. When emitted from the lungs after expiration, it is found to have a very considerable portion of its oxygen converted into, and replaced by an equal volume of carbonic acid gas; nearly $\frac{2}{3}$ ths of the oxygen disappear and are replaced by their equivalent of carbonic acid gas. This is the effect or change wrought in the air by one single respiration. If the same air continues to be breathed again and again, the

quantity of oxygen is still farther reduced, and the amount of carbonic acid is increased at each succeeding expiration. If the amount of this gas be permitted to reach to from eight to ten per cent, the air, so contaminated, will be no longer fit for the support of animal life; and persons breathing it will die with all the symptoms of narcotic poisoning. This is what actually occurred in the black hole at Calcutta. Too many persons were crowded and huddled together in a small close ill-ventilated apartment, and the following morning told the melancholy tale. On the guard's opening the doors, it was found that by far the greater number had perished during the night.

The lungs, in health, take in nearly eighteen pints of air each minute, and in the same space eight pints of blood are oxygenated, purified and fitted for the purposes of circulation and the support of animal life. In cases of disease of the lungs, we cannot too strongly enforce the necessity of taking especial care that the atmosphere which is breathed be as pure as possible, both night and day. If it is deteriorated, the lungs will be irritated. The apartment should be well ventilated, and the bed should be without curtains.

It is quite impossible to cure a patient suffering from disease of the lungs by any treatment whatever, if he be permitted to continue breathing an impure and vitiated atmosphere. We may as well expect to draw blood from marble, or sustenance from stones, as to eradicate consumption, while these principles of physiology and pathology are disregarded.

We learn from the researches of Farre, that in the year eighteen hundred and thirty-eight, fifty-nine thousand and twenty-five persons died of consumption in Great Britain alone; and it has been inferred that ninety thousand persons annually fall victims to this scourge, throughout the United Kingdom.

It is evident, if we look into the vegetable kingdom, and it is a fact tolerably well known and familiar to the experience of all, that plants will not bloom, flourish or live, if they are deprived of those essential stimulants, light and air; and if any portion of the functions of their respiratory system be interrupted, or suspended, they will soon wither and at length die. It is really surprising, that such analogies should pass unheeded.

There is another very prolific source of nervous disorder to which I wish to draw special attention. Ladies suffer from every variety of nervous derangement and confirmed ill health, entirely referable to their impeding or preventing the supply of oxygen requisite to support life in its due degree of vigour and activity. Many of them inform me that they have consulted the most eminent medical men in the metropolis, who must have observed that much, if not all, their misery was entirely owing to tight-lacing. Yet, strange as it may appear, none thought it necessary to insist on the removal of the cause; so difficult is it even for men of the highest repute and authority, to make innovations upon prejudices and long established habits and customs.

The annexed drawings p. 39 (copied from Erasmus Wilson's work) Fig. 7, illustrates the baneful effects produced by the mechanical action of tight-lacing, unhappily so prevalent amongst females. Fig. 8 shews the outline of the healthy-formed chest, unaltered by mechanical or artificial compression. Fig. 7 shews the melancholy contrast, the capacity of the chest permanently and irreparably contracted and distorted by indulging in the practice of tight-lacing. Hence there is no possibility of amplifying the chest or inflating the lungs. The skeleton from which the drawing is taken is still in existence and presents a hideous picture. A frightful

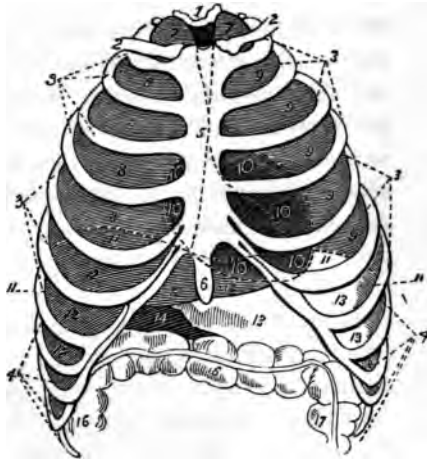
deformity of what was once perhaps beautiful and the object of admiration.

It may then be reasonably asked, How can it be expected that persons who so distort themselves should enjoy good health, while they thus forcibly prevent the

Fig. 7.



Fig. 8.



The figures relating to Diagram 8 shew the positions that the lungs, the liver, stomach, and part of the bowels ought to occupy, when the patient is well formed and healthy, and we need not be surprised if, when they are compressed, they cease to perform their functions healthily.

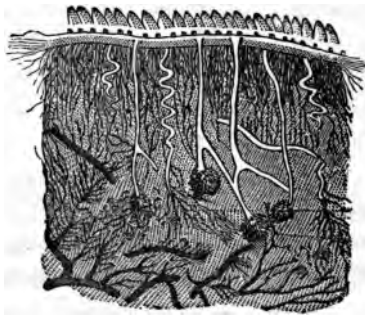
ingress of that amount of atmospheric air so essential to the purposes of life, and so necessary to maintain the due degree of health and vigour?

If further evidence is necessary of the evil results of an insufficient, or an impure supply of atmospheric air, and of its sure efficacy not only in disposing to, but actually bringing on, consumption, it will be found in the

well known and established fact that tubercles in the lungs, the cause of consumption, can be induced to almost any extent in different animals, *e. g.*, monkeys, by forcing them to breathe a close and impure atmosphere.

Another fertile source of nervous disorder, and one greatly neglected, is inattention to the skin, which performs a very important part in the animal economy. Inattention to its secretion is always attended with more mischief than can at first sight be well imagined by the unprofessional reader. There is a large quantity of waste and effete material which it is necessary to remove from the system, and which, if retained, or but partially removed, proves injurious to animal life. The skin — a diagram, of which (fig. 9), copied from Combe, is here subjoined — is an organ intended to exhale, and relieve

Fig. 9.



the general system from a number of effete principles. This is effected through the medium of the insensible perspiration. The vapour, thus exhaled through the skin, becomes in part absorbed by the dress, and in part is carried off by evaporation, and diffused through the surrounding air. The extent and amount of insensible

perspiration, is rendered quite evident, in what is termed a "muggy" day, when the atmosphere is already overcharged with moisture. Such an atmosphere will not absorb any more moisture. Evaporation, consequently, ceases, and the perspiration, not being carried off, condenses upon the surface. Hence it is that an animal, in such a state of atmosphere, will sweat profusely on slight exertion; and it is also on this account, that in marshy damp localities, where the atmosphere is continually surcharged with moisture and various exhalations, consumption, and nervous affections, are generally prevalent.

The exhalation from the skin consists of a complication of materials. These, frequently, become condensed, and deposited upon the surface of the skin, forming a layer or incrustation, which clogs and closes up the pores, and is productive of much mischief, and serious injury to the health, especially where there is any tendency to consumption.

According to the experiments of Lavoisier twenty ounces of waste material pass out through the skin every twenty-four hours. But, during severe exercise, when the action of the skin is greatly increased, the quantity thrown out is largely augmented.

In the treatment of nervous affections, especially when complicated with consumption, it is of the greatest importance, that the functions of the skin be kept in a free and healthy state. We must ever remember, in treating affections of the lungs, that the skin, the liver, the kidneys, and the lungs are the four great purifying organs, and are the media, through which noxious matters are thrown out from the system; if one of them, therefore, be disordered and enfeebled, it is the more necessary that the others should act vigorously, and per-

form their functions well, so as to give the weaker organs less to do.

The skin, as I have already remarked, is an exhalant organ, and therefore conveys effete matter away from the system. It also absorbs and takes up matters applied to its surface, and conveys them *into* the system. Thus mercury, cantharides, and various other agents, applied to the skin, are taken up, and, as is well known, produce their specific effects upon certain parts of the frame. So the noxious principles separated and thrown out by the skin, if, instead of being washed off by regular and sufficient ablutions, they be allowed to remain and accumulate upon it, will be reabsorbed, and taken back into the circulation. They thus poison the blood, and give rise to various and severe disorders.

Few persons, who have not paid attention to this subject, would credit the relief, that may be obtained by the regular use of the warm and tepid bath, cold sponging, and friction of the skin, in the treatment of nervous disorders, when the lungs are implicated. I have treated some thousands of cases of nervous affections, many of which had been the round of the profession; yet, I have been surprised, and feel reluctant to state, how few had been recommended to adopt the sanatory measures herein inculcated. It is surprising, that even the patients themselves should be so indifferent to such obvious means of preserving their health. I am satisfied that not one of them would have kept a groom a fortnight, who omitted to cleanse the skin of his horses, for experience has taught us that, whatever be the nature or excellence of their food, animals will not thrive if this principle be neglected. Strange then that man should so carefully watch over the health of his beast, and yet prove so indifferent to his own.

Having then taken care to see that the patient is placed in a pure and wholesome atmosphere, and adopted means for securing the proper and healthy action of the skin; and having enjoined that the diet is sufficient, plain, nutritious, unirritating, and suited to the circumstances of the case; we must next direct attention to the clothing, and see that it is properly adapted to the climate and season of the year, so as to maintain a natural, healthy, and equal temperature of the body. Having ordered the kind of exercise best suited to the circumstances; having prohibited the immoderate or injurious use of ardent spirits and other stimulants; having carefully examined for and removed any syphilitic taint, if such should be found to exist; having made every effort to remove depression of the mind, whether caused by grief, or unnatural discharges; I then carefully inquire into the condition of the alimentary canal and the functions of digestion.

I agree with Sir J. Clark, that consumption is very frequently produced at the onset by a disordered stomach, which if we neglect, all means are certain to fail. This must be evident from the fact, that every part of the human body depends upon the stomach for nourishment. In a deranged condition of the stomach, the digestion is impaired, and the chyme, which is absorbed by the lacteals and taken into the veins, is deteriorated in quality, and when poured into the heart, and sent thence into the lungs, does not properly perform the function for which it was intended, and the weak organ naturally suffers. If it be the lungs, tubercles will be formed in them, and if the vitiation of the blood be continued, they will inflame, soften, and break down; or cavity will result, and then no treatment can avail. Should the lungs escape, and the brain be exhausted through incessant

mental toil, the head will suffer. There will be a constant pain in the head, tenderness of the scalp, a feeling of giddiness, deficient memory, flashing before the eyes; a sense of dull lethargy, heat at the top of the head, a tightness, like a cord binding, as patients sometimes tell me; and all those symptoms, which differ in different individuals, and which are too many and too minute to describe. If the head and the lungs go unscathed, the liver may become the seat of mischief. Then there will follow all that group of signs, which mark diseased liver. Perhaps the heart is the weak part. Then, palpitation, and an irregular, intermittent pulse, plainly indicate heart-disease. If neither the lungs, the head, the heart, nor the liver be affected, the evil may settle on the skin in eruptions, which are always difficult to remove; or the kidneys may become seriously implicated and diabetes supervene, a disease invariably springing from a faulty digestion; or we may have degeneration of the kidney with albuminous urine, or stone in the kidney or bladder. All these effects result from a vitiated state of the blood, occasioned by disordered digestion. Suppose two men were to receive precisely the same kind of injury upon the finger, the one a farm labourer having keen digestive powers, and the other a brewer's drayman in London with weakened digestion. In all probability, the labourer would recover in a few days with only the loss of his nail. Healthy blood would, in his case, be at once sent to the part to repair the injury. But the brewer's drayman, with his impoverished and impure blood, would be crippled for months, and the accident would in the end, probably, cost him a portion of his finger. It is similar in all cases. Without the formation of good blood, all means used will be futile. The stomach, then, ought to receive the first attention.

When the stomach is in a state of great irritation, indicated by a red tongue, I have found much benefit arise from hot fomentations. A towel should be well wrung out of hot water, and placed over the pit of the stomach, and covered with gutta percha, to prevent the slightest chilliness. This application ought always to be made, when the stomach is empty. It may be continued with advantage two or three times a-day, until all irritation has ceased. The diet should be plain, simple, and un-irritating. Animal food ought to be given cautiously, and always decreased in quantity, if after it is taken there follows oppression. Wine and all stimulants should be strictly forbidden.

Cod-liver oil is a most valuable remedy in consumption, but the administration of it requires care. It ought never to be prescribed when it produces constant eructation, or causes pain and oppression of the stomach. Under such circumstances, instead of strengthening the patient, it only irritates the stomach, and bowels, and does mischief.

The condition of the chest may often be relieved by the following prescriptions:—

- R.—*Olei Morrhuæ* ℥vij
Sum. Cochlear.; amp. ̄. *Mistur.*
Sequent Cochlear. i larg.
- R.—*Acid. Phosphoric dil.* ʒij
Tinct. Calumb. ʒss.
Syr. Zingiber ʒvj.
Infus. Auran. C. ʒviss.
- R.—*Morphiæ Acet. grij.*
Mistur. Acaciæ.
Glyccirhin. purif. aa ʒj.
St. Cochlear. min. urgent tussi.
- R.—*Acet. Cantharid* ʒj.
Mistur. Camphor ʒss.
ft. Liniment Pectori applicand.

In the treatment of consumption, as in all other diseases, I cannot believe in the infallibility of any one particular remedy. I have tried all the means so much extolled by their several advocates, and have been disappointed. Consumption, when it has reached the third stage, is incurable. In the earlier stages, it may be prevented; but this will certainly not be by a round of drugging; such as opium to relieve the cough; vegetable or mineral tonics to improve the appetite; purgatives to act upon the bowels, and Dover's powder to induce sleep. The daily use of medicine, so far as I have ever seen it, indiscriminately administered, never fails to produce a disordered stomach, and thus the healthy formation of blood is prevented, the source upon which, after all, we have to depend for the re-establishment of the constitution. Medicine is, no doubt, a most valuable and necessary agent in its place. But it must be used with the greatest caution, and prescribed only when the necessity is imperative.

In the early stages of consumption, change to a warm climate is often beneficial. The place ought, however, to be selected to suit the patient. Many unfortunate persons are sent to Madeira, when it would be much better for them to remain at home. My friend Mr. Wollaston, and his companion Mr. Law, who have so highly distinguished themselves by their researches upon the Island—the former as a naturalist, the latter as a botanist—quite agree with me, that great care should always be taken before recommending patients to that climate. The atmosphere is moist, and only adapted to *certain* cases of pulmonic affection. Algeria, again, which has, on the contrary, a very dry air, is very beneficial in the commencement of pulmonic affections; but, in their advanced state, it greatly hastens the destruction of the

lung. Indeed, when consumption has arrived at the third stage, it is cruelty to send a patient to any foreign climate. He is sent there, in most cases, only to die. No benefit can result. He is deprived of all the comforts which an Englishman can only procure in England. Those even in good health do not find it pleasurable to live with limited means in a country where the language is unintelligible to them; and it must be worse when there is the additional grievance of ill-health. The annoyances which are continually occurring counteract any good effects the climate might have. Much, I believe, may be done in England by judicious management. Torquay, the south of Ireland, and the back of the Isle of Wight—except in a few rare instances where the patient is in very affluent circumstances,—will benefit much more than a continental residence.

There is a form of indigestion (for distinction's sake I shall call it mental indigestion) which is a most fertile cause of great nervous disorder, and which, if neglected, often produces tubercular consumption. The persons who suffer from it are always those who have had intense anxiety of mind from some cause. Some pecuniary loss has been sustained; shares in some unfortunate railway speculation have proved ruinous; some mining operation, or some joint-stock company has failed, and brought excessive mental worry. Merchants engaged in risky speculations, and tradesmen with small capital obliged to compete with millionnaires, are especially liable to it. The mind is so constantly upon the stretch, that there is no time allowed for the requisite sleep and meals. Exercise, enjoyment, and relaxation, are placed quite out of the question.

The symptoms attending this form of stomach derangement differ entirely from those occasioned by intemperance

in eating, drinking, and smoking. In the latter case, there is loss of appetite, a foul tongue, fœtid breath, constipation of the bowels, disturbed dreams, heavy and unrefreshing sleep. When over-taxation of the mental powers is the cause of indigestion the tongue is often clean, and red in colour, the appetite craving, the stomach subject to a constant sensation of sinking, which is relieved for a time by taking food and wine; the bowels, instead of being constipated, are relaxed; and sleep, instead of being heavy and oppressive, is disturbed by the slightest noise, and often a great portion of the night is passed in wakefulness. In consequence of the symptoms being so different from those which are generally believed to accompany stomach affections, the disease is mistaken, and medicines are administered which have no bearing on the case. In a practical point of view, it is of the greatest importance that the nature of the malady should be at once understood; for if a generous diet is allowed, and wine and spirits advised with a view to regain the failing flesh of the patient, the evil becomes greatly aggravated.

It sometimes happens, in these cases, that vomiting soon follows a full meal of condiments or nutritious food (which are unfortunately found to give temporary relief); and although the stomach thus indicates, in the plainest language it can use, that it is oppressed, patients will not obey its voice. I have seen instances in which it has been overladen for months and even for years, under the erroneous idea that a large quantity of food is requisite to restore strength. A gentleman came to me a few months ago, suffering from this form of indigestion. I had known him previously, and was much struck with his anxious, haggard, careworn appearance. He complained of great debility, headache, palpitation of the

heart, loss of sleep, and a constant dread that there was something unfortunate about to happen to him. His fretful impulsive desire to be always in motion was so great, that it was with difficulty I could induce him to remain stationary during the time he made me acquainted with his case. He informed me that he had been living in the country for some years on an estate left to him by an uncle, and had enjoyed excellent health until within a period of eighteen months before he consulted me. He had, in that period, suffered much anxiety in consequence of having agreed to be a director to a projected railway. The scheme had failed; and the worry occasioned by the law proceedings, and the difficulties in which he was becoming involved, disturbed his rest and brought on constant diarrhœa, with a feeling of emptiness and gnawing at the stomach. His appetite, previously, had been very moderate; but the debility and the stomach sensations induced him to take much more food than had been his custom. He felt obliged also to drink more freely of wine and spirits, expecting by this means to regain strength; but his digestion at length was so far impaired, that his stomach almost daily ejected the food. His skin became hard and dry; his feet were constantly cold; his eyes blood-shot; and when he came to me, the attempt to read and understand a leading article in the *Times* produced such a maddening headache, that he was compelled to desist. He could hardly read even his correspondence, owing to the unpleasantness caused by the black specks floating before his sight. The medicines which he had taken in the country had given him temporary relief, but they lost their effect; and the brandy and soda which he was taking, when I saw him, to counteract acidity and eructation, only caused the symptoms to return with in-

creased violence ; and he became, as he confessed, worse instead of better.

I endeavoured to explain to him that most of his suffering was occasioned by excessive irritation of the stomach, produced by taking food at a time when there was not gastric juice sufficient to act upon it. The blood, instead of being sent to the stomach to secrete the gastric juice, was retained in the brain, to enable him to think how best he could free himself from his difficulties. The food was consequently left in the stomach to decompose, and was either ejected by vomiting, or remaining, produced irritation, sinking, and oppression. Acting as an irritant, it created the desire for food and stimulants, which, when taken, added to the mischief.

I ordered a warm bath, and advised the application of hot fomentations to the stomach twice a day. Stimulants I desired should be entirely discontinued, and that the diet should consist only of farinaceous food. This was advice which was not easy to follow. The exhaustion which the patient felt was so great, and the impression that strength could only be regained by a large quantity of food so firmly rooted, that I had much difficulty in persuading him to act upon my directions. Fortunately he soon found the benefit. The warm bath procured him a good night's rest ; the farinaceous food prevented vomiting ; the fomentations to the stomach relieved the pain and lessened the desire for stimulants. For a time, until the digestion improved, carriage exercise alone was allowed. As oxalate of lime and lithic acid abounded in the urine, nitro-muriatic acid, as a near approximation to the gastric juice, was ordered to be taken an hour and a half after each meal. By this means, the patient was enabled to take strong beef tea. Walking

exercise was then allowed, but never so as to produce exhaustion. When the appetite grew more healthy, the diet included poultry and boiled mutton. The warm baths were exchanged for cold; the hot fomentations were continued, but care was always taken to apply them when the stomach was empty; the exercise was gradually and cautiously increased. Under the treatment, the patient steadily progressed in improvement. He freed himself from his anxieties by a settlement with his creditors, and he is now in his usual health.

I could fill a volume with similar cases, which occurred during the memorable railway mania and the recent monetary crisis. Many, unfortunately, did not terminate so favourably as the one just described. In several instances, the patients could not extricate themselves from their difficulties, and the mental irritation kept up the physical disorder. Others could not be prevailed upon to take less food and stimulants, because they found temporary relief from them in their exhaustion. When the mind and body are thus enfeebled, nothing but the resolution of a strong will can release the patient from the condition into which he is likely to sink. It is to be regretted that we have to contend not only with the patients themselves, but with their friends. They are falsely kind. They see them thin and emaciated, and urge the necessity of more food, and of a more nutritious character; forgetting that it is not the quantity taken, but the quantity digested, which gives strength.

I have been curious to enquire respecting patients who have consulted me for this class of nervous affections, and who have left me to place themselves under the care of others. Some have died from softening of the brain; others have fallen victims to consumption; the liver in others and become diseased, and dropsy has

terminated life; and many have left London, whose subsequent history I could never trace.

I quote a passage from the valuable work of Dr. E. Johnson, "The Domestic Practice of Hydropathy," which shows, that I am not alone in thinking that the emotions of the mind exercise a strong influence over the functions of the stomach:—

"Indigestion is a disorder especially belonging to an advanced state of civilised life. It must depend, therefore, upon that peculiarity, whatever it be, which distinguishes advanced civilisation from a more primitive condition. This peculiarity undoubtedly consists in the greater amount of brain-work, and brain-excitement, which results from a highly-artificial state of society. The employment of mankind is more intellectual; there is more study; more head-work of every sort, more anxiety, a keener sense of the moral responsibilities of all kinds; the sensibilities have a keener edge, and the moral emotions are therefore more easily and more frequently excited, and are more intensely felt; there is more pride; more envy, hatred, and malice; more ambition; more competition; more everything in the world to harass, worry, distress, excite, and depress the brain and nervous system."

Persons even in good health often suffer from indigestion. They have to pay the penalty for irregularities. Unwholesome food, or excess in its pleasures, or a too liberal enjoyment of tobacco, cannot long be continued with impunity. Furred tongue, fetid breath, constipated bowels, acrid eructations, and headache, are among the many results of indulgence. The occasional dose of blue-pill and the black-draught may give temporary relief, and the intemperance may be repeated, with nothing more than the inconvenience arising at the time; but it cannot become a habit without very pernicious effects.

When people live in an impure atmosphere, and in cases in which the constitution has been weakened by improper diet, bad air, inattention to the skin, and other exhausting causes, medicine alone, in my opinion, can never remove the evil. If purgatives are constantly given, constipation is sure to increase. I invariably find that the favourite dinner pill, and the morning tonic, and the daily purge, never fail to be regularly taken without great inconvenience in the end. I admit, that alkalies will counteract acidity, vegetable and mineral tonics will aid the digestion, carminatives will remove flatulency; and there are, no doubt, occasions when their administration is absolutely necessary. In the large metropolis of London, it often happens, that most important business must be transacted in a very limited space of time; and a person suffering from any disordered function must have temporary relief. Here it is justifiable to have recourse to such remedial agencies; but to persist in them for months, and even for years, is little short of madness.

There are many patients who suffer from an inveterate form of indigestion, who purchase largely for wholesale houses; and, unless they are possessed of great strength of purpose, it is almost impossible to cure them. The merchants from whom they buy are constantly tempting them to commit irregularities in diet, which it is difficult for them to resist, until at length their health gives way, and they are scarcely able to pursue their calling. I have often advised such patients change of air and sea-bathing, and have strictly enjoined for them a dietetic rule. This latter direction has been so neglected, and the benefit which I have expected to result has so seldom followed, that I now recommend them to one of the many hydropathic establishments. They cannot there eat indigestible food, for it is not provided; they cannot

indulge to excess in tobacco, because smoking is forbidden; they cannot drink wine, spirits, or beer, because these are not allowed; and they have, moreover, all the advantages which the invigorating influence of cold bathing is so well calculated to afford.

Sixteen years ago, opportunities presented themselves to me of observing the virtues of the water-cure. I was at that time no believer in its efficacy. But a few months' sojourn in Germany was quite sufficient to convince me that the system possessed some important advantages; and careful observation since has not tended to shake the opinion which I then formed. I am perfectly aware of the benefits to be derived from the inhalation of pure air, regular exercise, a suitable and well-directed system of diet, and thorough cleanliness of skin; and that these have as much, if not more, to do with the improvements which take place in the health under this treatment, than perhaps the purely hydropathic practitioner will feel disposed to admit.

Having already dwelt upon the advantages of diet, air, exercise, and due attention to the skin, it will be needless to refer further to these most important and essential elements of health. I shall, therefore, now confine myself exclusively to the inquiry, how far the use of cold water, both as an internal and external agent, is capable of preserving the health, and of restoring it when impaired.

If we had any doubt of the value of water, both hot and cold, as a sanitary agent, such doubt would be soon dispelled by examining the writings of the Greek and Roman physicians. These authors inform us, that baths, both hot and cold, were objects which attracted the anxious care and solicitude of the governments of their time. There can be no question that cold water, applied

in accordance with the rules laid down by hydropathy, will be found to modify, in a remarkable manner, the conditions of the human body, both in a state of health and disease.

If we look to one of the most serious, as well as one of the most perplexing diseases to which mankind is subject, we must admit that cold water is possessed of most powerful therapeutical agencies. The effects of cold dashing in arresting and cutting short typhus fever, even of the most malignant description, admits of no dispute. The reports of Dr. Currie, and of other able physicians who have practised this treatment, leave not the slightest room to question the results. It is unnecessary to enter upon all the precautions essential to secure the success of the practice. The object is not a special history, but merely an exposition of the use and abuse of a very powerful curative treatment. The only restrictions, or rather precautions, requisite in the application of cold dashing are, that the temperature of the body should be steadily above the standard of health; that there should be no feeling of chilliness; and the presence of no local affection of an inflammatory, congestive, or organic nature.

Water may be used as well internally as externally in the treatment of disease; and the question of its utility, as a remedy, has afforded matter for discussion in all ages, ever since the time of Hippocrates. Its external use in arresting fever has been already noticed. Its internal use is equally beneficial in the treatment of the same disease. Nature, by exciting certain sensations or feelings in disease, seems to create an appetite or craving, which prompts the sick to seek that which is best calculated to restore health. Thus, the insatiable thirst which attends fever, and the parched tongue which so

constantly prevails in febrile disease, impel the patient, as it were instinctively, to seek for drink; and there is no beverage on such occasions so agreeable as cold water, or so well suited to allay the cravings of thirst.

When there is much febrile heat, patients may drink copiously of cold water, not only with perfect impunity, but with great advantage. It quenches the thirst, reduces the febrile heat, dilutes the blood, and, when it has effected its purpose, passes off through the kidneys, carrying away with it a considerable portion of the morbid heat of the body.

Hydrotherapy recognises both these uses of cold water, and applies them as means of curing disease. There are various methods of applying cold water externally. Cold dashing has been mentioned. A more manageable method is found in what is termed "cold ablution."

Cold bathing is another mode, the nature of which is familiar to almost every one. A plunge into the sea is not often resorted to in disease; but it is of very general adoption as a means of improving health, and giving vigour and tone to the system. The sudden transition from hot to cold water is by no means a modern practice. The Romans used to induce or promote perspirations, by confining the body in the warm vapour from hot water; and when active perspiration was brought on, the individuals, while thus freely perspiring, were plunged into cold water. They used, also, when in active perspiration from laborious bodily exercise, to dive in this state into the Tiber, not only without any bad consequences, as we learn from the Roman authors, but with very beneficial effects.

Having thus far stated the general application of water, I shall next consider the hydropathic modes of employing it in the cure of disease, as practised by the disciples of Preisnitz.

One of the first principles of the hydropathic treatment is the regulation of diet. There is a strict embargo laid upon all stimulants. Every stimulating or exciting agent, whether of food, drink, or condiments, is rigidly prohibited. The meals are regular, and the diet is simple, but nutritious, without being irritating or exciting.

Water is next directed to be taken in quantities proportioned to the circumstances of the case. It is generally recommended to some extent before breakfast, and at other suitable periods after and before meals. The imbibition of water is so managed as not to interfere with, or impair, digestion. The exercise, which is arranged to follow immediately after drinking it, tends to prevent any evil consequences that might result from it.

A considerable amount of exercise, and of an active kind, when the patient is in a condition to bear it, is enjoined; and this is not only judicious, but essential to bring on the necessary reaction after the cold bathing.

The methods of applying water externally are the Shallow Bath, the Pack, the Dripping Sheet, the Sitz Bath, the Douche, the Plunge, and the Compress.

The Pack consists in wrapping the patient all round in a wet sheet, and covering him, so enveloped, with blankets, so as to bring on profuse perspiration. In this state he is generally left for an hour; and he not unfrequently falls asleep before the expiration of that period from the soothing and pleasurable sensation which he feels. Few who have not seen or undergone the process, would credit the extent to which perspiration is produced. It not unfrequently happens that several blankets are completely wetted through by the sweating of a person in what is termed the dry pack.

After remaining in the pack an hour, the patient is

taken out, and the body well washed in cold water, and subjected to friction with cloths, until it is quite dry and in a perfect glow. Then two or three tumblers of fresh water are directed to be taken, and a walk of half an hour, or an hour.

Packing I have found of great use to persons suffering from irritation in the stomach and bowels, brought on by a lengthened indulgence in wine and ardent spirits; or who have lived in a crowded metropolis, and been employed in some sedentary occupation. I have also seen it very efficacious in rheumatic gout, when there has been hereditary predisposition to the formation of lithic acid in excess, and oxalate of lime present in the urine.

The Dripping Sheet is generally used after packing, or as a substitute for a sponge bath. It is a sheet large enough to cover the whole body. It should be immersed in water, wrung out, and placed over the patient's shoulders. Friction should be used with it in abundance over every portion of the body, that a thorough reaction may be produced. The sponge bath in my opinion is preferable when it can be obtained; but the sheet is a good substitute. It will be found especially useful on the Continent, where a supply of water is procured under difficulties.

The Sponge Bath, needs no description. I find it an advantage to persons who have an objection to cold bathing, to rub the back freely with a horse-hair belt, and the body with flesh brushes, previous to taking the bath. The shock of the cold water is by this means much lessened, and the sensation rendered very agreeable.

The Sitz bath is frequently resorted to by the hydropathic practitioner. It is an ordinary hip bath partially filled with water, in which the patient sits for a period varied according to circumstances. Its use is productive

of considerable benefit, when there has been suffering from piles, leucorrhœa, or other local discharges. It has also an extraordinary influence in relieving severe headache; its effects, however, are not always permanent; still it is to be regarded as a valuable auxiliary in the treatment of disease.

The Douche may be compared to water forced out from a fire-engine; or, more appropriately perhaps, to a cascade, the water being so directed in this artificial cataract that it falls upon the part required. The height of the fall is regulated by the object to be attained, and varies from a few feet to several yards. When properly applied, it proves a remedial means of the greatest value; but when used improperly, I have seen it do much mischief.

The Compress is a cloth wetted thoroughly with water, and usually placed over the region of the stomach. The wet cloth is covered with another of linen, lined with a thin sheet of gutta percha. The lined side is placed next to the wet cloth, and the whole is secured by buckles or tapes. The gutta percha being impermeable to water, prevents evaporation, and so preserves the moisture and warmth of the part. I have used the compress very extensively in cases in which there has been severe irritation of the stomach, and constipation of the bowels; and I have found it one of the most valuable remedies in the treatment of these affections. As I have, for years, occasionally worn it myself, I can from personal experience attest its value; and strongly recommend it to those who require such a means of relief.

Many entertain that most mistaken notion, that the compress greatly increases the danger of taking cold. It is often, indeed, not without great difficulty that persons can be prevailed upon to try its efficacy. These appre-

hensions, however, are not only unphilosophical, but perfectly groundless. The cooling process, and the consequent danger of cold, consists in a very different mode of arrangement. The wet cloth in that case is exposed to the air, by which not only evaporation is allowed, but its amount is increased, its rapidity quickened, and as evaporation is always attended with reduction of temperature in the part, the temperature is reduced much below the natural heat. The compress, on the contrary, has a directly opposite effect; it confines the vapour, opposes evaporation, and thus secures the moisture, softness, and natural heat of the part. The most apprehensive, when once they have been induced to give it a trial, become very unwilling to discontinue it. They find, that the warmth and moisture attending its application relieve, in a remarkable degree, the irritation of the stomach. It often happens, that, after the compress has been used for some little time, numerous small red spots break out; and the appearance of this eruption is almost always attended with a considerable abatement of the symptoms.

Such are the means principally resorted to by the hydropathic practitioner. The cases in which I have found this system of treatment most beneficial, are those of patients who, for a series of years, have committed great excesses in both eating and drinking; those who are generally known as fast or free livers, and who have been in the habit of almost daily resorting to medicine. Literary men also, and inveterate smokers, are greatly benefited by it.

Hydrophathy, as a general principle, may be said to be safe. But there are cases, and these by no means few, in which its application would be extremely hazardous.

In numerous instances, which I have known, it has been most inconsiderately and injudiciously recommended;

and great mischief has resulted from the want of discrimination in its adoption. We should, therefore, employ and bring to our aid all the resources, which art and science have placed at our command, in acquiring a perfect acquaintance with all the circumstances of the case, before we advise a patient to submit himself to hydropathic discipline. It behoves the practitioner to ascertain the condition of the different viscera, more especially of the lungs, thoroughly to satisfy himself whether organic disease of any of these structures is present or not. I have no hesitation in saying that, if there be organic derangement of the structure of the vital organs, hydropathy, carried to its full extent, will prove decidedly injurious.

Every physiologist is aware, that, on the application of cold water to the skin, the blood immediately forsakes the surface, and is accumulated in the internal organs, leaving the skin pale, blanched, and cold. The accumulated blood acts as an irritant to the internal viscera, and is by them repelled and sent back again to the surface, giving rise to what is termed reaction, which is attended with that well-known pleasurable sensation, a glow. If any of the internal organs should be seriously diseased, the sudden internal rush of blood never fails to do mischief. I was personally acquainted with a gentleman suffering from tubercles, who was admitted into a hydropathic establishment. The system was immediately put in operation; but the first cold plunge brought on a severe attack of bleeding from the lungs, from which he never perfectly recovered.

In some cases, in which there has been a decided tendency to consumption, I have seen injury done by the hydropathic plan of treatment, when it has been incautiously administered. I have also had a gentleman under my care, suffering from organic disease of the kidneys,

which was greatly aggravated by sitting in the cold hip bath for half an hour night and morning, on the recommendation of a hydropathist. This shows, that the indiscriminate adoption of hydropathy, without any reference to the different susceptibilities is an abuse and perversion of the most common-place principles of therapeutics.

As an illustration of the ill consequences that sometimes follow an empirical adoption of methods of cure, without any regard to either the nature of the complaint, or its cause, I may mention the following remarkable instance.

A gentleman applied to me, some time ago, suffering severely from nervous disorder, which, upon investigation, was proved to be of a sympathetic or secondary kind, occasioned by an unhealthy drain upon the system, and requiring a local application to remove the cause. It was therefore arranged that the patient should come to London to undergo the necessary treatment. His friends, however, interfered; and by their persuasions, he placed himself in a hydropathic establishment of some considerable repute. Here, the gentleman charged with the professional management of the cases, promised this patient a certain cure within a specified time. The promise, however, unfortunately was not realised; and I have been informed that the disappointment so preyed upon the patient's mind, that, in a fit of despair, he committed suicide.

It is to be deeply lamented that more attention was not bestowed upon the peculiarities of this unfortunate case; and that the lights afforded by modern science were not brought to bear upon the development of its nature. Had the physician, who is a gentleman of considerable attainments, appealed to the *microscope* to assist him in the diagnosis, he would at once have

perceived, that hydropathy could not cure the patient. It is well known that, at best, it can only relieve; it can never effect a perfect cure in such cases.

In alluding to these circumstances, I by no means wish it to be inferred, that hydropathy is the only system in which we are doomed to suffer disappointment and failure. My endeavour is to show that we ought to select only that which is good and useful in any system; and condemn that which experience has taught us to be either dangerous or inefficient. I have witnessed very many instances of cure under the hydropathic treatment; instances too, which have resisted the most persevering application of all other means. I refer more especially to rheumatic and stomach affections.

If, as I have stated, only due care and discrimination are employed in the selection of subjects to be treated by it, we cannot, I think, value hydropathy too highly as a curative agent in disease.

Success in the treatment of nervous diseases must, in a great measure, depend upon our searching out, and, if possible, removing the cause. Thus, impure air vitiates the blood. If, therefore, the patient is confined in a close apartment, it becomes absolutely necessary, for speedy recovery, that he should breathe a pure atmosphere, and inhabit a large apartment with a free circulation of air. Again, when the skin is inactive, those emanations which should be removed through its influence, are retained; and good health will never be established while such a state of things is permitted to exist. Attention to the lungs and stomach, as well as to the skin, has been productive of the greatest benefit in the treatment of nervous disorders.

Nor are the lungs, stomach, and skin the only depurating organs, the functions of which exert a powerful in-

fluence not only in aggravating, but in actually bringing on nervous affections of the most serious description. The kidneys are the outlets through which a great proportion of the effete and noxious principles, resulting from the decomposition of the tissues, is ejected from the system. If the functions of these organs be suppressed or suspended, even for a short time, the patient will perish. An imperfect or impaired action will give rise to serious disease; the blood will become poisoned, and the brain and nervous system will be immediately, and seriously, involved. Suppression of urine soon produces stupor and apoplexy, and if it is sufficiently long continued, will prove fatal.

I am frequently consulted by patients, principally of the lymphatic temperament, complaining of a clamminess of the mouth; the tongue at the same time being thickly encrusted with a whitish fur; the appetite good, and not unfrequently voracious. These patients often suffer from severe nervous trepidation. They generally lose flesh very rapidly, feel much lassitude, and have a great disinclination to any kind of exercise. They also suffer severe pains along the spine and in the limbs; the skin is generally dry and harsh; the bowels often, indeed almost always, are constipated.

The prescriptions which have been brought to me by these patients, show that the plan of treatment which has been adopted in their cases, has consisted in the administration of tonic, and of every kind of strengthening medicine. Their diet, too, has been of the same character: jellies, prepared meats, strong soups, and food of the most concentrated kind; but instead of benefiting them, to use their own expression, "all they took seemed to be thrown away upon them, and appeared to make them even worse."

The little good derived from such treatment will perhaps account for the fickleness and wandering about of

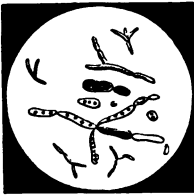
such patients; for we find them going from surgeon to physician, and from physician to surgeon in rapid succession, in the hope of being relieved. As many of the symptoms of consumption are present in these cases, decline is often apprehended; others attribute the ill health to a faulty action of the digestive organs; while others denounce that *sweeping cause* of disorder, a weakly constitution. A gentleman whose son I lately attended, assured me that he had taken him within three weeks to four different medical men of eminence, who all gave different opinions, and differently designated the disease. This may appear strange, but when disease is determined by symptoms alone, without their correlatives, it is by no means so easy correctly to discriminate and determine its nature. Very few patients, labouring even under the same disease, suffer exactly alike; and many of the leading symptoms are often modified, and frequently absent.

As a means of facilitating diagnosis or discrimination of disease, I wish most strongly to inculcate the necessity of urinary analysis. I feel satisfied, from very extensive experience, that if this were more generally attended to, the diversity of opinion, which now so unhappily prevails, would no longer exist; nor should we be so frequently taunted by our patients with the reproach — “When doctors differ, who is to decide.”

As I have already observed, the clammy tongue, dry skin, pain in the back, and failure of the strength, may exist in so many different diseases, that we are unable, relying on symptoms alone, to decide, with any degree of certainty, the real nature of a disease. But an examination of the urine will often lead us to the true interpretation; and, under all circumstances, it will facilitate our inquiries into the causes of morbid phenomena. To instance a single property from which much can be

determined, I need only mention, that the specific gravity of the urine in health may be averaged at about 1020; but if the urinometer should indicate a density of 1050, the urinary pathologist would immediately infer the presence of a large quantity of sugar, and the existence of diabetes in an aggravated degree. He would still further

Fig. 10.



confirm his notions upon this point, by setting a portion aside under the proper circumstances, and inducing those fungoid vegetations—“torulæ diabeticae”—the appearance of which under the microscope is shown in the subjoined diagram, Fig.10. Thus, he would be enabled,

by one examination, to decide the nature of the disease, without the possibility of mistake.

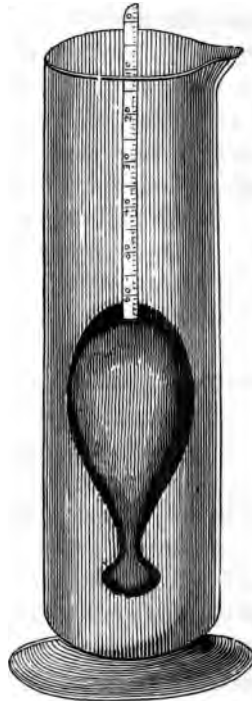
For the purpose of speedily taking the specific gravity, there is a little instrument, contrived by the late, and much to be lamented, Dr. Prout, called the “urinometer.” It consists of a hollow globe of glass or thin metal, from the upper part of which projects a scale graduated from 0 to 60; in the opposite direction, there is a weight to keep the stem upright. Put into the urine, it sinks, and indicates the gravity by the figure on the stem, which is on a level with the surface of the urine. Reference to Fig.11 will explain the nature and use of this instrument better than any description.

The value of the instrument in detecting disease, will at once be apparent, by mentioning the following case:—

Some time ago, a gentleman, a perfect stranger, called upon me for my advice. I requested him to furnish me with a specimen of the urine, the *specific gravity* of which I immediately ascertained to be 1038. A small quantity boiled in a test tube with a solution of potass over the

spirit lamp, speedily changed to a dark brown colour. This led me to make the following inquiries. If the thirst was not most urgent; if the appetite was not unusually good; if there was not a disagreeable clammy, viscid taste in the mouth; if the skin was hard and

Fig. 11.



dry; if the quantity of urine passed in twenty-four hours did not greatly exceed what was natural; and if there was not loss of flesh. The patient had as yet hardly given me any account of himself; he, therefore, appeared much surprised at my inquiries, and looked very steadfastly

at a microscope that was standing upon my table; and I afterwards learned, that he attributed some extraordinary influence to the polished reflector attached to the instrument. It appeared that he had been long suffering from all the symptoms I mentioned; and he felt at a loss to understand how I could, in the short time, get to know so much about him. A few minutes were quite sufficient to make the necessary examination.

To the urinary pathologist this could occasion no surprise. It would be at once apparent, that I had tested for diabetes; and feeling satisfied of its presence, it was then, of course, easy enough to enumerate symptoms.

I have found diabetes most frequently occur between the ages of twenty-two and thirty-six. A form of it, however, sometimes occurs in young children. The attention of the profession was first directed to this important fact by my friend, Dr. Venables, in his able work on Diabetes.

It is of the utmost importance that this disease should be detected in its early stages, as it is then that it can best be kept in check, or subdued. If food containing sugar, or fruits abounding in saccharine principles, be allowed, even as luxuries, it is the opinion of most urinary pathologists, that no plan of treatment can prove serviceable. "Even its occasional infringement," says Dr. Prout, "cannot be indulged in with impunity. Thus I have known," he continues, "a few saccharine pears undo in a few hours all that I had been labouring for months to accomplish." *

With the view of still further impressing upon the mind the necessity and importance of urinary analysis, I shall briefly notice another case of diabetes. The patient,

* On Stomach and Renal Disorders, p. 49.

a cooper, had been working for six or seven years in a very damp cellar. He applied to me in 1846, complaining of intense thirst. He had become greatly emaciated, his appetite voracious; and the other symptoms were present which are usual in diabetes. Examination of the urine fully proved the existence of the disease. I explained to him the nature of his disorder, and the necessity of at once procuring a more suitable workshop;—one dry, and properly ventilated. I also inculcated the necessity of strict attention to diet, and explained some other necessary precautions calculated to improve his health, and the necessity of strictly conforming to dietetic rules for some considerable time. I was, however, soon supplanted by a medical gentleman, who asserted that all the symptoms originated in a disordered state of the liver; and who, at the same time, undertook to set all right in a month.

To accomplish his purpose, he directed blue pill to be taken, which was continued for the space of ten days; and the patient unfortunately, instead of being perfectly well at the end of the month, as promised, became worse. The symptoms were much more severe, and he died a short time afterwards of confirmed diabetes.

Few persons not accustomed to the treatment of these affections, would believe the deleterious effects of even a dose or two of mercury. The mildest form of the disease may be speedily converted by the use of calomel or blue pill into the most confirmed and aggravated diabetes.

From several years' experience in the treatment of diabetes, I am decidedly of opinion, that, if early detected, the disease may be removed; but generally cases of this kind seldom terminate so favourably as we could wish. This is owing, I am satisfied, to the disease not being detected in its early stages.

It will be seen from the following case, that even when the disease has considerably advanced, if the patient will attend to the instructions laid down for his guidance, under favourable circumstances he may recover. A gentleman, upwards of sixty years of age, holding a high position in the army, applied to me in consequence of his suffering from great debility, accompanied with thirst, prostration of strength, and other symptoms of diabetes. The analysis of the urine soon satisfied me that it was diabetic. I informed the gentleman that it would be requisite for him to procure some bran biscuits, made by Blatchley of Oxford Street, and eat them in the place of bread; cautiously to avoid all exposure to cold or damp, especially of night fogs; and to take for diet, animal food, greens, and macaroni. Tea I ordered him to take without any sugar or cream; to drink nothing at dinner but amontillado sherry, or good claret; to have a fire in his bedroom during the winter, in order to warm and ventilate it; to wash the body all over every morning with tepid water and common yellow soap, using afterwards plenty of friction with a coarse towel; to live on a dry and gravelly soil, and if possible in a house with a southerly aspect. He immediately told me, that it would be very difficult for him to comply with these directions, as a Medical Board had recently decided on his case that he was still capable of service. At my desire, he mentioned to his medical attendants my opinion respecting him. They replied in language, and made observations, not very usual with those who are accustomed to regard the recognised rules of society. In the gentleman's critical health, the matter could not be allowed to rest. I, therefore, urged upon the medical attendants to take the specific gravity of the urine, to boil some also with liquor potassæ, and by thus making themselves acquainted

with the case to prevent its being referred to the Horse-guards. This advice was fortunately taken. One of the medical attendants I have since seen. He thanked me for my forbearance; and told me, that it was a cause of regret that anything unpleasant had been said. He further stated, that he had been biassed by some medical review which appeared many years ago, at a time when analysis was little understood, and little practised, and when I had more prejudice than now to contend against.

It was gratifying to myself, as well as pleasing to others, to see the improvement which took place in the patient's health. The treatment which I have mentioned was fully carried out; and I am induced from this, and many other cases which have come under my care, to believe that, if the course I have recommended be pursued, then the worst cases of diabetes, if not cured, may be much relieved, and kept in check for years.

In a work entitled, "On some of the more obscure Forms of Nervous Affections: their Pathology and Treatment," Mr. Harry William Lobb, L.S.A., M.R.C.S.E., writing on the subject of Urinary Analysis, relates the following case, to which I direct attention, owing to the circumstances connected with it. It is copied from page 180 of his work.

"A gentleman came from one of our Colonies to be cured of stammering, to which he had been subject more or less, all his life but lately had been getting worse; he was suffering from other obscure symptoms, night-sweats, indigestion and costiveness being amongst their number. He was advised to try several physicians, one after the other, which he did without relief. He was then told, that if he could be cured of his stammering he would get well. This young man was a personal friend of mine, and having met him on

“ several occasions during the course of his treatment, and from many conversations with him, I was quite sure, that there was something the matter with him beyond stammering; in fact, I came to the conclusion that this was the effect, and that the cause was as yet undiscovered. I suspected some disease of the genito-urinary tract, and asked him if he had ever had his urine examined. He said not. Upon examining it microscopically, I found several spermatozoa. As a child, there were symptoms which indicated a weakness of the prostate. He was of very excitable temperament. He suffered early from a disease for which he was kept more or less under the effects of mercury for more than a year, in which time he was salivated two or three times; and then underwent a long course of sarsaparilla, iodide of potassium, copaiba, cubeba ‘*cum multis aliis.*’ He now complains of great weakness and lassitude, loss of spirits, and of memory; is unable to connect his ideas; is quite unable to remember anything he reads; occasionally fancies he is going mad—has sometimes fits of the greatest misery, when he has no desire to live, life being a blank; he is fond of communicating his ideas, which he is now quite unable to do—shuns society, for he feels no pleasure in it—does not expect ever to get cured, but will try anything. Complains of a sensation of weakness in the back, has twitching of the eyelids, occasional startings of the tendons, and the limbs frequently tremble without apparent cause; the muscles are quite flabby; and he is unable to walk half a mile without extreme fatigue. Tongue quite clean and healthy; has a very large appetite, but finds that wine and spirits do not agree with him; does not smoke; suffers from indigestion and costiveness. There is a discharge from the urethra

“ which escapes on going to stool. The patient thinks
 “ nothing of it as he has had it so long; and the doctors
 “ have always told him it was merely a little weakness
 “ which would go away when he got stronger. This
 “ young man must have died probably in a lunatic
 “ asylum, if his malady had not been discovered.”

After further particulars, Mr. Lobb goes on to state:
 “ Such is one of the cases which I have known go the
 “ round of the doctors, and which would have eventually
 “ fallen into the hands of the advertisers in our papers.”
 “ It would occupy too much space,” continues Mr. Lobb,
 “ to recount the treatment of this case from the com-
 “ mencement to the termination; sufficient to say, that
 “ he has lately called upon me in perfect good health,
 “ and during the course of an hour’s conversation he
 “ did not hesitate or stammer once.”

The first occasion on which I saw this case in print was, when it was brought and shown to me by the patient himself who was not a little surprised. I wrote to Mr. Lobb, to inquire if the case was descriptive of the one which had been under my treatment and cured by the means which I had adopted. He replied it was, and he will therefore, I am sure, excuse me, if I give the particulars.

The patient informed me that he had come to England to be treated for the disease from which he was suffering, and had placed himself under the care of Mr. Lobb’s father who resided in Aldersgate Street; that he had consulted without benefit other medical men, and had then applied to Mr. H. W. Lobb, of Gloucester Terrace, Hyde Park, and was under his care for some time. He then recommended him to see Dr. Watson, which he did. Having met some patients of mine, he was strongly urged by them to seek my opinion. Mr. Lobb accom-

panied him to my house when I explained to him what I considered to be the nature of the case; and Mr. Lobb expressed himself gratified by my attention. On several occasions afterwards I saw him with the patient. At one interview he told me, that he had never been taught at the hospital which he attended, that seminal discharges arose from morbid change, and that he had never read of it until he had seen my Essay on Spermatorrhœa. "He had not," he also said, and I see he states the same in his book, "witnessed a case, treated either in private practice or at the hospitals; and when such a case was talked of, it was only 'pooh-poohed.' As a young man and a student, he believed what he was taught; but, upon entering into practice he had learned different, for cases were thrust upon him with evidence so glaring, that he must have been blind not to be convinced of their actual presence."

If Mr. Lobb had not treated this case as exclusively his own; if he had not been a weekly contributor to the Medical Journals; if he had not been Secretary to the Society for the protection of the General Practitioners, I should have passed over the circumstance without observation. So accustomed am I to meet with similar treatment from some members of the profession, that it has ceased to affect me. From Mr. Lobb, I must confess, it was not what his interviews led me to expect.

We often find the urine depositing certain sediments, the nature and variety of which are intimately connected with both the temperament and the peculiar affection under which the patient may be labouring. Oxalate of lime, correct delineations of which I here subjoin, (Fig. 12) most frequently occurs in the nervous and biliary temperaments; and not unfrequently in the sanguine. When it is found in this last, it is often associated

with an eruption upon the skin, and attended with great mental and bodily irritation. Not long ago I was

Fig. 12.



consulted by a gentleman labouring under this diathesis; oxalate of lime constantly appearing in the urine. This patient was treated simply for a cutaneous disorder. Astringents in the form of ointment applied to the surface, succeeded in suppressing the eruption; but the nervous excite-

ment and mental distress increased to a great extent. So severe were the symptoms, that the patient found it quite impossible to remain at rest, but felt obliged, as it were, to be constantly in motion. He assured me he suffered so much, that he often felt as if he should lose his senses, if the symptoms were not soon relieved. Sulphur baths with diaphoretics, and irritating frictions to the skin, brought out the eruption again, and gave him immediate relief.

I have invariably found that affections of the skin, when accompanied with an unnatural or disordered state of the urine, must not be rashly interfered with, nor suppressed by external applications, until the disordered state of the urine has been corrected, and the kidneys restored to the healthy discharge of their functions.

When oxalate of lime is constantly present in the urine, which is much more frequently the case than is usually imagined,—the difficulty of detecting the nature of these crystals being so great that they escape observation,—there is a feeling of distention in the stomach, more especially when the viscus is empty. This feeling sometimes prevails to so great a degree, that the patient is compelled to have his dress made very loose, and to adopt every means of preventing pressure. It occasionally happens

that the distention extends over the whole region of the stomach, causing great irritation and distress.

The heart, or at least its motions, frequently become involved. I have seen many instances of what may be named *nervous palpitation* of the organ. Patients from such palpitations often imagine themselves, the victims of real disease of the heart; and this notion appears to be more strongly confirmed by the irregularity of pulse which prevails in these circumstances. It not unfrequently intermits.

A medical gentleman consulted me some years ago for severe nervous depression, greatly aggravated by a firm belief that he should die suddenly from an affection of the heart. About two years before he applied to me, he had endeavoured to effect an insurance upon his life, which was refused under the idea that he suffered from disease of the heart. Certainly, palpitation was evident, and there was irregularity of pulse, great difficulty in breathing, and habitual coldness of the feet.

On examining the urine, I found it loaded with octohedral crystals of oxalate of lime. They were present to a remarkable extent after dinner, which, perhaps, might be attributed to an habitual indulgence in sweets, at this meal. The digestive functions were deeply involved, and yet the *tongue was perfectly clean*. The general circumstances induced me to suspect a gouty tendency; and, upon inquiry, I learned, that gout prevailed in his family. By regulating the treatment upon these views, and paying due attention to the digestive organs, the patient recovered, and is now attending to a very extensive practice, which he was obliged for a time to relinquish.

Disease of the heart is usually inferred when there is habitual palpitation, irregularity of pulse, a difficulty of breathing, and coldness of the extremities; and when

the pulsations of the heart are audible over the whole extent of the chest. All these symptoms may be present, and yet the heart itself perfectly free from disease. I feel reluctant to refer to the numerous instances I have seen of persons whose existence has been embittered, and whose prospects blighted, in consequence of functional irregularity being mistaken for organic disease of the heart.

I have already mentioned a case of gout lurking in the system giving rise to all the phenomena of diseased heart, and shall conclude the subject by calling the attention of the profession to one other remarkable instance. A gentleman, who consulted me, gave me the following preliminary history of himself:—

“I enjoyed,” he said, “excellent health, until I went to the University of Cambridge, where I read very hard for my Little-go. After passing the examination, a friend gave an entertainment in celebration of my success. At its conclusion we went out upon a rowing excursion, and I exerted myself more than usual. On our return, I became giddy, and at length fainted. I soon, however, recovered my recollection; but became ill, and was confined to bed for six weeks. My digestion, at this period, was much disordered; the pulse irregular; and I had a constant feeling of uneasiness about the heart. I was advised to return home; to avoid all kinds of mental exertion or excitement, and all sorts of active exercise, especially upon ascents; and to restrict myself to a very low and poor diet. I took foxglove for a considerable time, in order, as it was stated, to lower the heart’s action.

“My health was not sufficiently restored to admit of my return to Cambridge the following term. I remained at home for twelve months; and not being allowed to read, nor to take much exercise, time hung heavily upon my hands; and at the end of that period, the symptoms

were as severe as at the first. I was compelled to give up my studies, and have remained quite an idle man ever since. I have taken a great deal of medicine of one kind or another, and I now begin quite to despair of ever recovering my health."

Upon analysing this patient's urine, I found the oxalate of lime in great abundance. The powers of the digestive organs were greatly weakened, which I attributed principally to the kind of diet to which he had been restricted. He had lived almost entirely upon slops and vegetables, fearing that otherwise he should make too much blood, and disturb the action of the heart.

After hearing the history of his case, and giving due attention to all the circumstances, I came to the conclusion that he had, in the first instance, greatly impaired his health by too close application to study. After his examination, the indulgence in the pleasures of the table, followed by the laborious exercise of rowing, acted as the exciting cause; and in his excitable, but still enervated condition, the exertion proved quite sufficient to bring on fainting and the disordered state of frame which succeeded. The bleedings to which he had been subjected, and the digitalis, only served to keep up a degree of irritation in the system; and on his return home, being debarred from bodily exercise, and deprived of all mental occupation, he had too much time to think upon his disease, and to dwell upon melancholy forebodings, which at length produced a permanent state of irritation in the system.

Acting upon these views, I recommended him to resume his studies, under due restrictions, of course, as to intensity of application; to take horse-exercise, and adopt a more liberal and generous scale of diet. I also recommended means for restoring the vigour of the digestive organs; and advised him, during his stay in London, to

occupy himself by visiting the different places of amusement in the metropolis. His health and spirits were greatly improved: but I fear the impression that his heart is seriously diseased will not be easily eradicated from his mind; although he has been assured, by the most eminent of the profession in London, that no such diseased state exists.

In the treatment of the oxalate of lime diathesis, great care should be taken to order that kind of food which can be easily reduced by the stomach. Oily substances, such as butter, cream, fat meats, should be strictly forbidden. Rhubarb too and asparagus should not be allowed. Great attention also should be paid to the nature and kind of fluids which are permitted to be drunk. Water, impregnated, like that at Brighton, with carbonate of lime, should be carefully avoided. I have found that the Amontillado sherry agrees best with persons accustomed to take wine; and good stout is to be preferred to either ale or cider.

It is generally admitted that the appearance of oxalate of lime, as a deposit in the urine, is closely connected with the condition of the digestive organs; as it readily disappears and re-appears under certain alterations in the diet. The dyspeptic symptoms, under these circumstances, are often referred to acidity of the stomach, as their cause. While upon this subject, therefore, I would strongly impress upon the mind of the practitioner the necessity of well weighing all the circumstances of the case, before he recommends that incessant resort to *carbonate of soda*, now so much in fashion. Acidity of stomach is denounced as one of the most common, and most constant, accompaniments of nervous disorder; and carbonate of soda, and liquor potassæ, are among the most favourite remedies. Many cases of nervous disorder have

fallen under my care, to remove which it was a work, not only of time, but of extreme difficulty, in consequence of the injurious effects of an immoderate and daily use of alkalis. Perhaps the following case will illustrate this point:—

A gentleman of nervous temperament, engaged in one of the Manchester Warehouses, a tall, powerful man, applied to me, in consequence of suffering from pain in the region of the stomach. The pain was confined to a spot, which he could cover with the tip of his finger. He had, invariably after dinner, a feeling of distention and fulness, and an almost incessant desire of hawking up phlegm, which seemed as if agglutinated in the throat, causing great irritation, and an uncontrollable sensation to get rid of it. The skin was dry, hard, and harsh. There were severe periodical pains in the head, and all the general symptoms characteristic of confirmed dyspepsia.

He informed me, that, having suffered for a considerable time, he had, upon advice, been in the habit, for the last six years, of mixing a quantity of carbonate of soda with the beer which he used. He commenced, with what he called “a small pinch, or as much as would lie on a shilling.” This quantity was gradually increased, until it amounted to a teaspoonful. The soda, generally, relieved his distress, in some degree, for an hour or two, but the uneasiness returned, and recourse to the soda again became necessary.

The urine had a specific gravity of 1022, with a very faint acidulous reaction; and deposited a sediment consisting of mucus and epithelium and abounding in crystals of oxalate of lime. After standing at rest for above twenty hours, the surface became covered with a pellicle, which proved to be the triple phosphate, and the sediment was

found intermixed with the same. The reaction was now alkaline.

From the history and general circumstances of the case, I felt firmly convinced, that the greater part, if not the whole, of the misery and distress endured by this patient was caused by the inordinate quantity of carbonate of soda which he daily took. I therefore recommended the gradual discontinuance of this medicine; substituting for it, first the hydrochloric acid, and afterwards the nitro-muriatic, beginning with very small doses, which were, afterwards, gradually increased. Frequent recourse was had to the warm bath; and fomentations to the stomach. Plain, simple, but nutritious diet was adopted.

This plan he continued for some time with great benefit, but still he was far from being cured. He became, however, rather impatient of restraint and rule, and gave way to a longing desire for his favourite dose of soda-water; and as I would not sanction this, he got tired, and consulted another physician. I have heard from a friend of his, who is a patient of mine, that he is constantly changing his medical attendant, and that he is, at present, in very bad health. When patients, under false notions, accustom themselves to the daily use of soda, they may be placed in the same category with the habitual opium-eater, and the dram-drinker. They endure the greatest misery until they indulge in the accustomed dose; and few there are who possess firmness enough to resist the temptation, or fortitude enough to abandon its use.

And here, again I must beg not to be misunderstood. I by no means urge, that the alkalies are always injurious in nervous affections; on the contrary, I have met with a great number of patients who have derived

very great benefit from a judicious and well-regulated course of these remedies, especially in fever, as will be seen in the following example:—

A gentleman of the nervo-bilious temperament, connected extensively with the public press, applied to me, complaining of many of the symptoms just enumerated. In this case, the pain in the region of the stomach was by far more severe than in any instance I remember to have previously met with; which may, perhaps, be explained by the great nervous excitement and mental anxiety to which he was almost constantly exposed, in consequence of the great responsibility imposed on him by his connexion with an influential daily journal. Great irregularity of habit was a necessary result. He dined at all hours. He sat up almost all night, and drank, at the same time, largely of London stout and other stimulants. Indulgence of this kind generally ended in great depression and nervous exhaustion, which commonly lasted until recourse to the usual beverage aroused the energies and raised the spirits.

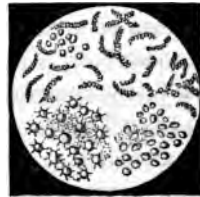
I was called upon very suddenly by one of his friends, to visit this gentleman. I found him suffering from a very severe attack of nervous fever. It appeared, that, upon a recent occasion, he had been confined for several hours in a close and over-heated apartment, when he was moreover in a state of intense mental anxiety. He, very incautiously, and most injudiciously, exposed himself under these circumstances unsuitably clad to the open air, on a raw, cold, damp morning, in the month of November. The attack of nervous fever, above-mentioned, was the consequence.

The perspiration and other secretions indicated a great tendency to excessive acidity; which justified a resort to a judicious and well regulated use of the

alkalies; and, indeed, I feel that the patient is mainly indebted to their influence for his recovery. But, even at the present moment, when he may be considered to be in the enjoyment of his usual good health, he is obliged to avoid green vegetables, oranges, light acescent wines, sugar, and other fermentable articles; experience having taught him that, in his case, acidity of the stomach may be speedily and very easily induced by the slightest deviation from rule; and this acidity, when brought on, is always attended with severe pain in the stomach, intense head-ache, and nervous trepidation; effects which speedily supervene, but which require considerable time to subside.

Nervous patients, with the oxalate of lime diathesis, I find, derive very great benefit from the exhibition of nitro-muriatic acid, with tincture of cinchona. It is, however, necessary to caution against the too long continued use of the acids. Oxalate of lime is found in urine depositing urate of ammonia, a diagram of which (Fig. 13) is subjoined, and even uric acid in the crystallized form; under which circumstances an incautious use of the acids might lead to great inconvenience. In regulating the treatment, therefore, when oxalate of lime appears in the urine, it ought to be analysed every third day, and immediately either urate of ammonia, or crystallised uric acid appears, the use of acids should be suspended. Sulphate of quinine, oxide of silver, or tris-nitrate of bismuth, may be given with great advantage, until the time arrives when we may resume the acids. I have had several patients under my care, who have suffered for many years from this diathesis, and whose

Fig. 13.



health has been much injured by an empirical resort to alkalis; but who are now deriving very great benefit from the cautious administration of nitro-muriatic acid, and cold baths.

Fig. 14.



Urea—a diagram of which, Fig. 14, crystallized from its solution in spirit, is here subjoined—is a urinary principle, excess or deficiency of which in the urine is often connected with important nervous disorders. When urea is in excess, it often causes a great deal of irritation; there is a dull, heavy,

dragging pain in the lower part of the back, which is much increased by exertion. A very constant symptom, more especially in certain forms of excess of urea, is a frequent voiding of the urine. There is often a much greater quantity voided than is consistent with health; but from the frequent calls, the quantity passed seems to the patient greatly to exceed what is natural. Hence this affection is, and often has been, confounded with diabetes, a disease of a very different nature.

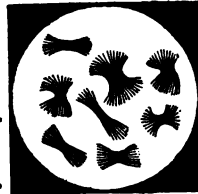
In speaking of the treatment of this affection, Dr. Prout very justly observes, and in practice I find his views confirmed, “That calomel, black doses, and saline purgatives, are calculated to do infinite mischief; and will probably render a manageable disease perfectly unmanageable”; hence the necessity of at once ascertaining the true nature of the disorder.

A patient recently consulted me, whose urine had for some time contained an excess of urea. He had been taking calomel, which had not relieved him; and he was recommended the daily use of fluid magnesia.

Upon examining the urine under the microscope, I discovered crystals in beautiful tufts, which were at once

copied by the artist; and the delineations (Fig. 15) are here subjoined. Upon further inquiry, I found them to consist of *urate of magnesia*. This patient was much relieved by discontinuing the medicine, paying strict attention to diet, and taking small doses of oxide of silver.

Fig. 15.



In certain forms of degeneration of the kidney—granular, for instance—the serum of the blood passes off by the kidneys. Such urine is albuminous, coagulating by heat, more especially if a few drops of nitric acid be added. When albuminous urine depends upon granular kidney, it may be regarded as a fatal symptom. We must, however, be cautious in pronouncing such an unfavourable opinion. Not very long ago, I was called upon to visit a gentleman who was studying for the bar. For some time he had been suffering from severe nervous aching pain in the back and loins. A medical gentleman, a friend of his, having discovered albumen in the urine, pronounced him suffering from organic disease of the kidneys. His friends became greatly alarmed, especially when informed that nothing could be done to save the patient. At this juncture, I saw the case.

The general appearance was not such as to excite in my mind the notion of organic disease. All those symptoms, the swollen face and eyelids; the harsh, dry state of skin; the dull, stupid look, and tendency to drowsiness, were not present in the slightest degree; nor was there the least indication of any tendency to dropsy. I was, in consequence, induced to doubt the kidneys having anything to do with the diseased condition of the urine. I, therefore, washed out the bladder with distilled water,

by means of a double catheter; and then desired him to drink two or three tumblers of filtered water. He was placed, on his bare feet, upon a cold marble slab, and in less than ten minutes passed a considerable quantity of urine, which, on examination, afforded not a trace of albumen. This sufficiently proved, that the kidneys were not the source of the albumen. Upon stricter inquiry it was found that the albumen was derived from the mucous coat of the bladder. It disappeared very shortly under the influence of the tincture of sesqui-chloride of iron, in doses of twenty drops three times a day. I mention this case to show the necessity of caution, and the inconvenience which may result from inferring degeneration of the kidney, merely because of a little albumen in the urine.

Fig. 16.



Lithic or uric acid, of which there is a diagram, Fig. 16, attached, is likewise a principle by which the urine is destined to carry out certain effete matters from the system. It, however, sometimes happens, that more lithic acid is formed than is evacuated with the urine. The super-

abundance either is retained in the kidney, giving rise to the formation of renal calculi, or it remains in the blood and occasions various forms of nervous disorder. It is well known that, in rheumatism, the blood comparatively abounds in lithic acid. Occasionally, this acid, after remaining for some time in the kidney, passes into, and remains, in the bladder, forming a nucleus for further deposits; and vesical calculus is the result.

One of my patients requested my attention to a poor man, a shoemaker, who had been suffering for thirteen years from a nervous affection, which latterly had increased

so much, and occasioned so great a degree of distress, that he could hardly attend to his work. He had tried a variety of remedies, and consulted numerous practitioners; and various views were taken of the nature of the case.

Having obtained several specimens of the urine, I found, upon examination, that it abounded in lithic acid, which was deposited in the crystalline form. The appearance of the acid, with the general circumstances of the case, induced me to suspect the existence of stone in the bladder, as the cause of the nervous symptoms from which he suffered. He came to London; and, on sounding, the existence of calculus was clearly and decidedly proved.

There were a great number of very small calculi of the lithic kind, many of which I succeeded in crushing. He became impatient, however, as it was inconvenient to him to be so much in London; and he, therefore, determined upon going into King's College Hospital, to be cut for stone. The operation was very skilfully performed, and the stones adroitly extracted from the bladder; but inflammation set in on the third day, and the patient unfortunately died.

When lithic acid deposits in the joints in the form named "chalk stones," there is much nervous irritation set up in the system; and patients of this class suffer so much from nervous derangement, that the most trifling incidents will throw them into a nervous paroxysm. These gouty concretions do not consist of chalk, but of urate of soda; and the diagram, Fig. 17, shows the form of crystallization assumed by the uric acid when liberated from its combination with the soda.

Fig. 17.



When the lithic acid diathesis prevails, the digestive

functions are usually much out of order, and the patient complains of flatulence and great acidity of stomach, much increased by acescent fruits and vegetables, and indulgence in port wine.

It is of the utmost importance that such derangements of the system should be speedily recognised. A few grains of carbonate of potass taken three or four hours after dinner, and persevered in for a short time will remove a great deal of mischief; and prevent the formation of stone in the bladder, which cost the patient, whose case I have just mentioned, his life.

Liebig has lately announced the existence of hippuric acid, Fig. 18, as a constituent of human urine. It is occasionally present in quantity in the urine of nervous patients; and in the urine of persons who have been compelled to live for some time upon a poor, low, and bad diet.



Change of air, and good nutritious food, with tranquillity of mind, will be found among the most effectual

remedies.

When hippuric acid is present, the urine is generally of a low specific gravity, remarkably pale, and is passed in large quantities. When it is found, the patients are fond of drinking copiously of tea, and often evince a distaste for animal food. Indeed, analytically, the urine approaches in quality that of herbivorous animals, such as the cow, or the sheep. It may always be inferred from these facts, that soup, pastry, raw and green vegetables and fruit will disagree. The system requires, if I may so say, animalising. Animal food, and its near approximation, cod liver oil, judiciously given, are of great service.

When the urine is voided in small quantities, of a high specific gravity, and is deeply coloured, it generally contains large proportions of urea and uric acid. Enquiry will show that the patients live principally upon animal food, and the urine in its analysis will resemble that of carnivorous animals, for instance, the lion, the tiger, leopard, hyena, and panther. A vegetable diet under such circumstances will be found highly beneficial.

The earthy phosphates are constantly deposited from the urine of nervous patients, and many of the symptoms, in such cases, are analogous to those which occur in the lithic acid diathesis. The triple or ammonio-magnesian phosphate is delineated in the wood-cut subjoined.

Fig. 19.



The deposition of the prismatic phosphate is generally accompanied with severe pain in the back, much increased by any exertion, especially if the lumbar and dorsal muscles are much or actively employed.

We frequently find cutaneous eruptions upon different parts of the body associated, or in some way connected with the deposition of the triple salt. "That a tendency to a deposition of these earthy salts in the urine," says Dr. Prout, "is sometimes hereditary there can be no doubt. Moreover, this tendency often assumes different forms in different members of the same family, and even in the same individual at different periods of his life. Thus, when one individual of a family has suffered from a deposition of the phosphates, another has suffered from gout; a second from asthma; a third from cutaneous disease."*

I have for some time attended a gentleman who has been suffering for many years from spasmodic asthma.

* Page 287, 4th Edition.

The urine deposits the phosphates in great abundance. I have also attended the brother of this gentleman, his nephew, and three of his children all suffering from what they name nervousness, which it is said runs in the family. No two, however, suffer exactly alike. The gentleman told me that he thought he should have lost his life in consequence of having gone, on the recommendation of a physician, to a watering place, and drank largely of an alkaline spring. He was reduced to such a degree, and his health so very much shattered, that many months elapsed before it was restored to its ordinary state. One can hardly reconcile the probability of such an error, had there been even but an imperfect analysis of the urine.

I am at a loss to comprehend, why it is that in the present day urinary analysis is so little understood and practised by the general practitioner. It would supply him with information which nothing else can give, and upon a knowledge of which the safety of his patients must very often depend.

What I have now said in this treatise, will, I am fully aware, be far from receiving general approbation. There is neither sufficient to satisfy the homœopathist nor exclusiveness enough to please the hydropathist. The allopathist will also, in many particulars, dissent entirely from my views; and I have no universal remedy of my own to recommend. One important duty, however, I have performed, and that is clearly and fearlessly to state, what mode of treatment I have found most beneficial in cases of nervous affections.

During the last sixteen years unusual advantages have afforded me the opportunity of witnessing the various plans of treatment adopted by some of our first allopathic practitioners in England and on the Continent; I have seen also the methods of treatment which are pursued by

the most eminent hydropathic, and the most celebrated homœopathic physicians at home and abroad; and the conviction forced upon me is, that there is something useful to be obtained from them all.

It is my decided opinion, that the physician and surgeon who refrain from the administration of medicine, when there is no necessity for its use, and who, regardless of prejudice, avail themselves of every other means suited to the individual case they may be called to treat, will be the most successful in practice.

THE END.





