Some surgeons have punctured; others have performed nephrotomy; whilst a few have resorted to, and still recommend, nephrectomy.

I think nephrectomy ought rarely, if ever, to be performed, unless the tumour be of immense size, and nothing of the kidney but a cyst-wall remain. Even then, puncture or nephrotomy should have preceded nephrectomy. Not a few hydronephrotic tumours have spontaneously subsided; several others have completely yielded to a single tapping, or a repetition of tapplings; several have recovered well and readily after nephrotomy; and some have gone on well and prosperously for a long time after nephrotomy, with an urinary sinus in the loin.

I would say of renal cysts and of hydronephrotic distension generally, that, as soon as the tumour has reached a size which causes inconvenience by pressure, not to say danger from rupture, it should be tapped; and that, if it refills, it should be cut down upon, punctured, and emptied, and then incised, and the edges of the cyst stitched to the edges of the wound. Under these circumstances, the cyst will collapse and probably close. If a fistula should remain and prove troublesome to the patient, the question of nephrectomy may be considered, and ought to be decided upon chiefly by the characters of the fluid which is discharged. If it be found that the kidney-structure is functionally sound, and secretes several ounces of urine each day, what remains of the organ ought not to be sacrificed without specially strong reasons; for it is safer to possess a healthy kidney and a half than only one healthy kidney.

I have already discussed the subject of opening the ureter in cases of obstructive distension of the kidney from impacted calculus; and I shall be much surprised if the next few years do not give us practical proof of the success of the treatment.

There is one point bearing on the frequency of micturition which has, I think, an importance in relation to hydronephrosis. The anatomy of the vesical orifices of the ureter and neck of the bladder is such that, during contraction of the bladder, the ureteric orifices are kept closed by the small muscles of the ureters. Now, when there is frequency of micturition, these orifices are constantly being closed, and obstruction in the ureters is the result. This, acting together with some other obstruction, such as a calculus, in one or both ureters, becomes an important auxiliary in the production of hydronephrosis. For this reason alone, it is very necessary to stop the frequency of micturition; and, should medicines fail to do so, there remains a most powerful and certain method, namely, median urethrotomy. This should be done, then, both as a means of relieving pain and preventing the increase of the hydronephrosis; but, at the same time, advantage ought to be taken of this opportunity of making a digital examination of the orifices of the ureters, to see if either be blocked by an impacted stone.

c. Much ingenuity has been spent upon instruments and plans for ascertaining the character of the urine secreted by the separate kidneys; and we have here to-night the gentleman who was, I think, the first to devote much labour and thought to this subject. Dr. Tuchmann will, I hope, demonstrate to us his method of closing the ureters. But I do not think he will greatly disagree with me, when I say that all the methods which have hitherto been suggested are either too unsafe, too unreliable, or too little practicable in hands which have not been trained by some hundreds of experiments, to meet with much favour. I would go further, and say I fear this must almost always be the case. The proceedings have about them something necessarily uncertain. If a tendon or nerve be divided, an artery or vein tied, or an organ of sense interfered with, a definite result ensues, whereby we are sure of what has happened. But, in closing one ureter for a few minutes, we have only the relative quantity of urine discharged meanwhile to guide us to the conclusion that one ureter has really been closed, or catheterised; and this, I fear, is but a broken reed to trust.

So far as I can learn at present, we must be content to rely upon the clinical history and course of the case, together with frequent examinations of the daily quantity and quality of the urine. In some cases, the line of research which has been followed by some of the Germans, and by Drs. Thudichum and Ralfe in this country, namely, of ascertaining the proportion which the amount of urea bears to the whole amount of solids passed, is likely to prove of considerable value. In estimating the condition of the kidneys from the amount of urea excreted, it should always be borne in mind that, under a low diet, the excretion of less than one half the standard daily quantity is quite consistent with two healthy kidneys.

In ascertaining the existence of a second kidney, the instruments for closing the ureters may possibly be more useful; because, if no urine at all flowed during their application, a safe inference might be drawn that there was no secretion passing into the bladder from an organ on the opposite side to the closed ureter. But, if allowance be made for cases

of congenital malformation and deficiency of the genito-urinary organs—under which state of things it would be always right to suspect a single kidney—there is an intrinsic improbability against either congenital absence or congenital atrophy. Out of 8,068 *post mortem* cases, there were but two instances of congenital absence, and one only of congenital atrophy, of the kidney.

LETTSOMIAN LECTURES

ON

DISORDERS OF DIGESTION: THEIR CONSEQUENCES AND TREATMENT.

Delivered before the Medical Society of London.

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LECTURE III. (*Concluded from page 270.*)

Another cause of imperfect indigestion is fatigue. When we start on a walk, it does not matter much whether the road be rough or not; any little obstacle is avoided with ease, and we thread our way over rough stones, through tangled heather, or over a quaking bog, without difficulty. Our nervous system is in full vigour, and preserves perfect co-ordination amongst the movements of the different parts of the body; so that one helps the other, and all difficulties are surmounted. But when we are tired, the case is very different; a little roughness in the road will cause us to stumble, and an unexpected stone may give us a sudden fall. The wearied nervous system no longer co-ordinates the movements of the various parts of the body, so that they no longer work together for a common end. The same thing occurs with the various parts of the intestinal canal. In my first lecture, I described the mechanism by which the acts of chewing and swallowing appeared to act as stimulants to the circulation and nervous system, and thus to ensure the proper co-ordination between the functions of the mouth, stomach, intestine, and liver. But, if the nervous system be exhausted by previous fatigue, or debilitated by illness, the requisite co-ordination may not take place, and indigestion or biliousness may be the result. How often do we find that the meal taken by a person immediately after a long railway-journey disagrees with him, and either causes sickness, or diarrhoea, or a bilious headache. Forty winks after dinner is by no means a bad thing; but forty winks before dinner is frequently much better. How often do men who have been working hard all day, with their mental faculties continually on the stretch, go home and have dinner forthwith. Exhausted as they are, how can they expect to digest properly what they eat? Almost the only saving point is, that many of them live some distance from their places of business, and have a short time during the homeward drive to sit still and rest. This is sufficient for some, especially for young men; but it is insufficient for elderly men, and they ought to make a point of having a little rest at home before dinner. Some men, unfortunately, are so misguided as to believe that exercise after a hard day's work will do them good; and, instead of utilising the little time they have for rest after a day's labours are over, they walk three or four miles, or take a tricycle-ride of several more, before dinner. The consequence is that, under the combined mental and physical strain, their digestion is impaired and their strength broken down.

Effects, somewhat similar to those of fatigue, may be produced by depressing or disturbing mental emotions, or bodily conditions. We know how readily excitement of almost any kind will destroy the appetite in some people, and depressing emotions will do it in almost every case. We not unfrequently hear of girls in whom consumption appears to have been brought on by an unfortunate love affair. If we accept the view that consumption depends upon the presence of the tubercle-bacillus, we might, at first sight, think that there can be little or no connection between consumption and disappointed love; but the depressing effect of the disappointment will lessen the digestion, impair the nutrition, and render the body more likely to afford a suitable nidus for the bacillus.

Different emotions appear to affect specially, not only different organs, like the heart and intestinal canal, but different parts of the digestive apparatus. Thus, disgust affects the stomach, causing

vomiting; fear is seen, in some of the lower animals, to affect the rectum, causing defæcation; compassion affects the small intestine, producing borborygmi; worry and anxiety, although they act upon the stomach and lessen appetite, appear to have a very special influence upon the liver. They sometimes produce jaundice, and not unfrequently cause glycosuria; indeed, most of the cases of diabetes that one meets with in middle-aged persons appear to originate in worry or anxiety.

In treating cases of indigestion, or its consequences, due to injurious mental influences, the depressing cause must be removed if possible. If this cannot be done, change of air and scene, with exercise short of fatigue, and in the open air, are serviceable. Bromide of potassium, either alone or combined with bromide of ammonium, is very useful, both in lessening the sensibility of the nervous system to worry, and in procuring sleep; for, as Shakespeare truly says:

"Sorrow's weight doth heavier grow
Through debt that bankrupt sleep doth sorrow owe,"

It is sometimes difficult to distinguish exactly between depression that may be called purely mental, and depression due to physical causes. I have already spoken of the mental depression due to disorders of the liver, but disorders of the genital organs are also apt to give rise to mental depression, and to digestive derangements. It is difficult to say whether the genital troubles give rise to mental depression through the medium of the digestive system, or whether they disturb the digestion through the emotions; at all events, dyspepsia due to uterine and other genital disturbances is not to be overlooked. Uterine dyspepsia presents the usual symptoms of nervous dyspepsia, epigastric pain, acid eructations, and sometimes vomiting after each meal. The bowels are not unfrequently much constipated.

Here, also, the first thing to do is to remedy, if possible, the condition of the uterus; next, to lessen the nervous excitability by bromides or other sedatives, and to clear out the intestines by means of purgatives.

We are sometimes too much inclined to regard digestion as a process which goes on in the intestinal canal only, and to forget how very intimately it is related to the other functions of the body. But we cannot rightly understand either the pathology of indigestion, or the action of remedies, unless we constantly bear in mind the intimate relation which exists between the alimentary canal and the rest of the body. In the treatment of indigestion we employ several classes of drugs, one of which is known as gastric tonics. These consist chiefly of vegetable bitters. There can be no doubt whatever about their practical utility, but it is not very easy to say how they act. They increase the appetite, lessen flatulence, and tend to diminish the discomfort and languor which are apt to accompany indigestion. It is possible that part of this effect is due to their power of lessening putrefaction; but there can be little doubt that they have other actions which are not yet thoroughly understood. One of the most useful of all is *nux vomica*; and the great benefit derived from its use is probably due to its stimulating action on the nerve-centres, by which the co-ordination of the digestive processes is rendered more perfect.

Another class of remedies is that of carminatives, which tend to disperse flatulence. Amongst the most powerful of these are ethers and volatile oils of various kinds, which probably act by increasing the movements of the stomach and intestines, and altering them in such a way as to allow the gases they contain to escape upwards or downwards. In addition to these, however, we have other remedies which, probably, act in a different way. Charcoal lessens flatulence, and is generally supposed to do so by absorbing gases in the stomach. But the power of charcoal to absorb gas is very slight when it is wet; and, as it will be wetted by the fluid in the stomach after it has been swallowed, it probably has but a very slight absorbing effect on the gases there. It is much more probable that it acts merely as a mechanical stimulant, and that its use in the stomach is similar to its use as a tooth-powder in the mouth. In the healthy stomach, the layer of mucus which covers the lining membrane is very thin; but, in abnormal conditions, the mucous membrane may be covered with a thick coating of slimy mucus, which will tend to prevent absorption. The mechanical action of the charcoal will tend to remove this coating, and at the same time the friction which it exerts on the mucous membrane will tend to increase the flow of blood through the vessels; charcoal will thus aid absorption in a double way, by removing the mucus and by increasing the circulation. If this idea regarding the action of charcoal be correct, we should expect that other inert powders would have a similar action, and this, I think, is the case. Subnitrate of bismuth, for example, is so insoluble, that it probably acts to a great extent mechanically; binocide of manganese

has a similar action; and cases of dyspepsia are reported which have been successfully treated by the administration of fine sand.

Closely allied to carminatives are stimulants, and foremost among these come alcohols and ethers. Ether, although perhaps the most powerful of all, is used less frequently alone than alcohol; but ethers mixed with alcohol, in the form of wines, are very frequently employed indeed.

The question of the employment of stimulants is one which has been greatly discussed, and which is apt to give rise to much excitement. Some would utterly abolish stimulants of every kind, while others would not only use them, but abuse them.

There is a great deal of practical truth in the definition of dirt as "matter in the wrong place." The white paint which gives brightness and cleanliness to the woodwork of a house, ceases to be clean, and becomes dirt, when it sticks to a lady's dress; and the pipelayer, which the soldier uses to clean his belt dirties his uniform. So long as alcohol is in its place, it is beneficial; when it is out of place, it becomes hurtful. The difficulty here is to define the place for alcohol. Some would deny that it has any place at all, and assert that it is utterly injurious at all times, and in all places. But such assertions are valueless; they contradict the common experience of mankind, and defeat their own end by their extravagance. It is no use to deny the existence of facts, for they will continue to be facts, whether we allow them or not. What we have to do is to open our eyes to their existence, and regulate our conduct accordingly.

The question of the general use and abuse of alcohol is far too large to be entered upon here, and I have already considered it at some length in a paper which I read before the Society, and which received its approval ("The Physiological Action of Alcohol," *Practitioner*, vol. xvi, pp. 57 and 118), as well as in others which I have written subsequently ("The Alcohol Question," *Contemporary Review*, vol. xxxiii, p. 691; "The Influence of Stimulants and Narcotics on Health," *The Book of Health*, Cassell and Co.) The substance of the opinion which I have always held is, that so long as a man is young and healthy, he does not require alcohol, and is better without it. I think it better in every way for people to abstain entirely from the use of alcohol until they reach the age of manhood.

I do not think it a sin to use alcohol in moderation as a luxury, provided always that it be used in moderation, not only for the individual, but for the individual at the particular time at which it is taken, for what is moderation at one time would be excess at another.

In my first lecture, I described the advantage that I had derived from a good dinner with plenty of wine. I partook freely both of the food and of the wine, yet I did so in what was moderation for me on that particular occasion. I was exhausted with overwork, and depressed by the effects of a cold, and neither the food nor the wine caused undue excitement at the time of dinner nor injurious effects afterwards. Had I repeated this dinner frequently—let us say every night, twice a week, or even at longer intervals—or had I even taken it when in health, the quantity of food and wine—which was moderate for me at the particular time when I took that dinner—would have been excessive, and I should probably have suffered accordingly.

In regard to the use of alcohol in dyspepsia, I think St. Paul's advice to Timothy is very good: "Drink no longer water, but use a little wine for thy stomach's sake, and thine often infirmities." It is not the young and strong who require wine, but the infirm and the aged. In very many cases, attention to the rules given in regard to rest before dinner, to mastication, and to the quantity and quality of food, will do away with the necessity for any additional stimulus to the stomach in the way of alcohol. But I think there can be no doubt that, even when all these things are attended to, there are some persons who are the better for a little wine at dinner. These are generally, as I have said, either elderly, or a little below par. When I say below par, I mean in reference to their surroundings; for some of them may be very much above their fellow men, physically or mentally, and yet be below par in reference to their work, or to the surroundings which put upon them such a heavy strain that they require some additional stimulus to help digestion.

It is impossible to lay down a rule for the quantity necessary, for this will vary not only with every individual, but with the individual at different times. The stimulant which is most generally useful is probably claret. With some persons sherry does well, but with others it is apt to cause acidity, a good deal of the difference being due to the kind of sherry, or so-called sherry, used. In most severe cases of dyspepsia, brandy and water, or whisky and water, usually agree better than wines of any sort.

The methods we have considered hitherto in regard to the treat-

ment of dyspepsia have had reference to the increase of assimilation, to the way by which we may put more fuel on the furnace of life; but the question we have now to consider is—how are we to remove the ashes, the products of waste which would choke the fire and extinguish the life? The combustion necessary to functional activity takes them in the organs themselves, and not in the intestines; and it might be more correct to consider tissue-change, and the action of drugs upon it, before we discuss the drugs which act on the intestine; but, from another point of view, the latter is, perhaps, the more convenient. The next class of drugs acting on the intestinal canal which we will take up is that of purgatives.

It is evident that a regular action of the bowels is important, not only by removing the indigestible residue of food, and thus preventing fecal accumulation, but by getting rid of some injurious products which have been formed during the process of digestion. It seems strange that one so frequently finds headache as the result of slight constipation, lasting perhaps only for a few hours; whereas, in constipation lasting for weeks, it may be entirely absent. This observation seems to me to afford additional support to the hypothesis I have advanced, that headache is due, in part at least, to poisonous products formed in the intestine and absorbed from it, for Brieger noticed that it was only in the first stages of albuminous decomposition that alkaloids were formed, and afterwards these seemed to disappear. In constipation, it seems not unlikely that poisonous substances are first formed and absorbed, but that they afterwards become either decomposed or excreted by other channels, and thus the effect which they at first produced afterwards diminishes, or disappears entirely. We find persons in whom a movement of the bowels takes place at very long intervals, and I have met with several such cases. During the time I was Casualty Physician at St. Bartholomew's, I must have seen 100,000 patients, reckoning that I saw each patient on an average three times. At first, I was accustomed to ask the question, "Are your bowels regular?" but I afterwards gave this up, because I found it was ambiguous. One day, I asked this question of a young woman, and she answered, "Yes, sir." I then asked, "How often are they open?" and she replied, "Once in three weeks, sir." Her answer to my first question was perfectly correct, for her bowels were regular, but the term regularity conveyed a different meaning to her and to me. This was an exceptional case, but I met with a number whose bowels were open only once a fortnight. In one case, they were only open once in three months, and the patient objected to take any laxative medicine whatever, as this was her normal condition. Such cases of constipation, occurring without any marked injurious result, are generally due to the fact that the patients live almost entirely upon food which leaves little or no indigestible residue, and which contains no excess of nitrogen. Most of the cases which I have seen were women who lived chiefly upon bread and butter, with a little tea, sugar, and milk, the greater part of which would be entirely digested and absorbed, passing off as carbonic acid by the lungs, and as urea by the kidneys. In most cases, however, especially among people who are better fed, constipation of this sort is likely to be followed by very injurious results. Where the bowels are habitually constipated, a most useful thing is to give a small aloetic pill before the last food of the day, dinner or supper, as the case may be. This slightly increases the peristaltic movements of the stomach and intestines, which would naturally be induced by the food itself; and the use of such pills may be continued for very many years together, without the least impairment to the general health. There are fashions in purgatives, as well as in anything else; and among the fashionable purgatives at present are the saline natural waters, or the salts obtained from them. These are best given the first thing in the morning, and should be either warmed or given along with warm water. When crystallised salts are used, such as Carlsbad salts, the quantity of water taken with them is of considerable importance. One-third to a half a tea-spoonful of the salts, in a large tumblerful of hot water, is usually sufficient to produce one loose motion immediately after breakfast; but a larger quantity of salts with a smaller quantity of water often causes abdominal disturbance, discomfort, or even pain, with several small motions at intervals throughout the day. Where evacuation of the bowels only is desired, the saline solution may be taken at a single draught; but when we wish it to act upon the liver, it should be taken in sips during dressing.

It is a matter of common observation that cases of hepatic disorder are benefited by a visit to Carlsbad, although Carlsbad salts or water have been productive of little benefit when used at home. But then they are used in very different ways at home and at the spring itself. In Carlsbad, the patient rises early in the morning, and promenades before breakfast, to the sound of music, for an hour, slowly sipping the water at intervals. I have already mentioned the powerful effect

of sipping upon the heart, but it has also an effect upon the liver. It has been shown that water, slowly sipped, not only increases the amount of bile secreted, but causes it to be secreted under higher pressure, so that, if any slight obstruction should be present in the bile-ducts, it will be overcome, and the bile will flow freely into the bowel.

It so happens that pharmacology, or the study of the action of drugs, takes us deeper into the secrets of the body than pure physiology or pathology; and I must now touch upon one cause of biliousness which I omitted before, namely, alteration in the condition of the bile itself. In a previous lecture, I discussed the effect on the vessels of the liver which might be produced by substances absorbed from the intestine; and I mentioned, in relation to it, the possible action of alkaloidal compounds formed in the intestine. I did not discuss the possible action of such compounds on the nature of the bile secreted, yet I believe this to be a very important condition indeed. We observe two kinds of biliousness, or rather, perhaps, I ought to say, biliousness with two different conditions of biliary flow. In the one kind, the stools are clay-coloured, from the absence of bile; in the other, the stools are either normal or are dark coloured, from excess of bile. Now, certain bodies belonging to the aromatic series have a very remarkable action upon the secretion of bile. Salicylate of soda is a powerful hepatic stimulant, not only greatly increasing the quantity of bile, but rendering it much more watery than before. Other substances of the aromatic series, especially toluylendiamine, on the other hand, greatly increase the quantity of solids in the bile, and, indeed, do so to such an enormous extent that the bile becomes so thick and viscid that it will no longer flow through the biliary capillaries, and jaundice is the result. Before it has become so thick and viscid that it will not flow at all, a part of it may escape into the intestines, and give to the fecal masses a very dark colour. We do not yet know whether a similar action on the liver is exerted by substances—we may, perhaps, say poisons—formed during the process of digestion in the intestine. If such substances be formed, their formation may be consequent on something wrong in the food which had been taken, or on some disturbance of secretion or absorption, or may be due to foreign organisms having been taken into the intestinal canal, and having produced there abnormal decomposition. Every now and again we find a number of people living in the same house suffering from jaundice, without any cause that we can discover; but probably it is due to their either having partaken of injurious food, or having been exposed to injurious influences, especially to the ingestion of microzymes.

There can be no doubt that a blue pill and a black draught, or a few grains of calomel, have a most beneficial action, not only upon the stomach, where Dr. Beaumont was able to see the morbid changes disappear under their influence, but upon the body generally. The benefit thus obtained is usually ascribed to the cholagogue effect of the mercurial, sweeping bile out from the body before time has been allowed for its reabsorption. Probably this is, to a great extent, the correct explanation; but recent researches render it not improbable that mercurials have another action, namely, an antiseptic one, in the intestinal canal, and that a good deal of the benefit derived from their use is really due to their preventing the formation of injurious products. If the hypothesis I have advanced be correct, that the bile is sometimes rendered thick and viscid by the action of certain products of digestion upon the biliary secretion, we would naturally expect that anything which will assist the bile to flow through the ducts into the intestine will be beneficial.

Lord Palmerston very truly remarked that "the outside of a horse is the best thing for the inside of a man;" and a brisk ride in the morning is better for most people than any amount of mercurials or salts. It is not merely that the person gets exercise, for a constitutional walk will not have a similar effect. It is the kind of exercise, the liver being mechanically compressed, during riding, by the diaphragm on the one hand, and the abdominal muscles on the other, so that bile is actually squeezed out of it. Where riding exercise cannot be had, rowing, or even its imitation in the gymnasium, has a somewhat similar action; and when people are unable to get exercise at all, massage over the liver will tend to lessen the accumulation of bile within the ducts.

Closely connected with cholagogues and hepatic stimulants, is another important class of drugs, namely, alteratives.

We are only beginning to have some vague idea of how drugs act which belong to this class. Nitrohydrochloric acid is a favourite remedy, and a very useful one in biliousness. We cannot yet say precisely how it acts, but it no doubt does affect the tissue-change in the liver. The reason for supposing this is that acids—nitrohydrochloric acid among others—appear again in the urine in the form of ammoniacal

salts, and the ammonia with which they are combined appears to be the representative of so much nitrogenous waste, which, instead of being converted into urea in the liver, has combined with the acid, and been excreted as ammonia. This indicates that acids act upon the liver, although, as I have just said, we do not yet understand their precise mode of action. Clinically, however, we find that nitrohydrochloric acid is exceedingly useful in persons who are troubled by eructations of sulphuretted hydrogen; and it not only removes the taste of rotten eggs which is so disagreeable, but lessens the depression of spirits which frequently accompanies this form of dyspepsia. It is also useful in oxaluria and depression of spirits, even when no disagreeable eructations are present. Ammonia also has a powerful action on the liver, and chloride of ammonium has been strongly recommended in hepatic disease. It is only within the last year or so that we have learned anything definite about the action of ammonia on the liver; but it has now been shown that ammoniacal salts increase the formation of glycogen. Our knowledge of alteratives, at present, consists only of a few isolated facts, but, before long, we may hope to have a more perfect understanding of their mode of action, and, consequently, be able to apply them more successfully in disease.

Another class of remedies which are also useful in indigestion is diuretics. Although these have no very direct action on the intestinal canal itself, they not only alter tissue-change in the body, but affect the nervous system, through which the digestive processes are co-ordinated. In some cases of gouty dyspepsia, large quantities of hot water are exceedingly useful, both by relieving the dyspepsia itself and by getting rid of any urinary irritation. The diuretic action may be increased by the addition of alkaline salts; and effervescent citrate or tartrate of potash is useful both as a diuretic and as a local sedative to the stomach in neurotic or gouty gastralgia.

By the frequent use of water as a diluent, either alone or with salines, the consequences of indigestion in regard to the lungs, heart, and head, may be often averted or remedied. Asthma occurring in gouty subjects is, perhaps, best treated by a mixture of bromide and iodide of potassium; and the addition of a little arsenic is said to increase its effect. In cases of intermittent pulse, bromide of potassium is frequently very useful, though one of the best remedies for it is one which, I believe, was prescribed by the late Dr. Warburton Begbie, consisting of two grains of powdered rhubarb, ten of sub-nitrate of bismuth, one and a half of nux vomica, and three of compound cinnamon-powder. This should be taken before meals; and, if there be much acidity, ten grains of bicarbonate of soda, or of magnesia, may be added to it. It may be given either in water, or, what is perhaps more pleasant, wrapped in a wafer and swallowed along with a little water. Giddiness, as I have said, frequently takes the place of headache in persons of middle age suffering from biliousness, and both headache and giddiness are frequently connected with disorders of vision. The most common causes of headache, indeed, are decayed teeth and inequalities of vision. Where the teeth are decayed, rinsing the mouth out with a lotion of bicarbonate of soda, or applying a little eucaïne to the exposed pulp, will relieve the headache, and especially if combined with the use of a saline purgative. In many so-called bilious headaches, the eyes, as I have mentioned, are very tense, and tender on pressure. Such headaches are not unfrequently relieved by the use of small doses of salicylate of soda, half a grain in an ounce of water being taken every quarter of an hour or half an hour. How this acts, it is impossible at present to say; for, though it possibly acts on the eyes themselves, its utility may also be due to its action upon the hepatic secretion. Inequality of the visual power in the two eyes is an exceedingly common cause of headache; and I have sometimes found that a sick headache may be arrested, even after the well known zigzags have become visible, by putting on a pair of spectacles which will equalise the eyes; or, perhaps even better, it will overcompensate the weak eye, and throw the strain upon the other.

In speaking of the disorders of digestion, I have left to the last one of the most important methods, and one which sometimes gives results little short of miraculous. This method was first introduced to the profession in America and England by Dr. Weir Mitchell, in his book on *Fat and Blood, and How to Make Them*, but in this country it obtained little notice, until it was taken up by Dr. William Playfair. It consists essentially in passive exercises and abundant feeding. We all know how active exercise increases the appetite. Tissue-change goes on more rapidly in the organs, waste is more abundantly excreted, and more food is eagerly sought for. But there are many feeble flabby persons who cannot take exercise, or if they can, will not. Moreover, there are others who are quite willing to exercise the voluntary muscles of the limbs, but cannot exercise the

involuntary muscles of their internal organs. Now, treatment by massage helps both of these. It increases the nutrition, both of the voluntary muscles and of the internal organs; and under its use patients, apparently hopelessly incurable, completely recover. Dr. Playfair has had, moreover, success with cases of hysterical women; but I have been most struck with the success of the treatment in the case of a man in whom all medical treatment had proved useless. This patient, whom I first saw about two years and a half ago, in consultation with Dr. Image, of Bury St. Edmunds, was a very tall powerfully built man, who had been accustomed to outdoor life, and much active exercise. He had at one time suffered from asthma, but this had left him, and he became liable to attacks of pain and vomiting. I was inclined to look upon the case as one of neurotic dyspepsia, but other physicians, who had been consulted, both in this country and on the continent, regarded it as tubercular peritonitis. For two years he continued to become more and more emaciated, until at length he was reduced to the appearance of a living skeleton. Only once in my life do I remember seeing a man so thin, and that was a person who was exhibited in a show. Dr. Playfair was at first doubtful about undertaking the case; but as Dr. Image and I were anxious that he should do so, he kindly agreed, and in the course of eight weeks our patient was a different man. Under the use of massage and forced feeding, his muscles enlarged, until now he might perfectly well join a Highland regiment, and wear a kilt, without being ashamed. His muscles, which had almost entirely disappeared, have not only become of a normal size, but they are as hard as pieces of wood; and from being a simple skeleton, he is now a well developed man.

From the hasty sketch that I have given of the disorders of digestion, their consequences and treatment, in these lectures, it will, I think, appear that, although our knowledge of the subject is still very imperfect, a large number of observations have been accumulated, which we may hope will, before long, enable us to understand the pathology more fully, and treat these disorders more perfectly.

AN ADDRESS ON MEDICAL REFORM.

Delivered at the Annual Meeting of the Dublin Branch.

By LOMBE ATTHILL, M.D., F.K.Q.C.P.,

Ex-Master of the Rotunda Hospital; President of the Branch.

DR. ATTHILL, having thanked the members of the Branch for the honour done him in electing him President for the ensuing year, and having referred to the flourishing condition of the Association in Ireland, and specially of the Dublin Branch, proceeded to say:

Just two years ago, this hall was the scene of an animated discussion on the subject of medical reform; and, after a debate which extended over three days, the Branch, by a large majority, decided in favour of an amendment moved by me, to the effect "that the policy of the parent Association in reference to medical reform should, in principle, be supported by this Branch." I regret to say that as yet nothing definite has in this matter been accomplished; the difficult question of medical reform remains as unsettled as ever.

During the past year, a Bill was wellnigh carried through both Houses of Parliament, which, reformer as I am, I must still declare to have been ill digested, unfair to most, if not all, of the medical corporations in the United Kingdom, and defective in some points of vital importance; and I most heartily rejoice that that Bill did not pass into law. If we are to have legislation for the medical profession—and it is much needed—you will, I think, agree with me, that it should be based on two great principles; namely, first of all, to secure the maximum amount of good to the general public, and next, to inflict the minimum amount of injury on the medical corporations, which have, during a long lapse of time, done much good work, and which still, with only one or two exceptions, fulfil their duties honourably, efficiently, and for the public good.

I will ask you to consider what the object to be gained by any medical legislation should be. Is it not primarily that notoriously incompetent men be excluded from the profession? Not that, by their exclusion, we, who have obtained admission, may be bettered, but that the public, and especially the poor, should be protected from the injuries which are, under the present system, inflicted on them;