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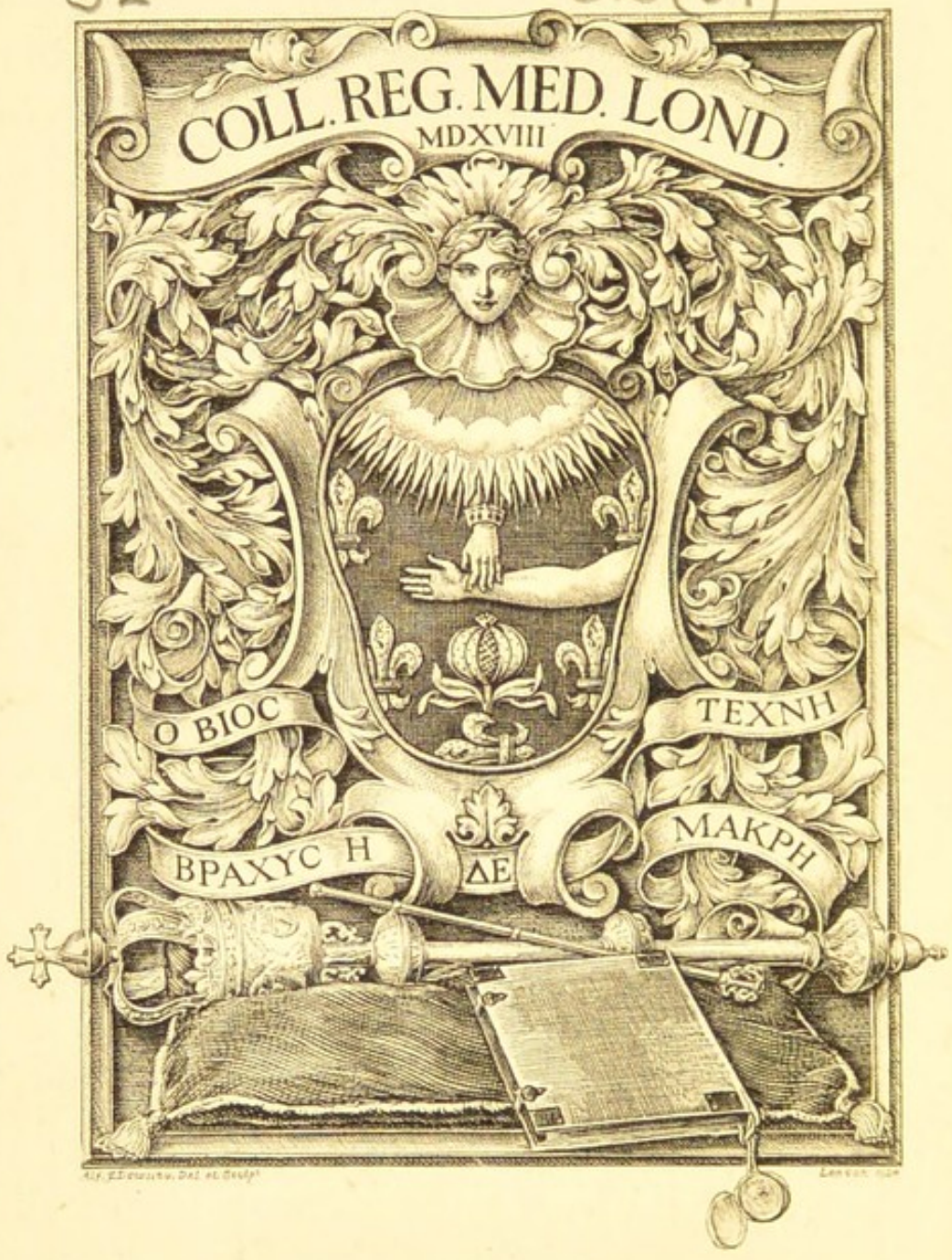

NOTES AND THOUGHTS FROM PRACTICE

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CLINICAL STUDIES.

I HAVE been thinking how much experience and "out of the way" knowledge we must possess after some twenty or more years of practice, and yet how seldom we commit this experience to paper. In many men this knowledge remains, so to speak, in solution; every now and then it may be crystallized and made of definite use, but much of it is lost except to the possessor, never to be regained. Perhaps one of the main reasons of this is that when a man has gathered much he is too busy to record it; and so it comes to pass that when men have little to do and less experience they write books, and when they should write books they have no time. I am venturing to put down my thoughts.

PROGNOSIS IN HEART DISEASE.

When I was a student, the mitral and aortic diseases made up most of the diseases of the heart, and anyone with a mitral bruit or aortic bruit was looked upon as in a bad way. On entering practice, after giving bad prognoses in some cases of aortic

and mitral disease, one found oneself often in error, the patient living on, and in many cases in good health and working power, in spite of evil forebodings. I have kept a record of cases with well-marked valvular disease, and although this record was commenced twenty or more years ago, some of the cases are alive and well to-day.

Many years back a "Collective Investigation Committee" was appointed, which did very valuable and serviceable work in collecting knowledge about the history of various diseases. I suggested to that Committee that the subject of prognosis of heart disease should be taken up; they agreed with me, and Sir Andrew Clark read the opening address at the Annual Meeting of the British Medical Association at Brighton on this subject a few years back. His tables included 500 cases of cardiac disease, with their histories.

But what I now particularly wish to draw attention to is, not the valves of the heart, but the wall, which is in my opinion of more importance. One has learned from epidemics of influenza, from diphtheria, rheumatism, gout, syphilis, and the many toxic forms of poisoning, that the wall of the heart is more apt to give out than the valves. Or, again, that excessive breathlessness which follows exertion in those who are untrained came out with great prominence in many of those who took part in the late Boer War. I had the opportunity of examining some of these cases at Sandgate. The mitral bruit seems to be produced by the dilatation of the left ventricle, which latter was very

marked in these cases. The bruit in many of these over-strained hearts entirely disappeared, and the left ventricle regained its natural size, when proper rest was maintained. One must not forget that hospital heart cases, which are the only ones that we see as students, are generally of a serious character, and occur among those people whose environment and habits have not been such as to insure a healthy cardiac muscle, and we enter practice very often with quite wrong views as regards prognosis of heart disease. The subject is too wide for me to enter farther upon it, but there is one point, an ethical one, which I particularly wish to draw attention to, and that is the common practice of telling people that they have a weak heart. I know people who have been practically ruined and rendered useless for life by being told that they have valvular disease. The less one thinks about one's heart as a rule the better. A careful and experienced doctor, with the aid of the patient, may find out fairly accurately what the heart in question is capable of doing, and then some common-sense rules can be laid down. Dr. Goodhart said, in concluding his Cavendish Lecture on diseases of the heart, before the members of the West London Medico-Chirurgical Society: "I am sure of this: we do far more good in our day by pronouncing people sound, if out of health, and by sending them forth with strengthened hope, than by keeping them in the chains of uncertainty and nervous dread, than which nothing can be more crushing to the utility of a life or more harmful to the chance of regaining health."

On Albuminuria.

The ordinary text-book classification of Bright's disease, viz., acute Bright's disease, such as that which follows cold or scarlet fever, chronic tubular nephritis or smooth white kidney, and interstitial nephritis or the granular and contracted kidney, does not by any means cover our cases of albuminuria which we meet with in private practice.

I am not referring to those cases of cyclic or functional albuminuria which have often been described and which we know so well, nor to those conditions which follow temporarily specific fevers, nor to those associated with chronic congestive states of chest and abdominal organs. Cases that I am now referring to occur in people who are for the most part pretty well, the albumen is almost constantly present, but not as a rule in large quantity. Let me give you an example in point. C. B., now aged 55, when 20 years old was refused admission to life assurance by a well-known London physician on account of the presence of albumen in the urine. Some ten years back I was consulted by the same person to consider again the possibility of his life being accepted for insurance. I found a marked quantity of albumen, but considering his past history, advised the insurance company to accept him on the principle of heavy premiums to be paid at the beginning, and to be gradually but steadily decreased as life went on; and should he live the usual appointed years, the amount paid in all should not amount to more than the total of ordinary premiums. My friend is alive to-day and fairly

well. Now, although this is no doubt an extreme and exceptional case, yet there are many cases of albuminuria which come under none of the recognized classes of Bright's disease. I believe that there is a fair number of distinctive clinical divisions of albuminuria not mentioned in our ordinary books. Whether they should be definitely classed under the term "Bright's disease" may be doubtful. If the presence of casts constitutes organic disease then they might be, for casts are certainly sometimes present. Because you find albumen in the urine do not be in any hurry to class the case under one of the classical divisions of the disease. I am convinced that many live for years without ever having a granular kidney, certainly not a large white one. Whether some of these cases may not come under the head of what is called the large red kidney I am not sure.

On the Soporific Action of Mercury.

I am not aware that the above action of mercury in the class of case I am about to describe is at all generally known, and that is my reason for mentioning the subject. The cases in which I have found blue pill—for this is the form of mercury I am referring to—give such good soporific effects are rather difficult to describe, and must be given in a more or less general way. Many men would call them cases of biliousness, and for want of a better term, I am contented to use it provisionally. The patients are usually over 40, complaining of

lassitude, loss of appetite, a general fulness of the abdomen, pains in the shoulder-joints, tongue is generally of a whitish-brown colour, a nasty taste in the mouth, eyes are rather "thick," a want of clearness of thought, more or less dull pain in the head, not confined to one particular spot, irritability of the skin, and above all *sleeplessness* at night. There may be many more symptoms and signs than the above, or few of them may be present, but when the symptom of sleeplessness is prominently complained of, then it is that we find the soporific action of blue pill, followed by saline draughts, peculiarly brought out. The symptoms I have detailed are principally those found under the heading of "bilious dyspepsia," but there is this important clinical difference: whereas sex, richness of food, and want of exercise play leading parts in producing this particular form of dyspepsia, the cases that I have in mind are found as often, if not more so, in women as in men, and where the plainest diet and fair exercise have been taken. There is little doubt that sea-air has something to do with this state of health; people who have come down to the seaside after a long residence inland frequently develop, after a few days, all the symptoms described. I believe that we who practise in seaside resorts would less often be called upon to prescribe for this condition were a little mercury taken by the patient immediately on his arrival.

I do not associate these cases with those which are commonly called "lithæmia," or the substitution of uric acid for urea as the final product of dis-

integration of albuminous substances within the body; in this last condition you obtain the more remote symptoms of gout.

What is the exact action of the mercury which brings about the happy result? I do not know, nor am I anxious to speculate or propose theories. Murchison supposed that mercury possessed a double action, for he says, whether or not the secretion of the bile was increased, there was certainly more bile passed when the drug was being taken, and an eliminating action was brought about, so that less of the bile constituents were absorbed from the intestine than usually. Again, Murchison supposes the albumen is in some way or other more thoroughly disintegrated. In some such way the brain is "cleared." It is important for us to know empirically the use of a drug which will enable us to give a patient a good night's rest, whilst at the same time we are treating the origin of the trouble and apparently not giving ordinary soporific drugs.

The Danger of putting Old People to Bed.

Probably I shall be running atilt against someone's opinion when I say I believe that many old people are sent to bed too early, and are kept too long in bed when they are convalescing. Of course, there are many obvious exceptions which will at once occur to you, and which I need not take up your time in mentioning. I believe that we should be chary in advising old people to take to their beds

when slightly ill. Some few years ago I was attending an old man of 80 with a slight attack of bronchitis, the like of which he had often suffered with before. A consultation was suggested, and the consultant called in advised my patient going to bed. I remonstrated, but gave way to what I thought then was wiser advice than my own. The patient kept his bed for a week, and then died. It may have been a case of *post hoc* and not *propter hoc;* still, my experience has since led me to believe that this man would have had a better chance of recovery if he had remained up during the daytime.

We must remember that the will power of old people is comparatively weak, and that bed to them is comfortable; then, when once in bed, after a few days the heart and muscular system lose tone. The effort to overcome this is difficult, and sometimes impossible to obtain again. It often requires a good deal of courage to keep these old people from taking to their beds, for the patient often takes kindly to bed himself, and the friends think you unkind in advising less rest. My own belief, then, is that it is wise to keep old people about and with moderate exercise as long as possible.

On Cases simulating Typhoid Fever.

For some years past there have come under my notice cases which have often given me trouble in diagnosis. The patients affected are of all ages, and of both sexes. The common symptoms have been a general malaise, abdominal pain of a rather general

character but having a tendency to concentrate itself around the stomach area, a furred tongue, temperature varying between 101° to 103° F., not necessarily higher in the evening, although often so; pulse of good quality. Although there is no desire to take food, yet sickness or nausea is generally absent. The bowels are, as a rule, confined. The illness lasts from a week to a fortnight. I believe the most likely cause is some form of ptomaine-poisoning, or some alteration or chemical change in the food, setting up a distinct form of poisoning. I may say in passing, in reference to food-poisoning, that I believe some of the rashes we meet with are due to this cause. I am not now referring to the common urticarial rashes from fish, tinned meats, &c., but to many indefinite rashes, which seem to recur over and over again, extending in duration for a fortnight, or even more. It is interesting to note that our fathers and grandfathers constantly spoke of cases of gastric fever; and of late it has been rather the fashion to class the above with typhoid fever, and to say that the old diagnosis was wrong. It is well to remember that in days gone by, when laryngoscopes, ophthalmoscopes, stethoscopes, and all other scopes and speculums were unknown, there was much more time left for observation and thought, and old descriptions of diseases were very accurate in their general outlines. Now, the term "gastric fever" indicates the two chief features of the cases I have brought forward, viz., abdominal pain situated in the stomach region, and fever; hence I believe that many of these gastric fevers were truly gastric affections, and

produced by some form of food-poisoning, or irritation set up thereby.

Renal Asthma, but perhaps more correctly called Uræmic Dyspnœa.

One is so in the habit of associating shortness of breath, apart from anæmia, with cardio-vascular or respiratory change, that the kidney as a cause of dyspnœa is apt to be forgotten. I am not referring to those severe attacks of great difficulty of breathing which come on in the early part of the night, in which there is an agonizing want of breath with great inspiratory effort. The cases I am thinking of have been aptly called "continuous dyspnœa," and apparently the only sign that is noticeable on meeting your patient is shortness of breath, and it is the principal thing that he complains to you about. On examination of the chest one finds little or nothing wrong, except, perhaps, a slightly enlarged left ventricle. As a rule there is no dropsy present, and, so far as I have seen, convulsions have not yet come on.

It is difficult to understand why some cases should suffer from shortness of breath and others should not, nor does the amount of albumen present seem to play an important part.

Dr. Dickinson has suggested that spasm of the pulmonary artery is the *modus operandi* of the attacks; but I think that he must be referring to the paroxsymal attacks, and not to those I am now mentioning, for one can hardly think of the artery being more or less permanently contracted.

I should think that a very probable cause would be that some uneliminated waste product circulating through the respiratory nervous centre, and the resulting irritation, produce an increase in the respiratory rhythm.

The practical outcome of the above remarks is this : that in all cases met with of shortness of breath, it is important to remember that the kidney may be the offending organ.

FRESH-AIR TREATMENT OF ACUTE RESPIRATORY DISEASES, WITH SPECIAL REFERENCE TO PNEUMONIA.

THE vast benefit of admitting fresh air freely to the sick room in cases of pneumonia has of late attracted the attention of a few clinical observers. As the disease is comparatively common, always serious, and requiring the greatest care in treatment, any fresh light brought forward will be interesting and welcomed.

We have long known the ill-effects of absence of free ventilation, and yet for practical purposes most of our public buildings and private dwelling-houses are most inadequately supplied with fresh air.

The open-air treatment of phthisis is well established, and we are not likely to retrograde in this direction; but the treatment of the more acute affections of the lungs, such as pneumonia, bronchitis, asthma, by the above method is not well established.

For a long time past, the administration of oxygen to pneumonic cases has been customary, but there exists a good deal of doubt as to its efficacy, for reason, perhaps, that it is too artificial in its manufacture, and if of use, too intermittently given. Now, the natural atmosphere is always with

us, and can be administered in large and constant quantities.

May not the higher incidence of pneumonia in winter and spring be due, not so much to the cold weather, as to "the closer confinement of the populace indoors, in the stagnant air of living-rooms from which sunlight is excluded, and which tends to lower vitality and decrease resistance on the one hand, and to favour rapid multiplication and increased virulence of the specific poisons on the other?" (Anders.)

Again, we have evidence that pneumonia is more prevalent in overcrowded districts and among the impoverished classes.

It seems to me that in a disease where nearly half of the breathing apparatus is out of gear, it is hardly possible to have too much air, containing its full amount of oxygen.

I am in the habit of treating these cases with free ventilation, or even on an open verandah exposed fully to the air. My experience leads me to think that pneumonic cases do better with this freedom of air rather than, as formerly, with a limited amount. Of course, there are many other points to be considered in the treatment, such as warm and light clothing, and a constant supply of nutritious foods.

I am not prepared to say that excessively damp air, or strong, cold east winds playing directly on the patient, is decidedly beneficial, but if the air is dry, I doubt if the coldness is detrimental.

I should sum up the treatment of pneumonia by saying that the essential points to attend to are: (1) Absolute rest; (2) appropriate feeding and

stimulation; (3) sufficient, but light clothing; (4) sunshine, if possible; and (5) abundance of fresh air. My experience leads me to say that the last point is the one which is most generally neglected, or perhaps, forbidden by the patient and friends.

In speaking of the treatment of bronchial pneumonia in children, Northrup remarks: "Nothing stimulates the heart better than a current of fresh, cool air upon the face. Fresh air stimulates the heart, reddens the blood, quiets restlessness, favours sleep, improves the secretions and digestion, in short, meets most of the indications for treatment of pneumonia in infants."

Although the above notes refer particularly to the more acute cases of the respiratory organs, I should like to add that I have treated a fair number of subacute, and even chronic cases, such as cases recovering from empyema, bronchiectasis, with or without purulent and offensive expectoration, &c., in open verandahs with the greatest success.

The Relief of the Right Heart.

There is no doubt that the heart is more often auscultated than percussed, in other words, the valves of the heart are more thought of than the muscle; also, it may be said with truth that the left side of the heart receives more attention than the right. This probably is as it should be, but we must remember that there are times in chest diseases when the right side of the heart, especially the auricle, demands our thought and skill. When we are dealing with dis-

eases such as pneumonia, valvular or muscular disease of the left heart, it is well to examine by percussion the size of the right auricle. Now there is not much difficulty in detecting an enlarged right auricle; the normal dulness of one finger-breadth to the right of the sternum in the fourth interspace is increased to two, or perhaps three, fingers-breadth; the ordinary finger percussion is quite sufficient for all practical purposes. When this enlargement is discovered, then local depletion by means of a few leeches, three to six, is decidedly valuable.

I have seen cases where after application of leeches the distress almost at once is relieved, and it is then that the action of digitalis and strychnia can have full play; for it is bad treatment to begin with heart tonics before the heart congestion is relieved, and often, also, before the alimentary canal is purged.

The Use of Sour Milk in the Treatment of Disease.

My attention was called to the above many years ago by Dr. Bowles, of Folkestone, who frequently prescribed it. I believe the value of sour milk has been known in many countries for many generations under various forms and names.

Like many other remedies, the clinical discovery of the use of sour milk was recognized long before a scientific explanation how milk turned soured was discovered.

We must not confuse the ordinary sour milk with

what is commonly called buttermilk, for the latter represents only those constituents of cow's milk which remain after nearly all the butter fat has been removed in the process of churning, although, of course, the nutritive elements, such as casein, milk-sugar, &c., are present. Again, the ordinary buttermilk obtained from a dairyman is of unstable quality, contains often numerous micro-organisms, and frequently much dirt.

The Value of Fermented Milk.

There is no doubt in my mind that fermented milk is of considerable value in many abdominal troubles. Lactic acid seems to coagulate the casein gradually, rendering the curd soft, as occurs in the first steps of gastric digestion. It is said to have an antagonistic action on intestinal bacilli and their toxins.

Lactone buttermilk is useful in the feeding of children in all stages of their growth, and especially when there is any intestinal catarrh. It is now possible to make pure buttermilk, with lactone tablets, which are manufactured by many chemists and are easily attainable, with full directions as to the preparation of the buttermilk.

I have found it most useful in cases of so-called gastritis and intestinal troubles, when the patient is unable to take ordinary food, and gets thinner and thinner—cases often resembling abdominal cancer, and most difficult to diagnose. Some of these cases no doubt suffer from idiopathic dilata-

tion of the stomach. The above, put on 3 or 4 pints of sour milk, may, in a few weeks, completely recover.

I may also mention its value in vomiting of pregnancy, inanition of the aged, cancer of the stomach, &c.

Dr. Carter, of New York, writing in the *New York Medical Journal*, April 4, 1908, says "That the vital factor in buttermilk, which has made it desirable as a food, and which has rendered it efficacious as a remedy, is found in the lactic acid ferment. This ferment to-day has been isolated, cultivated, and, like the housewife's yeast, is available in convenient form for household use. Thus, it is possible to give our difficult feeding cases—infant or adult—food not alone efficient in itself but augmented by an active agent for overwhelming the pathogenic bacteria that may inhabit the intestinal tract.

The Treatment of Acute Diarrhœa in Children with Saline Injection.

Acute diarrhœa in children, as we know it in the summer, is one of our greatest anxieties. I am not speaking here of the comparative mild cases, which yield to ordinary remedies and dieting, but to those collapsed conditions in which sickness and constant diarrhœa are both present, and which are met mostly among the classes that live in poor and crowded thoroughfares. These cases when possible should be admitted as in-patients for hospital treatment; here alone can they be kept properly clean

and fed, and in a thoroughly ventilated room. If we can manage to prolong life for a few days, recovery will often follow. It is often most difficult at first for the baby or child to keep down any food at all. It is in this condition that saline injections, given either by the skin or bowel, are of great and saving value. I have treated many cases of this kind in this way. The injections must be given slowly and continuously.

ON BROAD LINES OF TREATMENT.

AFTER some twenty years of practice, hospital and private, it is interesting to me, and I trust it will be so to you, to reflect on some of the numerous and various changes that have taken place in the treatment of disease, and to notice one's own attitude towards these changes. Treatment, both medical and surgical, has undergone within a few years an almost revolutionary change; twenty to twenty-five years ago cases of appendicitis were rarely, if ever, operated on, ear surgery as it is known to-day scarcely existed, gynæcology was just beginning to be studied seriously, stones in the bladder were cut out, but not crushed, operative suppuration was seen every day—and so I might go on. Specialists have grown and developed in every direction, and to-day there is hardly an organ in the body without its special attendant.

We must admit, I think, that a large proportion of the great advances and discoveries in treatment have been brought about by men engaged in special work, and at times when they had leisure to digest their thoughts and their methods; it will suffice to mention the treatment of the diseases of the eye, the ear, and the throat, to illustrate this fact. But as at one time we were too general and too inexact, so now I venture to think there is a danger of being

too specialized. Specialism seems almost rampant, and there is a serious danger of the general man being held of slight account.

There is another subject closely allied to treatment, viz., the age and the experience of the practitioner. The enthusiasm and immense energy of youth seem to require an outlet, but the reading it undertakes cannot, as a rule, be accompanied with much practical experience. The young man is certain and dogmatic in his diagnosis and treatment, while the old man is apt to be desultory and too hesitating—the young man thinks often that his senior is slow and timid, while the elder man forgets the advantage of youth; both at times are right, and both at times are wrong. I should say roughly that operations are more easily, and with less indecision, undertaken in early than in later life; at the same time the well-known operations which are beneficial would be more earnestly recommended by men of a few years standing. There are a great many cases in which there is no doubt as to the value of operating; there are others, perhaps not as many, in which it is often very difficult to decide as to the necessity of interference. Here I would mention the question of hospital and private cases. We must acknowledge that we at times decide as to our treatment whether the patient is at home or in hospital—the difference between operating in a well-equipped hospital and a squalid, insanitary room is so great that it is no wonder to me that men often refuse to operate when the patient is found in the latter position. But to return to my

point of age, there is no doubt that as we get older we think more and read less, or shall I say rather that we think more about what we read and have read, and also bring into mind our past failures and successes.

There is a saying that at times one cannot see the wood for the trees—or, what is more to my purpose, I would say that a man may be too near the wood to see it—in practice, we are constantly, so to speak, too near our cases, and a mistake we often make is prescribing for a case at a first consultation or visit; how often I have wished I had not prescribed! A first consultation is often well spent in hearing the patient's history only. Again, the patient often comes to be treated for a local trouble when it has a distant cause, and to remember the various and multitudinous causes of it often takes more than five or ten minutes given to a case. I have often said that one-third of the eye patients that come to me require general treatment; let me give you an example out of many in this branch of medicine. A man, aged 54, came to me with sudden loss of vision of the right eye; on examination a large hæmorrhage was discovered in the posterior region of the eye. His history was this: that for years he had been subject to albuminuria, large hypertrophied left ventricle, and loud systolic murmur, with increased arterial tension, and other symptoms of general gouty degeneration. The man had always lived well, and had taken little or no exercise. He at once wished to consult an oculist, and saw an eminent one in London. It was

apparent that it was not primarily an eye case; the position of the hæmorrhage was accidental, and the real treatment of the case was general. This line, I need hardly say, the specialist took, and handed the case back to my treatment. To illustrate further let me take the treatment of eczema. I think that there can be little doubt that general causes play a very important part in the origin of the above disease; this fact was known to a past age of practitioners when they said that some forms of skin disease should not be driven in—by that they meant, I suppose, local applications were not always beneficial. I remember well my father rebuking me for attempting to cure locally a gouty scrotal eczema. I often have heard men laugh at the "driving in" treatment, but, taken in its true light, there is much sense in it. Still, local remedies hold an immense sway in the treatment of skin diseases; and in looking through my prescription book, under the head of eczema, I find many more local prescriptions than general ones. My present opinion is that internal remedies, if carefully selected in regard to the cause of the eczema, are, as a rule, of more use than local applications. The public like an external treatment in which they can take a prominent part and see what is going on, and I think that this is a reason which accounts partially for the present prevalence of these applications. I could quote many cases in which my patients have not done well until internal treatment was carried out.

Pharyngitis is another disease which seems to me

to have been treated locally *ad nauseam*, with more often than not no corresponding beneficial results. I am now referring particularly to that chronic form which is called granular. The disease is often met with in delicate young women, and may or may not give rise to irritating symptoms. Every conceivable form of local treatment has been tried, but I suspect the electric cautery has had the longest innings. A case came under my care during last summer like one of those I have mentioned: the pharynx had been actively treated for years until she finally decided to think a little more about her general health, and it was then that she began to improve. Very often the change of food, suitable clothing, free ventilation, and regular exercise are almost too prosaic to mention, still less to urge to the notice of the patient, but until these broad rules are carried out the local treatment will have comparatively little effect. The cause of the pharyngitis may be a general and removable one, and until this is attacked the local applications only complicate and mask your treatment.

Again, I would refer to some interesting cases in which we are primarily consulted for difficulty of breathing, but which do not improve or get well until a general course of treatment is adopted. The cases I am thinking of occur both in women and men, in ages between 50 and 70. These patients are stout, indolent, well-to-do, and enjoy and partake of the good things of the table. On further enquiry you will find the shortness of breath is not permanent, and is often associated with a particular

increase or unsuitability of food. On examination the left heart seems enlarged, impulse feeble, and the pulse is quick and weak; the bowels are constipated, and albumen may be present in the urine. They sometimes complain of tenderness and weight over the liver, and a general lassitude of mind and body; their nights are often sleepless or restless. On first sight one is tempted to give heart tonics and stimulants. I am not prepared to say that this is wrong, but under these, without other means, the patient does not improve. The diet requires to be very carefully regulated, food given in small bulk, solid rather than fluid, and about every three hours. The bowels must be kept free; perhaps the most valuable drug at this stage is calomel given in frequent and small doses. It is advisable for the first few days, if possible, to keep the patient in bed, as the free opening of the bowels may produce faintness and syncope if the patient is up and about. As soon as the patient is better moderate exercise should be insisted on, and a general plan of moderation in all things should be written down and enforced. The foregoing description will probably call up in your minds similar cases you have met with. I think that the breathing difficulty is brought about by the flabby condition of the heart setting up some dilatation, and this is followed by pulmonary and liver congestion, the original cause being the overloading of the abdominal organs from excessive or unwholesome foods, together with the absence of exercise or good air, and the inability to dispose of the waste

products. At anyrate, my experience is that no amount of tonics, whether cardiac, nervous, or intestinal, have any real effect until the patient is put upon and acts upon a rational system of living. I should not, perhaps, have alluded to these cases except that I have made mistakes myself, and seen them in the practice of others, in which the value between the local and general troubles was not proportionately estimated.

There is a common malady named lumbago, with its ally sciatica. The causes of it given in our text-books are many, and popular remedies are numerous. To treat the complaint successfully the numerous causes must be borne in mind, and each considered in connection with the case under consideration. A belladonna plaster or an injection of morphia may be necessary as a crutch to the lame man temporarily, but in the vast majority of cases this cannot be put down as treatment. Sir George Johnson's term of muscular dyspepsia or dyspeptic myalgia as expressing a condition of the lumbar muscles, which are irritated and kept sore by the products of imperfect digestion or secondary assimilative processes, seems to me to be a far more common cause of the above than is usually thought or taught clinically. The many cases that get better when treated with anti-dyspeptics, cholagogues, and aperients go largely to support this view. It is very common to see the word "rheumatic" affixed to the word "lumbago," and anti-rheumatic remedies are often prescribed; but I have sometimes thought that as many of these cases are now treated at

inland health resorts, such as Buxton, Bath, Aix-les-Bains, &c.; the careful dieting, massage, baths, alterative and aperient waters, all more or less affect the general system, and have an eliminating action, and the success of the treatment of lumbago at health resorts is largely due to what I have stated.

Let me give you one more prominent symptom, viz., convulsions, in which one must often look beyond the brain for the explanation and its treatment. Here I will shortly describe a case as illustrating the point I wish to bring forward.

A boy, aged 2, was taken almost suddenly with severe convulsions; I saw the child soon after the convulsions had begun. These soon became almost continuous, and the boy appeared in a serious condition. On placing my hand on the abdomen marked peristaltic action of the bowel was felt. The convulsive attack was so tedious and violent in passing off that I gave some chloroform to check it. Some time later the bowels were opened four or five times, after which the convulsions entirely passed off. There are many causes of convulsions in children, and intestinal irritation from undigested or ill-assorted food is among the most common.

In regard to the convalescent stage of disease my opinion, from what I have seen in my own practice and in that of others, is that not infrequently patients are ordered to work before the health is fully established. The obvious answer to this statement is that in most cases time is too precious for the patient to spend very long in convalescence; but we must remember that convalescent homes are com-

paratively common, and admission to them by the poor is not difficult, and the other classes often have opportunities, or could make them, for a longer rest after illness if the medical adviser urged it.

It is only lately that I have fully realized how tedious is a full recovery after many cases of typhoid fever, and I will quote this disease as an example of many cases in which prolonged rest is required for recovery. What a serious exhaustion to the whole nervous system a case of typhoid must involve. A fever, almost continuously high, lasting often for four or five weeks, with a great portion of the bowel out of gear, all the internal organs more or less softened, and worked at the greatest disadvantage. Is it a wonder that the convalescence must be and ought to be slow? The seriousness of the attack is seen later on in many ways, such as the loss of hair, the formation of nodes or abscesses, the feebleness of the muscular system, the slowness of the digestive organs to re-establish themselves, and the mental weakness or defective memory, &c.

It is a hurrying age, and everything must be done quickly, and doctors like other people have fallen under this stress of example. Of course, there are many exceptions to my statement; every case must be considered from what the disease is, and also the quality of it. I have made more mistakes from giving too short a time to a convalescence after acute disease than too long, and the excuse of the expense or value of time has not always been present. Where there is a morbidness of character

or a likelihood of a long rest developing into a state of permanent idleness, then a different mode of treatment is advisable. Here, again, a broad view must be taken of the whole surrounding circumstances, and action carried out in accordance therewith.

OPHTHALMIC NOTES IN MEDICAL PRACTICE.

IT is impossible almost to separate many of the more common eye complaints from ordinary medical practice, and a knowledge how to locate these, or at anyrate to apportion their due significance, should be possessed by all.

It has always seemed to me that the eye teaching at our medical schools has been a mistaken one; too much has been taught, and subjects touched upon which the student, when he enters practice, will never require, and operations described which he will never perform. The leading points might be given in two or three lectures, and these firmly impressed and illustrated, but to jumble up the important and non-important diseases and complaints of the eye in several lectures is to court failure, and the result is probably unsatisfactory to the student and the patient alike.

Few men, in large general work, can keep up all the diseases of eye for want of time, or of opportunities of seeing these diseases, but all men should know the more common and important ones, and be able to distinguish, for instance, an iritis from a conjunctivitis, a cataract from a glaucoma, and a headache due to a refractive error; and if these were known better, fixed pupils would be rarer, glaucomatous

eyes more frequently saved, and squints and ocular headaches sooner relieved.

The following few remarks will be based upon what I have gathered from among my eye patients which I have generally seen after my general patients at our hospital for the past twenty years, and in my private work, and I will endeavour to make them as much as possible of a clinical and practical character.

I should say that the most common eye trouble which one meets with at the hospital is that of phlyctenular ophthalmia and phlyctenular ulcers of the cornea. There are many varieties and degrees of this inflammation in regard to the seat, extent, and course of the disease. Still, there are characteristics common to all forms. The disease is seldom seen in very young children or after 20 years of age. It occurs among the ill-fed and badly nourished poor; hence the disease is seen much more in hospital than in private practice.

The disease is a constitutional one rather than local one, hence the slowness of cure. The treatment consists in free home ventilation, warm clothing, good food, and tonic medicine. Photophobia, which is most severe in many cases, will disappear when the pupil of the eye is dilated, and the addition of some form of mercury to the atropine is beneficial for the ulceration. The constant recurrence of the ulceration points to the constitutional cause playing the most important part.

As a rule, when the ulceration has occurred fairly early in life, I have found the subsequent scar disappear, although it may be some two or three years before doing so.

Errors of Refraction.

The above make up a very large proportion of eye work, and there are a good many cases that come to us not directly for the eye, but on examination some refractive error will explain the symptom. Headaches after reading or doing any near work is the most common symptom met with in association with refractive error, and by far the most common condition of the eye in this connection is hypermetropia.

It is a truism, and one that can scarcely be exaggerated, that when anyone comes complaining of a headache, always to think that the condition of the eye may possibly account for it. The following points are worth remembering: In testing the vision with glasses, always begin with a plus one, and note down the strongest one which the patient can see the ordinary test type at the ordinary distance; if the case is one of simple hypermetropia, this is the measure of it, but if the case is one of simple myopia, take the weakest concave glass which enables the patient to read the type at the ordinary distance, and this glass will be the proper one.

In dealing with children, it is always advisable before ordering spectacles to paralyze the accommodation, for the reason that spasm of the ciliary muscle is often present, and then an artificial myopia is thereby set up; so that these patients see better when you are testing them with minus glasses, whereas they require plus ones. Opticians not infrequently make this mistake. When neither plus nor minus glasses improve the vision up or to near the proper standard, you almost invariably have to deal

with a case of astigmatism. The correction of astigmatism I need not enter into, suffice to say that I think keratoscopy is the best and easiest method of working it out, and that the pupils should be dilated when doing so.

Every now and then one meets with cataracts in young people, or some disease of the vitreous, choroid, or retina, hence, when glasses fail to restore vision, it is necessary to examine the interior of the eye.

When eye headaches are present, they are generally due to hypermetropia or to astigmatism. I hardly remember ever meeting a case of headache due to simple myopia. Myopic astigmatism may give rise to headache, but not simple myopia.

Sometimes even half a dioptric (72m.) left uncorrected will set up a headache.

The danger of uncorrected myopia lies in the resulting damage that takes place at the back of the eye from constant strain, setting up posterior staphyloma.

There is hardly anything more satisfactory in the whole range of medicine than the treatment of headaches by suitable glasses.

As a rule, I think it is a mistake to fully correct at first either hypermetropia or myopia. We must not forget "the play" of the eye; in the former, the accommodation has had a wide range, and this quality cannot be quickly reduced; or again, in myopia, the elasticity of eyeball is very considerable, although this must be kept in bounds. Yet, in practice I find that a fully corrected myopia is often

troublesome to the patient, and may lead to his throwing away the spectacles—for his vision is always good at close range—with ultimate injury to the eyeball.

Again, in dealing with odd eyes, where you have perhaps + 3 D in one eye and + 4 D in the other, if the case is young, there glasses may be ordered, but if this inequality has existed for some years, you will find that in practice glasses mathematically ordered will rarely be found of much value in actual use. I have over and over again seen spectacles ordered on the above plan, which could not be used. We must remember that the eye is not a glass ball; its size is constantly varying, its movements are varied and many, so that it possesses the power to adapt itself, to a great extent, to many conditions of refraction, and if this power of adaptability has been exercised for some time in connection with any particular refractive error, and you suddenly give a pair of spectacles which may scientifically correct the error, the old habit will often reassert itself and kick, and the glasses cannot be worn. A compromise will have to be effected, as in many other lines of life, before success can be attained.

In connection with hypermetropia, I must not forget to mention the condition of squint. It is always internal, and is produced by strain of the eye in attempting to do near work. Since the knowledge of the cause of the internal strabismus has come about, the operation has become much less frequent. Even when it has existed for some time, atropine and properly fitted and suitable glasses will effect great results.

I have quite convinced myself that in the eye which really squints and remains uncorrected optically for any length of time, the vision deteriorates greatly, and in most cases is never fully restored.

Conjunctivitis.

Conjunctivitis, in our neighbourhood, I should say, is not very common; I mean the catarrhal form. If there is any doubt as to its nature, think of iritis, and if the patient is under 40 years of age, instil a little atropine. The most common mistake in the treatment of conjunctivitis is the too frequent and too strong use of astringents; most cases do better with alkalies or boracic acid. I always throw away the usual shade worn in these cases—free ventilation to the eye is beneficial.

Purulent Ophthalmia.

Purulent ophthalmia is less frequently seen amongst us since the knowledge of the great importance of aseptic and antiseptic treatment of the eyes immediately after the birth of the child, and for a few days afterwards, has become prevalent. When once the disease is fairly started, no time must be lost in trivial or proxy treatment. Whenever possible, I always recommend admission to the hospital, where regular, personal, and systematic treatment can be carried out. If this cannot be done, give the child chloroform, and yourself apply the specific treatment of nitrate of silver, or some of the modifications of it, such as argyrol, &c. It is mere waste of time to order the mother or ordinary nurse to apply a lotion,

which nine times out of ten never reaches the affected part at all. It is impossible to take too much trouble over these most serious cases.

Tinea Tarsi.

Many of these cases come to us from over the hills, Acryse, Paddleworth, &c., and are probably due to exposure to our cold easterly or northerly winds. There is one important point to remember in connection with tinea tarsi, besides using the well-known ung. hydrarg. nit. mit., that is, its association with hypermetropia; until this is corrected many cases do not recover.

Foreign Bodies.

Foreign bodies in the eye are very common in Folkestone. Do not attempt to remove the body, or even to look for it, until the eye has been cocainized—this at once removes all pain, and disarms all fear of manipulations: the body can now be quietly removed. If not at the cornea, it will almost invariably be found on the inside of the upper eyelid, when this is everted.

Glaucoma.

Of all diseases of the eye, this is the one in which most mistakes are made. The acute cases are mistaken for iritis, and the chronic cases for cataract. Remember that an inflamed eye with a dilated pupil usually means glaucoma; a contracted pupil with inflammation usually indicates iritis.

Never instil atropine into an eye of a person over 40 without at first estimating the tension of the globe,

for if you do you may bring on an acute attack of glaucoma in a sensitive glaucomatous eye.

If only you will always think of the possibility of the presence of glaucoma in an inflamed eye, you are not likely to make a mistake.

There is a quiet form of glaucoma, passive in its progress, which is often thought to be cataract. The systematic use of testing the tension of the eye-ball, after ophthalmic examination, will remove all diagnostic difficulties.

Never say that a person has a cataract unless you can see a distinct opacity; even by direct focal illumination the lenses of old people have a hazy appearance, and this is apt to mislead one. The direct and indirect methods of ophthalmoscopic examination will remove your doubts.

Pannus.

I have met very little of this trouble in Folkestone; the two common causes are: (1) granular lids, and (2) the phlyctenular form coming on after repeated attacks of phlyctenular conjunctivitis and keratitis; the former affects the upper half of the cornea, and the latter the whole of it.

Great Œdema of the Eyelids.

In all these cases give a general anæsthetic, as a corneal ulcer is often present, and any undue pressure on the eyelids may cause rupture of the eyeball.

General Diseases affecting the Eyes.

When you think that all the following diseases and poisons may, and often do, affect the eyes, viz.,

syphilis, acquired and inherited, small-pox, diphtheria, measles, purpura, septicæmia, lead, alcohol, tobacco, kidney disease, diabetes, leucocythæmia, pernicious anæmia, heart disease, tuberculosis, rheumatism and gonorrheal rheumatism, gout, personal and inherited, you will not wonder in a large proportion of the eye cases that one sees ; one has to look for the cause of the trouble outside and beyond the eye.

The most common general cause of eye disease is syphilis, and probably half the cases of iritis, vitreous disease, choroiditis and retinitis may be put down to this poison, and it is a pretty safe general rule, when in doubt in any of the above, to give some form of mercury and iodide of potash.

I have met with a large number of cases of interstitial corneitis, almost invariably from inherited syphilis, and nearly all of those have got well under specific treatment, although the course of cure may run into many months and sometimes years. The diagnosis is easy from the well-known accompanying signs in the teeth, nose, &c., and ground glass appearance of the cornea.

Kidney Disease.

Kidney disease is a prolific cause of eye disease, the disease almost invariably affecting the retina, so that no apparent cause in the eye is seen until an ophthalmic examination is made. The two conditions to think of are that of pregnancy, or immediately after it, and Bright's disease. On examining the urine, the presence of albumen will lead to a diagnosis.

Tobacco Poisoning.

The excessive use of tobacco is the most common cause of toxic amblyopia. I had a very severe case last year among my out-patients, but he recovered, as nearly all of them do, when the cause is cut off. As a rule, there is not much difficulty in getting the patients to give up the use of tobacco in these cases, as the threatening of loss of sight acts as a very strong deterrent.

Diphtheria.

Everyone now knows the difficulty of reading that often comes on after an attack of diphtheria from paralysis of the accommodation. But if you order a pair of plus glasses to remedy this defect, be sure not to forget to order their discontinuance when the paralysis of the muscle has passed off.

Rheumatism.

This is supposed to be a common cause of conjunctivitis, and of that particular form of iritis called relapsing. I have often thought that rheumatism, and so-called "cold," have been mixed up together. I have not found that these cases are particularly benefited by anti-rheumatic remedies. I have found that soothing applications are more beneficial than astringent ones in so-called rheumatic conjunctivitis. As regards the iritis, atropine is as necessary in this form as in every other form of iritis. I have seen conjunctivitis and iritis from gonorrhœal rheumatism, but it is not common.

Gout.

In the conjunctivitis of gout, the general system should be treated at once; the eye trouble is only an outpost. It is in this disease that one meets with those sudden cases of blindness, complete or partial, from rupture of an atheromatous vessel in the retina —hæmorrhagic retinitis. Whether we meet with conjunctivitis, iritis, hæmorrhage, or glaucoma in gout, the general treatment is more important than the local.

Nervous Diseases.

In all cases of brain disorder the eye should be examined by the ophthalmoscope. Eye changes are common in these diseases, such as syphilitic growths, meningitis, abscess, &c.

In *leucocythæmia*, *pernicious anæmia*, and *purpura* we meet with retinal hæmorrhages.

In *pyæmia* and *septicæmia* we meet with purulent conditions, which I have seen; here, as a rule, removal of the eye is necessary.

The troublesome tinea tarsi of *measles*, the *cataract of diabetes*, the vague eye symptoms of *alcoholism*, we all know.

The study of the eye will always repay one, and give us many clues to some of our most perplexing cases.

SOME THOUGHTS ON FOOD AND EXERCISE.

I THINK that many of us, perhaps most of us, do not pay that amount of attention to what is called general health that the subject demands and deserves.

There is no doubt that the length of life has increased during the last fifty years under the improved and improving knowledge of sanitary conditions; there is, however, still much more to be done and said in this matter.

The importance of good air, proper food, and suitable exercises for all periods of life transcends in importance everything else in the whole range of medicine and surgery; yet, probably, it is on account of the "commonness" of the above, and also because everybody thinks he knows about them, that there has not been more rational and definite instruction given.

Some years ago it was doubted whether anyone had really reached the age of one hundred years, but now we have on record several authentic cases of the above age, and to-day there are people living, well and strong, who have completed their century.

To live to a good age and not to enjoy life seems

to me to a great extent useless, and I feel sure that most of the bad health we meet with after fifty is due largely to most unwise dieting, and to not taking a regular and proportionate amount of exercise.

The life between 40 and 70, and even up to 80 years, should be enjoyable, and work should be a pleasure and not a burden, as it is now in many cases. After 40 there is a tendency among all of us to neglect the taking of exercise, and at the same time to continue our old diet tables. Now, to enjoy this second half of our life, preparation for it must be made in the first half by a regular and systematic training of the whole man—body, mind, and soul—and the proportion and order of development of each of these parts should be easily understood and carried out.

In these short notes I am only dealing with the body, and if this be carefully and successfully attended to, the highest parts of our nature, viz., the mind and character, will have a better chance of their development and growth when taken in hand.

The subject of ventilation I shall not dwell upon ; it has probably received more attention from the public and ourselves than that of food and exercise, and the result is seen every day in the diminishing number of deaths from the various forms of diseases included under the term of "tuberculosis."

I will now go on to say a few words in relation to our food.

During the last few months I have read a good

deal on this subject, and I may say that I have tested some of the methods on myself.

It seems necessary in these days, in order to obtain a hearing on any particular subject, that one must hammer away incessantly and in a very loud manner. I find that men who write on diet have each a particular line, and each one thinks that his *confrère* is wrong. The one who writes on the non-animal diet tells you that if you follow the system all your diseases and complaints will disappear, and you will ever hereafter be well. Another writes as a starvationist, and one immediately thinks what a vast amount of good food has been wasted and money unnecessarily spent. A third advises the almost total abolition of starch and sugar, declaring that to the eating of these foods are due cancer, bronchitis, pneumonia, &c. ; whilst a fourth ascribes the same terrible results to an animal diet. And so I might go on.

What I feel, after having read these books and given a good deal of thought to them, is this : that there is much truth in all of them and much exaggeration. We are apt to forget that the body is not a machine but a living organism ; that whereas two machines can be made exactly alike in every detail, no two human bodies have ever been constructed alike. What suits one person does not by any means exactly suit another. Food—quality and quantity—must vary with the individual, with the time of life, with his mode of life, and with the climate he is living in. No diet table can be or should be for many days exactly the same.

I think it is unfortunate that many of us do not

seriously think about these questions until, perhaps, we begin to put on too much flesh, or find that the power of exercise in many ways is leaving us. If we were properly taught at 20 and we really carried out the lessons, then the early increase of flesh, and a disinclination for exercise, might, I believe, be longer postponed.

As regards the quantity of food, I find that most writers are agreed that too much is almost invariably taken, and there seems little doubt that this is true; the cause of this is, perhaps, due principally to this, that whilst in the evolution of the race so much care has been given to the cultivation of the mind, the diet has continued the same, although much less strain has been thrown upon the physical parts of the body, and, consequently, less albuminous substances are required. Yet this statement requires much modification, for when the body is being built up a full diet is necessary, but it must be an assimilative one.

The effects of excessive alcoholic drinking are always more apparent than excessive eating; the former, whether in an acute or chronic form, show themselves in many ways, and a drunken man is an object-lesson which no amount of over-eating is capable of producing. The normal effects of over-drinking are worse than the results of surfeiting, hence the *raison d'être* of temperance societies; but the over-fed man is no less wearing out his internal organs than the alcoholic—the mill in the former grinds more slowly, but no less surely.

The amount of nitrogenous food eaten should vary

with the amount of motor power given out—the more force expended the more fuel is required, and this should be of as economical a kind as possible to save the organs from wearing out too quickly. Anyone who is in the habit of walking or playing out-door games of any kind soon discovers the different motor values of foods—books may help in this matter, but practical experience is of more value.

I have often watched the huge meat dinners that many of our hospital patients obtain when in bed, practically the same amount in quality and quantity as when they are at work; fortunately for themselves a bilious attack or diarrhœa often supervenes to relieve the surfeited organs, or the house surgeon plies them with the old white mixture.

My own experience tells me that some kind of meat is better for moderate and prolonged exercise, although excellent substitutes will be found in eggs, cheese, brown bread, &c. I have tried porridge, milk, vegetables, &c., but the quantity required to produce the same force as with meat is too great for me, and the distension caused is a distinct drawback and is mechanically uncomfortable.

When working mentally and taking little or no exercise, less meat should be consumed and is best taken in the middle of the day; for dinner, fish, or even game, is pleasant, and I believe useful. If I were to state my own diet when in work it would be something like this: For breakfast, eight o'clock, a rasher of bacon, one egg, toast and butter, with coffee and milk, equal parts; luncheon at one o'clock, consisting of meat, vegetables, light farinaceous pud-

dings ; at 4.30 a small cup of tea ; and dinner, about 7.30, consisting of soup, fish, game, light puddings. If much mental work were to be done in the afternoon, I would recommend the omission of the meat in the middle of the day, and take, instead, a light pudding with cheese and milk, and then afterwards a larger meal in the evening. But I cannot say too strongly that there is absolutely no one rule about foods to be observed by all. The amount of work, whether mental or physical, the season of the year, whether warm or cold, the climate, the time of life, the individuality of the person, and other things, must be taken into account.

I deprecate too frequent meals—three a day should rarely be exceeded, and on an average at intervals of four to five hours.

I have often noticed that many people never seem to have finished eating, and it would be difficult to say what amount of rest the stomach ever obtains. Surely the stomach is a long-suffering and forbearing organ, but in many cases it has a terrible revenge in setting up a lasting and almost incurable dyspepsia, or, what is worse, a carcinoma.

I think that many doctors who write so urgently about plain diets often forget the great attraction that the mere pleasure of eating has for a large number of people.

The organs of sense and taste, like other organs of sense, are developed with varying degrees of sensitiveness in people, and the so-called "pleasures of the table" have a real meaning to some but not to others.

There are a great number who do not wish and never intend to give up these pleasures, and know well that the indulging in them tends to increase their satisfaction. No amount of preaching or teaching on moderate and judicious feeding will affect these people, and I am not so foolish as to think or believe that anything I write or say will do so. On the other hand, there are a very large number of people who eat unwisely from want of knowledge on the subject, and did they know the consequences that will follow later on their present mode of living, would gladly submit to any beneficial change in their dietary.

If there is one class of persons more than another who should try and keep well, it is the medical profession—a profession probably more trying and wearing to the nervous system than that of any other profession, the members of which can rarely retire until comparatively late in life. If we are poor, it is necessary for us to be well. It has often been said that the members of our profession have more hobbies, whether they be out-door ones, or those of art, science, or literature, than any other section of the community, and to enjoy these nothing is so helpful as good health ; and there is nothing that tends towards this so much as careful feeding.

Exercise.

It would be well if every man were trained in early life to some form of out-door recreation, for it is often difficult in middle life to take one up from lack of early training, which is really necessary to the full enjoyment of it.

Health is enormously strengthened, work is rendered more pleasurable and of a higher order, when moderate and judicious exercise is systematically carried out. There are some men who practically do nothing else than play all the year round, who live for this, and these naturally excel in games. Very few men are able to lead purely physical lives for pleasure, and it is right that this is so. We are not animals in this respect, and exercise should be taken to keep the body in health, so that the mind and character may have more play and be more fitted to do their work.

There are many kinds of exercise fitted for the various times of life; to many they come naturally and are enjoyed; to others it seems that all forms of exercise are irksome. Games are more enjoyed in early life—at anyrate, the more active ones; but there is a strong tendency when middle life is reached to slacken off, and get what is called lazy. Of course a good deal of the disinclination is due to the lessening of the elasticity of the tissues and to the increasing of the body-weight, both of which, however, I believe are brought on earlier than need be by the absence or want of due training of the body.

Then, again, there are those bugbears which we hear everywhere, especially in our own profession, of "no time," and "I cannot afford to do it."

Now, I have often argued and talked with men on this subject of "no time," and at once I admit, if one is going to take systematic exercise, say one or two afternoons a week, one must be prepared to lose something professionally in the present; but consider for one moment the other, and what we may call the

philosophical, side of the question. In the first place, there is a distinct gain of health, and if persistently and consistently carried out, a maintenance of it. Work for a longer period can be carried on, and the quality will not only be maintained but increased. What the public requires of us, I venture to hope, and in many cases I believe, is good work rather than much indifferent work, and when they do this our reasonable recreation will not in the long run affect our position with them.

Now, the question naturally arises when discussing the subject, what forms of exercises are to be recommended? These must depend on our age, on our aptitudes, our early training, the place we live in, and, perhaps, on our incomes.

It is almost useless to play cricket, fish, or shoot, unless taught these in early life; but there are many things, such as riding, golf, fencing, gymnastics, cycling, which can be taken up much later in life than the former. Every man must decide for himself the kind that he will take. My desire only is to urge that everyone, if possible, should adopt one or more of the above.

It is important that the exercise should be regularly practised; but as many sports can be only enjoyed for a portion of the year, such as cricket, shooting, &c., then these should be supplemented by some other kind of sport, such as cycling, walking, fencing, &c., during the remaining parts of the year.

I believe that it is a wise thing to get quite away once a week from one's work, where there is a change of air, of scene, and of people. There are many sports which allow of this, such as shooting, includ-

ing rifle-shooting, golfing, cycling, &c.; after these outings we certainly return fresher in every way and with greater relief and keenness than if the recreation was taken in our own homes. But if this absence from home is prevented from any cause, then we can fall back on tennis, cricket, net practice, fencing, &c.

I once heard it said by a well-known physician that if sea-water was not so common and accessible it would be a great deal more used in balneology than it is now; the same may be said of sea-fishing. There is a good deal of real amusement and sport to be obtained at any of our sea-board towns in the way of fishing, sailing, and rowing.

The sea is practically a freehold—there is no rent to pay for the use of it, and the game you catch is free of charge.

I have only been aware quite recently of the quantity, quality, and varieties of fish that can be caught on our sea-boards, and at comparatively small expense.

I have been induced to write these few rough notes by noticing for some years past the indifferent states of health that one meets with in middle life and old age. Few people can possibly enjoy the later years of life without preparing for it in the earlier periods.

I have written on two subjects only—food and exercise—which when carefully attended to will affect our well-being more than anything else.

The body being well, the higher parts of our nature will have full and fair play—the mind and the character will then be better fitted to fulfil their high destinies.

CLINICAL TYPES OF PNEUMONIA.

I HARDLY know of anything more interesting in one's spare hours than to read a book on general medicine or surgery written fifty years or so ago. What an immense change has come about in almost every department of our profession, whether the etiology or treatment of disease be considered! I well remember some years ago, whilst dressing for the late Mr. Cooper-Forster, seeing a woman who was dying from acute septicæmia after an amputation of the breast had been performed, Mr. Cooper-Forster then remarking that it was impossible to account for these deaths, and that every now and then such a result would follow from such an operation as the above. Even in my own recollection one most important disease has almost disappeared—viz., ague; and another, *i.e.*, lardaceous disease, is becoming very rare; the former was rife in my own neighbourhood forty years ago, and the latter was common when I was a student.

Before coming to the subject of my paper—the various types of pneumonia that are met with clinically—I will consider the past history of pneumonia. There can be little doubt that what is called to-day croupous, or lobar, pneumonia was the only form of the disease known to our forefathers. Watson, writing in 1848, in the third edition of his "Practice of Medicine," practically only describes lobar pneumonia; he gives a few

lines to catarrhal or lobular pneumonia, but omits all reference to its pathology, physical signs, and treatment. Fibroid pneumonia he does not mention. Watson at the above date pictures most graphically all the classical signs and symptoms we now generally associate with an acute attack of sthenic pneumonia, occurring for the most part in a young person from the so-called cause of chill, such as fine crepitation followed by bronchial breathing, bronchophony, dulness on percussion, the characteristic sputum, the relative increase of the respirations as compared with the pulse-rate, &c.; but, strange to say, the "crisis" is not referred to at all, probably, I suppose, because the thermometer was not in use at this date; still, one would have thought that the application of the hand, and the often collapsed state of the patient at this critical time, would have demanded some special notice to this point. It was in this form of the disease that one, or sometimes all, of three well-known so-called specifics were used, viz., bleeding, tartar emetic, and calomel. The confidence in the foregoing was unbounded, and it would have been almost impossible for anyone not to have employed them, such was the faith in their efficacy. Graves, writing in his "Clinical Medicine" some few years before the period I have just referred to, speaks only of croupous pneumonia. He mentions as a rather common sequelæ or complication of the disease abscess of the lung; but on carefully reading over the notes of the cases there is some doubt in my mind whether these were not for the most part local empyemata or tuberculous cavities. However, at

this date no exploratory needling or incision was made. Graves also recommends the old treatment of bleeding, tartar emetic, and calomel, but he advocated, as a rule, only two bleedings of 12 oz. at each time. The treatment by digitalis and strychnia is not mentioned at this date. My own reading and experience lead me to think that ordinary sthenic croupous pneumonia is not met with so commonly to-day as it was some years ago. I rarely see in hospital or private practice the disease accompanied with all the well-known —I was going to say the examination or text-book—signs and symptoms. I believe that the type has somewhat changed. The various clinical varieties that are present with us now are in some instances due to different causes and require different treatment.

The phrase "congestion of the lungs," too, is constantly employed by the public and not infrequently by the members of the profession. It is difficult to understand in what sense it is used by the latter; when used by the former I pay no attention to it. Many years ago Sir S. Wilks was constantly objecting to the prevalent use of the word "congestion," and he taught, I believe, that the term should only be used when the first stage of pneumonia was indicated. There can be no doubt that the first stage of a croupous pneumonia is that of congestion; but the question before us is, Is there such a thing as a congestion of the lung, pure and simple, apart from its association with pneumonia, and one that is not passive in origin, as seen in heart disease? I think that such a

condition—which may be called "simple congestion" at present for the want of a better term—does exist. It is almost impossible to demonstrate it, as it is not a cause of death. The following case came under my notice some time ago. A man, middle-aged, was admitted into the Victoria Hospital, Folkestone. At the base of the left side there was dulness on percussion, with bronchial breathing and bronchophony. On the right side at the base there was some loss of tone on percussion, with fine crepitation, but no bronchial breathing and no bronchophony. At the *post-mortem* examination the base of the left lung was found to be in a state of red hepatization, with the characteristic appearance and qualities, and the base of the right lung in the condition known as congestion or engorgement. Now most of us have met with cases which gave only the signs that go with a congestion, and the subsequent history of the case has led us to make no further diagnosis. I see no reason, judging from analogous states in other organs and parts of the body, to say that this congestive state of the lung must necessarily go with pneumonia. On the other hand, I think the public and many of the profession use the word far too frequently and far too loosely.

When the term croupous or sthenic pneumonia is used in this paper it is that form which I have already mentioned as having been graphically described by Watson, with its well-known classical signs and symptoms, followed by crisis, generally supposed to be caused by exposure to cold. It occurs for the most part in youth and the middle-aged, and the prognosis is good. The following

forms, I think, we are justified in speaking of as clinically different:—

Pneumonia of Influenza.

It is very difficult to form an estimate of the proportion of cases of influenza that complicate pneumonia; but this complication is more frequent in some epidemics than in others, and I have sometimes thought some of our brethren seem always to have a very much larger number of pneumonia cases than others. This is probably due to the cause of a different method of classifying some of the chest troubles. The following seem to be the main and prominent characteristics of this form of pneumonia. The consolidation is not as a rule confined to one lobe; it begins in small patches, being more of the type of lobular pneumonia, although by the confluence of the various patches a large area of the lung becomes affected. It is rapid in its extension, and often both lungs are involved. The signs of bronchial breathing and bronchophony are not well marked, but crepitant râles are prominent. The cough is troublesome; the sputum is often profuse, and does not possess the ordinary sticky and rusty-coloured quality. A crisis seldom occurs, but there usually follow great general weakness and depression. I have seen two fatal cases of influenzal pneumonia, and the rapidity of the extension of the disease was remarkable in each case. No case of ordinary sthenic pneumonia has come under my care in connection with influenza, although it is said to occur.

Septic Pneumonia.

This form seems to be met with more frequently in young adult life or in middle age, and is rarely seen after 60. The cause is not always easy to fathom, for the origin of the infection may be internal pent-up pus undiscoverable during life. One of the most typical cases ever seen by me followed an attack of facial erysipelas. The pneumonia is patchy in distribution, and whilst one patch is clearing up another is appearing somewhere else, either in the same lung or in the other. The physical signs are not well marked, and, of course, change as the disease shifts from one spot to another; the percussion note is impaired, but not very noticeably; bronchial breathing and bronchophony are often present. The temperature follows a septic course, and the general appearance of the patient is one of blood-poisoning. There is no sputum, the disease is chronic in its course, and fatal in prognosis.

Epidemic Pneumonia.

The epidemics of pneumonia described as happening in the sixteenth, seventeenth, and eighteenth centuries are difficult to follow out and to understand; they are described pretty fully by Hirsch, of Berlin, in his "Handbook of Geographical and Historical Pathology," published by the New Sydenham Society in 1886. The epidemics existed in almost every part of the world. In reading the accounts of the above one feels that there is want of detail and accuracy about them which takes away

very much of the value of the reports given. We must not forget, however, that auscultation was not practised or understood until the beginning of the present century, and the value of the thermometer is of recent date. It is during the last twenty years that reliable knowledge has been obtained in reference to this form of pneumonia. An epidemic broke out in Middlesborough in 1888, and was thoroughly investigated by the late Dr. Edward Ballard. Two years later a similar epidemic, although on a smaller scale, occurred in the village of Scotter, in Lincolnshire, and was examined and reported on by Dr. H. F. Parsons. The disease appears to be a constitutional infection—a pneumonic fever. The incubation is short; there is a rapid rise of temperature, and the constitutional disturbance is out of all proportion to the evidence of the local pulmonary disease. The cough is trivial; delirium is early present. The fatal cases occur often on the third or fourth day. It is common for the physical signs of pleuro-pneumonia to be observed in one or both lungs on the second day. Convalescence usually begins by crisis on the seventh day. Relapse is common; mortality is high.

The infection is given off, or tends to be given off, in the breath and sputa, and it is acquired by inhalation and perhaps by swallowing. The ease of transmission from person to person is much influenced by lowered vitality on the part of the recipient, and by close and prolonged contact with the patient. The treatment is thus important; the ordinary preventive measures of isolation and disinfection must be carried out.

Typhoid or Asthenic Pneumonia.

This comes on in a diseased condition, and therefore the clinical type is changed. The so-called typhoid symptoms are generally present, such as low delirium, tremors, paralysis of the sphincters, a brown, dry tongue, sordes on the teeth, the pulse feeble and rapid, &c. The pneumonia begins gradually, and is never sharply defined. The symptoms of rigor, pain, and rusty sputum are absent, and there appears to be no crisis. For the above reasons this complication, as it may be called, is often overlooked, yet it may be the immediate cause of death. In most cases the pneumonia is due to the pneumococcus of Fränkel; in some few, however, the typhoid bacillus has been found.

Pneumonia of the Aged.

The pneumonia of old people certainly seems to me to carry with it a certain combination of signs and symptoms differing from the preceding types. The disease comes on very insidiously and is accompanied by a general weakness of the body, which may overshadow the lung mischief. There is no rigor, no pain, and little cough. The temperature is probably little raised throughout, often not rising above 100° or 101° F. The pulse at first is not much quickened, but the rapid increase of respiration is marked, and the patient complains of want of air. The patient lies on the affected side; there is little if any expectoration; the physical signs of dulness, bronchial breathing, and

crepitation are all present, but the dulness is not great, and the crepitations are coarse in quality; the prognosis is bad. It is important, owing to the latency of this form of pneumonia, to examine the lungs in all acute illnesses of the aged. The above must not be confused with that which is known and described as "hypostatic pneumonia." This latter state comes on at the end of an illness, being found in both lungs, and at the most dependent positions. Strictly speaking, it is a passive condition.

Alcoholic Pneumonia.

This form is the last I will mention. Alcoholic pneumonia can be better recognized when seen and examined than when described. The delirium which is constantly present calls out for much attention, whilst the chest mischief may be proceeding unnoticed. The man is much worse than his physical signs would lead one to expect, and it is the general downhill condition of the patient that strikes one rather than any local disease. The sputum is profuse and dirty in colour, whilst the temperature is only moderate in height, and if the patient lives long enough the crisis is a feeble one; the prognosis is bad. I may say that as a rule I have always looked upon low temperatures and profuse expectoration as bad omens in forming a prognosis.

Probably most of the types of pneumonia I have been describing are pathologically almost identical, differing more in degree than in kind from one another. However, we know that when meeting with these varieties the prognosis and treatment are

unlike in nearly all of them. Let me take as examples one or two diseases in each of which there are forms which pathologically seem alike and yet prognostically and therapeutically are dissimilar. Diabetes in people under 40 years of age is a serious disease ; the prognosis is bad, yet a case may be much improved by treatment. Diabetes coming on in persons aged over 60 seems to be almost a harmless disease, and very often, except for the attendance of the medical man, would not be taken heed of by the patient. Clinically, these two forms must be classed differently, but as regards the presence and even amount of sugar they are alike. Again, acute Bright's disease following scarlet fever, as far as the urine and general symptoms are concerned, is identical with that form following exposure to cold. Yet we know clinically that the prognosis in the former is much better than in that of the latter. I might give you other instances, but the above will suffice.

In a paper read a few months ago before the members of the West London Medico-Chirurgical Society I advocated that there should be a more precise clinical classification of disease, and that it is unscientific as well as unpractical to speak of pneumonia, peritonitis, meningitis, neuritis, &c., unless some qualifying adjective is used to indicate the nature of the disease. I have attempted here to classify pneumonia clinically, although probably not entirely satisfactorily.

Bacteriologists wish and believe that various forms of disease should be classified according to the micro-organism to which the particular form is due. This

method at first sight would seem a simple and satisfactory one, but practically bacteriology is hardly in such a sufficiently advanced stage for us to adopt this mode. Before many years are passed—the clinical physician and the bacteriologist working more closely together, each correcting and aiding each other—we shall arrive at a much more satisfactory classification of disease than at present exists. In the meantime I think that there is room for the clinical physician to be more accurate in his own line than sometimes he has been in the past, hence the reason why I have written my paper on the clinical types of pneumonia.

A PLEA FOR A MORE PRECISE CLASSIFICATION OF DISEASE.

THE time seems to me to be approaching, if it has not already come, when a more definite and diagnostic classification of diseases should be made. The causes of diseases are becoming better known every day, and many that in the past have done duty, either under the head of "predisposing" or "exciting," must fall away and give place to others more precise and causative.

Until a few years ago a cold or a chill was thought to be the cause of nearly all inflammatory states in every part or organ of the body; it acted as a satisfying and comfortable explanation of all troubles alike to patients, their friends, and the doctor; it covered up an immense amount of ignorance, and spared need for further clinical research. But in these days of pathological and laboratorical examination, cold as an origin of disease must take a declining position. It is not denied here that it plays some part in disease, although at present it seems to be a mysterious one.

My subject is so large and vast in all its ramifications that I must take up, so to speak, one aspect of it, and my remarks will mainly be directed towards a plea for the attainment of a more precise clinical classification of disease.

The three general causes of disease given in our text-books are classed under the heads of Traumatic,

Chemical, and Vital, the last including all infectious and contagious diseases. Under each head will be found a great number of diseases unlike in their qualities or symptoms, and I doubt very much if this method of classifying diseases has been of much service to the practical physician or surgeon. What is wanted is that the known causes of the disease should have a proportionate value put upon them, and again, that no prominent symptom should be classed as a disease if it is possible to put a causative or defining adjective in front of it.

I believe as our knowledge advances the so-called direct causes of disease will decrease in number, in other words, the traumatic and chemical causes will take the place more of what used to be called predisposing causes. Injuries to tissues, whether produced by traumatism or by chemical agents, place tissues and organs of our body in such resistless states that the various active bacterial agents have more or less full play ; but this theme I will not pursue further, but will illustrate the meaning and project of my short paper by taking certain well-known diseases, and discuss their causes in some detail from a clinical standpoint.

To begin, we will take pneumonia. Under this head is generally included what is termed acute croupous pneumonia, catarrhal, or tubular pneumonia, and interstitial pneumonia. Formerly pneumonia practically meant only one form of the disease, viz., the sthenic form with all the well-known classical symptoms and signs, as high fever, hot skin, quick pulse, flushed cheeks, coated tongue, great thirst, febrile urine, with dulness on percussion,

bronchial breathing, bronchophony, &c., ending by crisis, and for which blood-letting was commonly done. I believe that this was the only form of pneumonia known to our forefathers, and when the word pneumonia was used it carried with it all those symptoms and signs that we now generally associate with acute croupous pneumonia, occurring for the most part in healthy young adults. If there is one disease more than another which seems to be caused by a chill or exposure to cold this is certainly the one; yet many cases come under our notice when no such origin can be traced.

I would advocate that if the word pneumonia be retained, standing alone without a qualifying adjective, that the acute croupous form should always be understood to exist. But to use the word indiscriminately for all sorts and conditions of inflammatory states of the lung is a misnomer, and leads to errors in diagnosis and treatment. The pneumonia occurring in influenza, known to all of us, is clinically distinct: it has its own history, its own peculiar features, runs a certain course, and cannot practically be considered apart from the original disease. It may be, and often is, the most important symptom of the influenza, but it is only one of the many results that may be met with in an attack of influenza.

Take, again, that form of pneumonia met with in alcoholic persons, the leading symptoms of which are: Moderate temperature, excessive expectoration, spreading of the inflammatory condition, great depression of the nervous system, low circulatory condition, &c.; or, again, that infective or septic form of

pneumonia, peculiarly well marked, after some attacks of erysipelas, which comes on perhaps days or even weeks after the original poison has passed away, characterized by small patches of lung affected, wandering in character, quickly appearing and afterwards disappearing, resistful to all treatment, fatal in prognosis; or, again, that clinical form which occurs late in typhoid or typhus. The list might be extended, but I have said sufficient to indicate that each of the above are unlike in character, have a different origin, run a different course, and the line of treatment is not necessarily the same in each form.

The next disease I wish to say something about is peritonitis. It appears to be very questionable, to my mind, whether the word peritonitis should ever be used without some explanatory adjective accompanying it. Has anyone here ever seen a case of so-called simple peritonitis? All my life I have been looking out for such a thing, and so far have not succeeded in meeting one. The causes of peritonitis are after all comparatively few in number, and I doubt if "cold" can be reckoned as one of them.

In children, apart from tuberculosis and typhoid, peritonitis can almost invariably be traced to disease of the vermiform appendix. One has met with it in intussusception, and also very occasionally from strangulation of the gut in connection with Meckel's diverticulum. I have never seen infantile peritonitis from an infective cause nor from exposure to cold. Coming on to middle and later life one must add to the above a few more causes, such as propagation of inflammation from adjacent organs, viz., ulceration or perforation of the stomach or bowel, strangulation

of the bowel, metritis, &c., new growths in the peritoneum, and almost lastly, peritonitis from injury to the peritoneum produced by accidents or from operative procedures. We have all seen exceptional cases of peritonitis, and I may mention here that somewhat rare condition, happening late in life, of falling of the splenic flexure of the colon upon itself, at first setting up a distended condition of the bowel, followed by constipation—this latter condition being the one for which medical advice is sought. The attacks are at first mild, gradually increase in frequency and in length, until ultimately a peritonitis and fatal obstruction closes the scene. Upon such a case I made a *post-mortem* examination. Doubtless those cases would be benefited by elevation and massage, as recommended by Mr. Jonathan Hutchinson. Again, there are cases of peritonitis directly septic in origin, where pus escapes at once into the abdominal cavity, and also there are few which are produced by absorption of material from outside the abdominal cavity, such as from the urethra, &c. I have seen infective arthritis in small and large joints, iritis, pleurisy, pericarditis, produced by a gonorrhœal discharge, but so far have not seen septic peritonitis apart from absorption of poison from the peritoneal cavity. The peritonitis associated with gonorrhœa in women, and the ordinary infective kind connected with the uterus, tubes, &c., I am not alluding to.

As I have doubted the existence of simple peritonitis, so do I doubt that of simple meningitis. I am loth to confess that the only three common causes known to me clinically of meningitis in children are

tuberculosis, extension of mischief from ear and nose disease, and cranial injuries. One might think that the disease was produced by many causes, considering how frequently the word is in use. The long list of distinguishing symptoms and signs between simple and tuberculous meningitis met with in our class-books are of little value.

In later life a few other causes must be thought of, such as syphilis, tumours, &c., but meningitis following rheumatism, influenza, pneumonia, erysipelas, is certainly rare.

The disease known as posterior and basic meningitis, which is closely associated with epidemic cerebro-spinal meningitis, has signs and symptoms of a distinguishing character, and will be comparatively easily recognized.

I have now been through the common clinical causes of pneumonia, peritonitis, and meningitis; my object has been in these few short notes to emphasize the importance of always, when using the above words, adding a distinguishing word to them. I am quite aware that under the words of pneumonia, meningitis, orchitis, cystitis, &c., &c., the causes or origin of the disease are given in our ordinary text-books, but there is a want of proportion about them, and the common and rare causes are mixed or jumbled up together, and, like a tangled net, the threads or causes require much trouble to unwind them. Those of us who have been in practice some few years, or who are fortunate enough to hold hospital appointments, find out sooner or later what value is put upon these causes; but for those starting in practice, or for others who are

working in out-of-the-way places, and do not possess the medical and surgical advantages some of us do, would fail to a great extent to estimate truly the value of these causes.

One reason why I think the rare causes of many diseases have a far too great importance attached to them, is that our medical societies, especially, perhaps, those in London and the great provincial towns, seem to encourage their members to read something that is not commonplace ; and so it comes to pass that all rare cases and so-called interesting ones are laboriously hunted up and promptly recorded. These are published in the medical journals and obtain a prominence and an undue amount of weight which is often quite out of proportion to their real clinical value ; whereas our common and everyday causes of disease may be neglected, and thus arises a tendency to forget the well-known and useful adage, " Common things most commonly happen," or we rarely meet with rare diseases.

Again, when using such words as pneumonia, peritonitis, a diagnosis of the disease is really not made. A prominent sign is indicated by the words, and, of course, a most important, and possibly a vital one. These terms are placed in all our text-books at heads of chapters, and by their prominence seem to call aloud to be treated as distinct diseases. This point is not a fancy one I am asking you to consider, for treatment is the aim and end of all medical knowledge, and the line of treatment which one must carry out depends very much on the qualifying adjective you place before these important words representing these diseases. A few examples illustrating this will aptly conclude my paper.

A *tuberculous* meningitis, as far as our present knowledge goes, had better be treated on expectant lines ; a *septic* meningitis will very probably require active surgical treatment.

The various forms of peritonitis require treatment according to the clinical form we are dealing with. Appendicular peritonitis, if local in position, is generally cured by local surgical treatment, and so each type has its own peculiar treatment.

The ordinary croupous is not the same disease clinically as a septic influenzal or alcoholic pneumonia and the treatment of each, I take it, would be somewhat unlike. In the same way I might discourse on neuritis, cystitis, and so on. My paper advocates thus a clinical rather than a bacteriological classification, and this need not be wondered at, seeing that my work is confined mostly to the bedside and the *post-mortem* room rather than to the laboratory ; whereas those engaged in physiological and laboratorical studies would make bacteriology the chief factor in our classification.

The assistance of the clinician and the laboratist is both required, and it is necessary for the full advance of medicine that they work together. Still, at present, I think the clinician has fallen a little too much in the background and requires a little push forward, to which end these few notes have attempted to contribute.

SOME REMARKS ON THE PREVENTION OF APPENDICITIS.

I THINK there can be little doubt that appendicitis has much increased of late years. Although many years ago cases of appendicitis were almost invariably put down as peritonitis, yet these peritonitic cases were less numerous than we meet with to-day. The type of case, I believe, has also changed, as in many other diseases, for the so-called simple or medical cases we see less frequently than we used to.

Between the years 1893 and 1905 inclusive, 107 cases of appendicitis were admitted into the Victoria Hospital, Folkestone, every variety of the disease being found among this number.

From 1885 to 1892 inclusive not a single case was recorded, although in the last year, 1892, 263 patients were admitted.

I have carefully gone through our statistics, which show that not only have the appendix cases increased absolutely—for this is to be expected in a growing neighbourhood—but relatively so. For 1893 the proportion of appendicitis to all cases amounted to 1 in 100, whereas in 1904 and 1905 the proportion was 1 in 26 and 1 in 29 respectively.

Twenty-two cases died, being roughly one-fifth of the entire cases.

It is possible to exaggerate the importance of the above, but, after many years of hospital and private work, one must come to certain opinions, and they are these: That cases of appendicitis are absolutely and relatively increasing; that the ordinary medical

or simple cases are not so frequently met with as formerly; and, again, that this type is more frequently of a grave septic character.

Before passing on to the clinical aspect of my paper, it is well to say that there seems no doubt that the real starting point of the appendicular peritonitis is the presence of the *Bacillus coli communis* in the appendix; yet this statement requires an explanatory note, for this bacillus is always present in large numbers through the whole alimentary canal from the mouth to the anus. Again, it varies greatly in its virulency; it is only when the bowel becomes the seat of any morbid change that the bacillus, so to speak, comes into play. Thus, any change brought about in the bowel by constipation, diarrhœa, obstructed bowel, congestion of the bowel, becomes of immense importance. Thus, it seems that for an attack of appendicitis to occur there must be some lesion of the appendix to allow the escape of the bacillus, and the bacillus must be in a state of virulency.

Ordinary or simple catarrh of the appendix is evidently of common occurrence. *Post-mortem* examinations show this. It generally leads to no symptoms and it is not often clinically diagnosed. But there is a further stage of the trouble, in which more or less inflammatory material is thrown out—this material may go on to the formation of pus or be entirely absorbed.

Coming now to the practical or clinical side of our subject, everyone must at once be struck with the change of mind which has taken place in respect to the treatment of appendicitis. A few years ago all

cases of appendicitis were admitted into the medical wards and treated by the physicians. Now surgeons seem to claim these cases, and all writers and speakers of to-day, when discussing the subject of appendicitis, refer to it almost as entirely as requiring surgical treatment. This was particularly brought out at a meeting of the Royal Medical and Chirurgical Society on February 28, 1906, when Sir Frederick Treves opened the discussion "On the Subsequent Course and Later History of Cases of Appendicitis after Operation." Although the terms of the title of the discussion practically precluded the preventive or medical aspect of the subject, they nevertheless showed the trend of the feeling of the profession at the present time on this subject, namely, the surgical side, and practically ignored the preventive or medical part.

I maintain that the purely surgical treatment of this disease, although, of course, right in its proper place, is treatment at the end of it; and all scientific and sound treatment of disease should aim at the prevention of disease, or treatment in its very early stages. There is always a difficulty in discussing, especially with the lay public, the two great lines of treatment (1) the preventive, and (2) the surgical. The former method can hardly be appreciated by the patient, for the disease has not yet come on; there is no pain, sickness, or general feeling of illness. But in the advanced stage of the disease, in which an operation has relieved all the above symptoms, the patient is not likely to forget the great benefit received. In other words, it is very difficult to get carried out rules of diet, exercise, &c., in order to

prevent a disease, however serious, which the patient knows nothing about, and of the consequences of which he is entirely ignorant. Still, I maintain, if this disease is to be stamped out, or, at anyrate, brought under control, the real clinical causes of it must be studied, and much more attention be paid to the carrying out of the rules by which we think the disease can be avoided.

I may mention here that the disease seems to be one of civilization; it is rarely, if ever, met with among coloured races. Although the white people in the United States seem to suffer more than any other race from appendicitis, the negro inhabitants of the Southern cities are almost exempt. The same may be said of the coloured races of Africa, and Dr. Sandwith states that in Egypt they had to wait for some fifteen years after the English occupation to find an appendicitis patient among the Egyptians or Soudanese, either in hospital ward or in the dead-house. Dr. Sandwith goes on to say that during the last few years, however, some cases have been seen, and in January, 1906, whilst visiting Dr. Cresswell's hospital patients with him at Suez, he found five cases of appendicitis being treated in a ward containing only sixteen patients.

I believe that the most prominent and active cause of appendicitis is constipation, a lodgment of undigested matter, or fæcal masses, in the bowel. It is often very difficult to decide on the presence of constipation, for the daily evacuation is not sufficient to settle this point. In those extreme cases in which patients come to us saying that they are suffering from diarrhœa, on rectal examination the lower

bowel may be discovered to be entirely blocked up with hard masses of fæces; but, apart from these, there may exist hard fæcal lumps in the hepatic, splenic, or sigmoid flexure of the colon, and even in the small bowel, with a daily natural stool.

I have on two occasions suffered from acute attacks of appendicitis, at an interval of a twelvemonth, both of which I traced to constipation. The cause of the second attack was most clear to me. I was travelling by quick stages along the South Coast of France, visiting the various health resorts in that neighbourhood. My bowels had been confined for four days, and on the fifth my attack commenced and lasted for eight days. It is the experience of many patients that when the bowels have not been opened an attack of appendicitis is apt to occur.

I think that our ancestors and the old physicians and apothecaries insisted much more strongly on the need and importance of regular and thorough bowel action than we do at the present day. The regular dosage with salts and black draught had much more to do with the prevention of intestinal toxæmic conditions than, perhaps, we even to-day are prepared to admit. Practitioners in those far-off days had more time to study clinically the symptoms of disease than the overwrought student and precise physicians of to-day. Men in those days were great observers, and they noticed that free stools kept the head clear and the body cool. The Oriental seems to be often a large, if not a voracious, eater, especially at a feast, but he has a horror of constipation.

Now, there are a good many conditions, which have increased of late years, which are more or less

associated with constipation, directly or indirectly, such as oral sepsis, excessive and unnatural eating (as seen in our modern hotels), unsuitable foods, alcoholism in its various forms, weakened abdominal muscles, wrong methods of stooling. Each of these require some notice.

Treves says: "Defective masticating teeth are exceedingly common among the subjects of this disease, and especially among those who have passed the period of youth. Over and over again it would appear as if the want of proper and efficient teeth had been the direct cause of the attacks. Such patients often bolt their food, and such meat as they eat can hardly reach the stomach in a condition fit for complete digestion. The bolus passes into the bowel still ill-digested. It fails to stimulate normal peristalsis; it is prone to lodge in the great receptacle, the cæcum, where it decomposes, and, if there be any existing lesion of the appendix, must tend to encourage the morbid change."

In connection with this question of the teeth, I have often wondered why dentists have not paid more attention to the prevention of decay. Surely something might be done to prevent the almost universal decay of teeth that we now witness in all classes of the community, and at all ages. We are always hearing of the bad results, and in some cases apparently very serious consequences of oral sepsis, and yet stopping the teeth, or their extraction, seems at present the only remedy, forgetting that no artificial substitutes in the mouth can fully take the place of sound teeth naturally fixed. In the coloured races it must be noted that their teeth are perfect; they

do not hurry over their meals, and they rest after them—how different from the scene often witnessed of a man or woman bolting food and reading a newspaper.

I also might refer, at this stage of my paper, to the present faulty mastication which now necessarily takes place with the soft artificial foods which are in vogue. This has been prominently brought forward and constantly urged by Dr. Harry Campbell. The full significance and the evil resulting from this mode of feeding, primarily on stomach and intestinal digestion, and secondarily, on the general system of the child, is not to-day fully appreciated.

Coming on now to the question of food, there can be little doubt that a great change has come about in our methods of eating, also in the quality and quantity of food we take. Personally, I cannot help thinking, and many hold this opinion, that the enormous amount of iced food, in the shape of meat, fish, game, &c., which are now taken, plays an important part in many of our intestinal troubles. The above custom seems at present a necessity, and it seems little use to say very much about it, yet for a long time I have thought that there are decided dangers connected with the iced food traffic.

Then, again, as a rule, I think that nearly all of us are eating too much, too quickly, and not taking sufficient rest after the meals. It is not a fair argument to say that our ancestors ate as much, for it must always be remembered that they lived and exercised much in the open and fresh air; whilst many people to-day who eat most take little or no exercise. Again, the modern *table d'hôte* dinner, as

taken by the well-to-do people, is not favourable for peace and quietness among the contents of the digestive canal, nor can the present state of the knowledge of cookery among the poorer classes be considered conducive to their well-being. When the question of feeding is more carefully and systematically considered, I believe that it will be found that it plays an important part in intestinal inflammation; also, apart from the quality and quantity of the food taken, irregularity of eating tends to set up gastric and intestinal irritation, and conceivably inflammatory conditions, such as appendicitis. Commercial travellers seem more liable to the foregoing conditions than other people.

Another point worth considering is the present method of stooling, and also of the little use we make now of our abdominal muscles for the thorough expulsion of fæces and flatus. The old-fashioned and natural method of stooling on the ground, with the thighs flexed on the abdominal walls, so that in straining the inguinal and femoral canals are practically closed, has now gone out of fashion, and the modern unscientific, though comfortable, method is substituted for it. I believe the former method of stooling is much more conducive to the thorough emptying of the bowel, and, therefore, less likely for obnoxious and poisonous materials to be left behind. I am glad to see that there are already on the market some waterclosets made which to a great extent carry out the natural methods.

Again, the stays, as worn by women in the present day, must more or less weaken the expulsive action of the abdominal muscles. The practice of kneeling

down, bringing the buttocks in contact with the heels, and the anterior chest wall in contact with the thighs three or four times every morning is a good and beneficial exercise, one which I have practised myself for some time past, and recommended to others.

The question of climate and the various uses of mineral waters have been considered for many centuries, long before the Christian era. These waters are scattered in abundance throughout the whole Continent of Europe, and have more or less been systematically used by all classes of people and for many diseases. It has often been said that the people who need these waters—I am referring just now to those that are taken internally—do so on account of the excessive eating or indigestible food which they have indulged in previously to the treatment by balneology. This may be true in some cases, but I am sure that the custom of drinking special waters and of bathing is far too prevalent a custom to think that all these thousands of people who wash themselves inside and outside have over-eaten. To my mind this exceedingly common Continental custom of "water-drinking" periodically and regularly must have had a very beneficial effect in the cure and prevention of many intestinal diseases. These waters existing in great varieties in great numbers of places, in great abundance, of various temperatures, and in different climates, seem to me to have a purpose that we in England have scarcely recognized or appreciated.

We possess in our own country most valuable waters. It is not my purpose to describe these,

which I think will be more fully understood and scientifically given when their *raison d'être* is understood. In these days of strife and stress, living as most of us do in towns, our habits tend more and more to be sedentary. The internal organs under this mode of living are apt to get clogged and to work heavily, and unless they get unloaded by some means the system suffers. I can hardly imagine anything more beneficial to the economy of the body than that of a course of waters suitably taken at one of our bathing resorts. I believe the regular washing out of the intestinal canal would do much to prevent a large number of cases now known as colitis and appendicitis.

I have avoided quoting cases in support of views expressed in this paper. It would take too long, and probably be wearisome to you. Every kind and form of appendicitis are daily recorded. For the last twenty-five years it has fallen to my lot to see both in hospital and private work a great many of the above. A large number have required immediate operation, but a larger number have recovered under medical treatment.

The title of my paper precludes the later or surgical aspect of the subject. It almost entirely deals with the prevention of the disease. Still, I see and read that there is a strong tendency, not so strong as it was, I think, to ignore the treatment of the early stage of the disease, at which time I believe that much good can be done by suitable and timely treatment. What I have tried to bring out in this paper, and wish the profession earnestly to consider, are some methods or modes of treat-

ment which will prevent to a great extent this now common disease of the appendix, and also allay the morbid fear about the disease which is unhinging a large number of nervous people. I feel that a great deal more might be done than at present is the case to stamp out this popular disease. The operation that is constantly being done cannot be considered the true scientific treatment, although absolutely necessary in many cases, when the disease is far advanced. My paper is essentially a clinical one, and I do not claim for it any true scientific standpoint. Yet many of the best methods of treatment—I may also say most—have been discovered experimentally, before they have been explained scientifically. To give two examples: ague was stamped out in Romney Marsh by careful and systematic drainage, long before the real cause of it was even thought about. The drainage disturbed and upset the mosquito, and then the ague lessened and gradually disappeared. The giving of quinine was only a passing phase in the evolution of the treatment of the disease; although a most beneficial and comfortable crutch, quinine never lessened the amount of ague, although it modified the attack. Once more, the operation of removal of the tongue for cancer has been one of the most unsatisfactory in the whole range of surgery. Clinically, this fact has been known for many years, but now it has been clearly demonstrated by Mr. Cheatle that almost invariably there is present in the geniohyoid and the geniohyoglossus muscles, cancer growth which is not touched at all in the ordinary operation for the removal of the tongue. Some day before

long, I hope, we shall be able to demonstrate conclusively the exact cause and method of an appendicular attack. In the meantime, my experience leads me to think that some such view as I have attempted roughly to give you in this paper will partially explain the increasing number of cases of appendicitis that we meet with to-day.

Appendix.

When one is hearing so much about the uselessness of the cæcum and the appendix, it is well to bear in mind that organs before now have been thought to be functionless which by further experiments and experience are now known to be most beneficial, if not necessary — for example, the thyroid and the spleen.

Comparative anatomy teaches us that in the carnivorous birds and animals digestion occurs principally in the stomach and small intestine, the cæca in the above being rudimentary or absent. In the herbivora the cæcum is enormously developed, and in the solipeds the cæcum is the main digestive organ, the stomach occupying a minor position. Man, as we know, in his eating is carnivorous and herbivorous, and so, as we should surmise, possesses not only a stomach and small intestine, but also a cæcum; the latter is small, because the vegetable food which he takes is not bulky, and it is generally of a nutritive character.

Sir William Macewen has shown by experiments on patients watched by himself, and also by those carried out on the lower animals by other observers,

that the cæcum and the appendix perform an important part in the final stages of digestion.

It seems most probable that the part played by the cæcum and appendix in the general digestive process has not until now received its proper attention. We have been for some years past thinking too much about cutting these organs away, rather than working out a method by which they might be preserved in a normal condition for active working.

When proper mastication of food, preservation of teeth, simple feeding at regular intervals and at quiet times, are properly taught in our schools and practised in our houses, we may then hope to see a marked diminution in the number of cases of appendicitis, which are now so appallingly common. Somebody has pithily said that man has neither a crop like a bird nor a cæcum like a horse, so that he has no provision made for bolting his food.

FUTURE LINES OF TREATMENT: THEIR EFFECTS ON THE PROFESSION.

THE changes in medical and surgical treatment which have been made during the last thirty years have been enormous, so that it is difficult to realize the fact that a student at that time never saw a case of appendicitis operated upon; that stones were always cut out, and not crushed; that throat, nose, and ear surgery was unknown; that the study of bacteriology had not commenced; that aseptic and antiseptic treatment was just beginning; that diphtheria was treated without antitoxin, with a fatality constantly appalling; that lung cases, including phthisis, were treated in ill-ventilated and hot rooms; that almost all abdominal operations were fatal; that alcohol was administered in large quantities for all acute cases, and ordered also in many chronic ones; so one might go on with a wearisome tale. Many of us have had to almost re-learn our profession.

Of course, all these great changes of treatment have been more or less gradual, but can be traced back to two or three great principles. The first, perhaps, that occurs to us is Lister's great teaching, that pus is not only unnecessary in all wounds, whether natural or artificial, but also harmful, and often deadly in its effects. To all of us here it is almost incredible that we should have lived these nineteen centuries of the Christian era and not to have discovered this fact.

Moses wrote quite clearly about the power of heat to destroy disease; we applied this power in many ways to preserve our foods, but when it came to the presence of pus we called it laudable! The second great advance was the promulgation of the Public Health Acts, which have been since amended and extended in many ways. To-day, the health of every town and village is more or less under the supervision of a special medical officer. The third important advance has been division of labour among medical men.

Among other great events which have affected our treatment is the study of bacteriology, with all its ramifications, by means of which the real causes of disease are ascertained; for, instead of calling all diseases by one of its leading signs or symptoms as in the past, such as peritonitis, meningitis, pleuritis, we place a distinguishing adjective in front, as septic, tuberculous, pneumococcal, influenzal, &c., thereby placing the diagnosis on a scientific basis, and often following it by a correct treatment. Although we have not yet been able to trace the origin of all our diseases, yet we believe that a great and successful beginning has been made, which must sooner or later be followed by even greater advances.

Once more, and this will suffice for our present purpose, the teaching now, in many of our elementary and public schools, of the laws of health will, before long, have an enormous influence in affecting the well-being of our nation, and preventing many diseases which now come under our care. Whatever our private views may be as regards Mr. Birrell's late Education Bill, we must all feel that the people

at large lost much by its rejection in regard to those provisions in it which put the teaching of the physical part of our nature on a proper footing.

Now, coming to the *present time*, it may be asked: What are the lines of treatment that are particularly engaging our attention, and to what end are they leading?

Many things that I am going to say you may not agree with, still, they are worth thinking and pondering over.

First, let me take the subject of *Anæsthetics*. Surely it is an unnecessary risk, as well as an unscientific procedure, to render a person wholly insensible in order to operate on a small area of the body. It is well known that many of the fatalities in connection with general anæsthesia have occurred in most trivial local complaints.

Local anæsthesia is only at present in its infancy, but I have already read and seen enough to prophesy that, within ten years, all minor operations will be performed by means of its aid, and, where this method cannot be used, that some such method as that known as spinal anæsthesia will be adopted.

There must be some conditions which will require the whole body to be made insensible for some reason or another; at the same time I believe and hope that it will not be the rule.

Secondly, the Treatment of Consumption. — We know, to our own pecuniary cost, what enormous advances have been made in the treatment of this disease.

Sanatoria for consumptive patients are spread all over the country, and our consumptive patients

flock into them, but I believe that when these sanatoria have educated the people at large to the great value of fresh air, and to the following out of the natural laws of eating, clothing, and exercise, their existence to a great extent will cease. After all, people are sent to sanatoria *with* consumption, and surely the main point in reference to this disease is to prevent its occurrence; this prevention will be brought about to a large extent by teaching everyone, especially the children, the absolute necessity of ventilation in all houses and public buildings.

Although consumptive sanatoria were first started on a scientific basis abroad, especially in Germany and Switzerland, yet, strange to say, the value of fresh air is more appreciated in this country than abroad. One has only to notice the absence of proper ventilation in almost all foreign railway carriages, in the hotels, private houses, and especially in the châlets in which the peasants live, and to compare this with our own system in order to estimate its superiority. There is one great drawback to the sanatorium treatment, which is only just being appreciated, viz., the strong possibility and almost probability of producing loafers, especially among the working class. This is a subject upon which much might be said, but it has already been noted, and in some sanatoria work is now provided for the inmates.

Whilst on this subject of ventilation, it should be observed that when all children are placed in well-ventilated rooms, and taught to breathe properly through the nose, the operation for the presence of adenoids will be a rare one. I think that there is

already a noticeable decline in such operations, and that they are growing in disfavour.

On the Subject of Therapeutics.

There is an absolute revolution in ideas. To a great extent this has been brought about by the nauseous medicines prescribed, and by the uncouthness of our past dispensing methods. Homœopathy has had a great deal to do with altering some of our views as to the administration of drugs, both from a dosage and cosmetic point of view. Then we were tied hand and foot by our antiquated British Pharmacopœia. There soon sprang up all the great American firms—the English following somewhat slowly in their wake—with their "tabloids," standardized solutions, elegant preparations, and also constant introduction of fresh drugs. To-day, we hardly know where we stand. Nearly all the medical men condemn the present system, for they say that the chemists are supplying them with drugs, instead of therapeutists telling the manufacturers what to compound. This is only partially true, for many of the best firms employ qualified medical men, and also obtain their information direct from practising physicians. Still, I would always rather prescribe from the British Pharmacopœia, if possible, but to-day it is almost impossible to wholly do so, for many reasons that are obvious.

But there is a point in connection with this subject of therapeutics which is seriously affecting our profession, namely, the ease with which the public can obtain every kind of drug for every kind of trouble.

The harm, apart from ourselves, that is being done is great, for people quickly fall into the habit of drugging themselves, to their serious injury.

The Present Treatment of Cancer.

The present treatment of cancer is far from satisfactory, although the dangers connected with operations for it have disappeared, and its earlier removal has somewhat prolonged life; but when one looks back over twenty or thirty years, and rccollects all the cases of malignant disease that one has seen operated upon and the results following, one is obliged to admit an immense amount of failure and constant disappointment. The reason of this is plain, for one is attacking the disease, so to speak, at the wrong end, and I have little doubt that some of us will live long enough to see a real and permanent preventive method established. Again, another example of treating a disease late in its course is that of appendicitis. I have already written upon the prevention of *appendicitis*, and am writing more, but I will simply say here that the disease is purely one of civilization, that it is increasing absolutely and relatively to the population, and that apparently the only treatment which at present holds the field is the operative one. Surely it is worth while, nay, it is imperative, that the causes of this disease should be studied, and that it should thus be prevented or treated quite in an early stage. The operative method, although often effective and curative, is a serious one. It is done at a late and complicated stage of the disease, and, as in many

cases of cancer, it cannot be considered scientific, and can only occupy a temporary position.

Much the same might be said about the operative treatment of *gastric ulcer*. It seems to me, here again, that we are constantly discussing, or rather that the papers are, the advisability or not of operating upon many cases of the above, and constantly forgetting that most of these gastric ulcers should be prevented, or else cured in their earlier stages.

No one disputes the urgent advisability of operative interference in cases of rupture of gastric ulcer, and most men would agree that there are a few cases of chronic ulceration, in which the pain and misery are so great, that an operation is wise.

Gastric ulcers, we know, occur very largely in anæmic young girls of the servant class. Do we sufficiently recognize the seriousness of anæmia in young people? I think not. Every anæmic person should be looked upon potentially as having a gastric ulcer, and the anæmia treated at once and continuously, at the same time the diet should be carefully attended to. When it is possible, hospital treatment, with its rest, diet, and general nursing, is of the greatest use.

Once more the *milk question* and its relationship to children. Children have been dying by the thousands for years past from diarrhœa, due to contaminated milk, and the full remedy for arresting this death-rate has not yet been applied.

If people had stopped to think about the past and present method of milk-feeding in children, and to compare it with Nature's method, legislation on this question would long ago have been made effective

and curative. We all have known and watched how a baby takes its mother's milk; there is the natural warm and soft pillow of the breast for the child's head to lie upon, the milk is of the right temperature, contains all the necessary nutriment, and passes direct from the mother to the child, with no possible chance of obtaining any bacterial infection *en route*. Now compare this with the milk which is obtained from the cow, and trace its passage to the child, from the udder through the hands of the milker to the can; from here it often travels in carts or in trains, or in both, to the milkman's shop; then through all the dangers from the shop to the nursery. One does not wonder that, after the vicissitudes through which the milk has passed, boiling should be considered necessary. Some day milk will be sent direct from the cows, and retained in a sweet and uncontaminated condition, until it reaches the child or invalid, without the necessity of altering its full nutritive and antiscorbutic properties by boiling or sterilizing it.[1] When the above comes about, we shall see a great diminution of diarrhœa in children, and our astringent medicines will be little required.

Let us now, for a few moments, consider what in future will be the trend of the teaching of medicine and its future effects on the members of our profession. It is always difficult to prognosticate, still, from what has already been said, and from the manner in which practitioners are already affected, it can be safely inferred that some great changes,

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[1] See a description of "A Scientifically Worked Dairy Farm," *British Medical Journal*, January 2, 1904.

such have already been in the past, are probably in store in the future.

We shall not continue to spend thousands, nay almost millions, on hospitals, dispensaries, infirmaries, sanatoria, inebriate and drug homes, &c., to treat mostly patients who have diseases far advanced, of which the cure, in many cases, is doubtful. Our out-patients' system will have to be radically altered, for half the patients that are seen under it are suffering from troubles and complaints due to ignorance on the part of themselves or of their parents who bring them up.

Everything is now tending, and will do so more and more, in the direction of the teaching of hygiene and temperance, especially to the young. At the meeting held in London, on April 24, 1907, Lord Strathcona presiding, convened by a joint Committee of the Board of Hygiene and Temperance, the Hygiene and Temperance Committee of the Medical profession, also the Health Committee of the British Medical Association, there were speakers from all parts of the world, and nearly every one mentioned what immense results had taken place from the teaching referred to. The following resolution was moved and carried: "That this Conference is of opinion that to meet adequately the responsibilities of the State towards school children, it is essential that a medical department should be instituted by the Board of Education."

Now all this preventive teaching of medicine, which will increase more and more, is being brought about by ourselves for the destruction of ourselves.

It is one of the most extraordinary occurrences of

the present day, that a great profession is digging its own grave. Yet to be honest we must dig it. But what is going to happen to us? A great deal has already happened. Our *dispensing* to a great extent is gone. For slight ailments patients treat themselves, or their friends do it for them.

Nurses take on a great deal of work, including midwifery, that medical men once did. Masseuses, electricians, quacks, such as corn-cutters, skin specialists, and many such like, take another large share of our work, and to-day there is no doubt whatever that the total amount of strictly medical and surgical work done by our profession is less than it was twenty years ago relatively to the population.

I think, then, that there must be, if men are going to gain their livelihood by practising the medical profession, fewer men admitted to its ranks, and these highly qualified. There will be more and more State-supported men in all branches of medicine. This has already occurred in connection with many of our public bodies.

Honorary appointments to public institutions will become considerably fewer in number, and in future be replaced by paid ones. Co-operative methods, as in all other business and professions, wherever possible, will come about. The best example of this is the club system, which has been in vogue now for many years. I cannot conceive that the in-patient system of our hospitals will be much affected; for, in my opinion, patients are treated in them by such methods that it is almost impossible for them to have anything like the same advantage at their own homes. In large towns, nursing homes compare

favourably with our hospitals, but even here the expense is often almost prohibitory.

Much is heard at the present day of the lowly estate of the medical profession, of the neglect with which it is treated by governments, principalities, and powers, of the imperfect appreciation of its services shown by the public, and of the manifold wrongs which it suffers at the hands of Society.

That there is solid ground for dissatisfaction in respect of all these things is a statement which cannot be refuted.

It may, however, be pointed out that these are partly to be found in the operation of economic laws, which affect in the same way as they affect every other profession or industry, partly in the uncertain nature of the knowledge on which the healing art is largely based, partly, too, in the new conception of the true function of the physician, which is almost imperceptibly being produced by the evolution of scientific medicine.

As medicine approximates more and more to the character of an exact science, its chief aim tends to change from the cure to the prevention of disease. In the defence of the public health its most conspicuous triumphs have been won, and in this direction lies the hope of its future expansion.

It is certain that, when a knowledge of the general principles of physiology and of the laws of health is the common property of all men and women, the belief in futile remedies will cease, and quackery will die a natural death. Medicine will no longer be looked upon as the art of curing disease, but as a science of preventing such of them as cannot be altogether abolished.

That such an existence of things as described above is far off, we must all admit, still, we have only to compare the present with the past in order to see and appreciate what we have left behind and what we enjoy to-day.

In that far-off time to which I am referring, the physician will take the place that rightly belongs to him—as the most important functionary in an enlightened state.

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