

PERISCOPIC REVIEW.

PRACTICE OF MEDICINE AND PATHOLOGY.

CHLOROFORM IN HOOPING-COUGH.

Dr. FLEETWOOD CHURCHILL, of Dublin, in the *Monthly Journal of Medical Science* for August, addresses a letter to Professor Simpson upon the use of chloroform in whooping-cough. The following is an extract:—

You are aware that, in my work on *Diseases of Children*, published three years ago, I mentioned that I had tried the inhalation of sulphuric ether in whooping-cough with great benefit in about a dozen cases. After your application of chloroform for producing similar results, I tried it in whooping-cough with equal benefit in at least as many more cases. But I always found two obstacles to its full and fair administration to young children. In the first place, you cannot get them to give notice of the approach of a cough, so as to enable you to have the chloroform in readiness before the paroxysm commences, and when the paroxysm has commenced, as it consists of eight or ten expirations to one inspiration, the chloroform will have evaporated before it has been fairly inhaled. And secondly, young children have such a horror of anything near their mouths during the cough, that they will resist your trying the chloroform as much as possible, until they themselves have felt its power in relieving the cough. Owing to these two causes, and perhaps also to a want of clever management on the part of the mother, we shall find it fail altogether, occasionally, and in other cases only partially succeed; but when it is fairly tried, as I have already remarked, its use is most beneficial.

I have all along felt very anxious to try it in young persons of twelve or fourteen years old and upwards, because with them we can avoid the two difficulties I have mentioned; but it was not until this year that I had an opportunity. Four cases have come under my care, and the results are as follows:—

CASE I. Miss D., aged 16, had had whooping-cough a month, when I prescribed chloroform. There was no complication, but the whooping was frequent, especially during the night. She was directed to have the chloroform in readiness, and to use it with each paroxysm, and she assures me that in two days the whoop ceased. The cough lasted a few days longer, but it was slight and not in kinks.

CASE II. Miss A., aged 20, had been ill with whooping-cough for about three weeks, when I prescribed chloroform. The cough was not very frequent, and there was no complication. Two days sufficed with her also to relieve her of the whoop; and the slight cough which remained subsided after a week or ten days.

In these two cases the effect seemed quite magical; both had the disease well marked, and the families of both were prepared for a disease of two or three months' duration, as was the case with their other children.

CASE III. Miss B., aged 18, took the complaint from her brother whom I was attending, and I therefore had an opportunity of giving chloroform from the commencement. She did not whoop any time she coughed; but she was directed to use chloroform whenever she felt the tickling in the larynx, without waiting for a cough. By doing so, she found that she could postpone the cough indefinitely, and if it came on suddenly, the use of the chloroform instantly suspended it. About three weeks elapsed before the tendency to cough and the use of chloroform ceased; but during that time she lost neither appetite nor flesh. She slept well, was in good spirits, and able to follow her usual occupation. She went to the country quite well.

CASE IV. Master B., aged 16, the brother of the last case, when I first saw him, had the disease most severely. The kinks were violent and prolonged, the efforts to inspire, and the whoop excessive; it really seemed as if he would be choked or that something would give way. He had lost appetite, sleep, and spirits, although the disease had not lasted three weeks when I saw him. I tried chloroform with him, and it at once reduced the number of paroxysms one half, but without mitigating them when they did occur. He took the chloroform very freely, and as he was not readily influenced by it, the quantity seemed to give him a headache, and he begged to be allowed to suspend its use. I the more willingly agreed to this, as he had a severe attack of diarrhoea. I therefore substituted two drops of prussic acid (Dub. Pharm.) with two or three of black drops three times a day. The improvement,

begun under chloroform, continued under this treatment, and at the end of five weeks from the beginning of the disease the cough had ceased, and he had regained rest, spirits, and flesh.

Although this last case cannot be regarded as cured by chloroform, the paroxysms were first diminished by it, and I have no doubt that it contributed to the beneficial effect of the prussic acid. The three first cases are, I think, very conclusive as to its value; and, if further experience confirms them, we shall possess a means of cutting short this disease in adults, who, when attacked, suffer so severely.

CONSTIPATION AND FÆCAL OBSTRUCTION.

Dr. CHRISTISON, of Edinburgh, publishes the following very interesting extract from a Clinical Lecture, in the *Monthly Journal of Medical Science* for September, p. 252.

The occurrence of a singular case of obstruction of the intestines from accumulation of feces, induces me to make a few remarks on a subject which, though it may appear trite to you, is really one of great importance, and deserving your early consideration as professional men.

When you enter presently on medical practice, you will probably be surprised, as I was in the same conjuncture, at the exceeding frequency of the habit of constipation among persons in easy circumstances in this country. At what period this liability was first observed, and in what cause or causes it originates, are questions which at present I cannot pretend to discuss. But there can be no doubt of the fact, that the infirmity of constipation is extremely common; and likewise, that it often exists without any other constitutional infirmity or special disease, except what is clearly referrible to an undue neglect of the proper correctives. Accordingly, by due attention to the use of fit laxatives, thousands of persons of both sexes in the middle and upper walks of life contrive to live as long, as healthily, and, except for the plague of constantly taking physic, as happily, as their more fortunate neighbours.

Prior to the publication of the treatise on purgative medicines by the late Dr. Hamilton, senior, of this city, there is much reason to believe that the use of laxatives was greatly neglected in such circumstances. But after the appearance of that work in 1818, an important reformation took place in this respect. Indeed, as in all important reforms in medicine, physicians and their patients soon ran to the opposite extreme; and ere long as much harm was done by the abuse of aperient and purgative medicines as previously by the neglect of them. At present it may be confidently said that both errors have been materially corrected. No one denies the great importance and frequent necessity of cathartics of all kinds, from the mildest laxatives up to the most drastic purgatives. And on the other hand, most physicians are now satisfied that gentle aperients are sufficient in numberless circumstances, in which formerly powerful cathartics were the fashion. Among other observations, too, it has been found that the regular daily use, even of mild laxatives, is not so indispensable a precaution for preserving the health of those of a permanently costive habit, as has been supposed by many physicians, and especially by many people themselves who were afflicted with that habit. For example, there can be no doubt, that for most people, who, though otherwise healthy, require constantly to use aperients, it is better to open the bowels in this way once every other day only, than daily by a daily dose. Some, especially those who live freely, require a more frequent dose. But in general you will find an effectual aperient every other day amply sufficient for those who do not augment the bulk of the alvine discharges by superfluous nourishment; and by that system they are much more likely to escape the risk of an irritable or congested state of the intestines arising, which we know to be the frequent consequence of the habitual excessive use of cathartics, even of a mild kind.

Some persons, however, have such a horror of aperient medicines, that they cannot persuade themselves to take one oftener than twice a week, or once a week only. And, nevertheless, you will sometimes see them keep their health, and maintain their bodily comfort. But, for the most part, you will find it a sound general rule, to insist with such people on a more liberal use of aperients; and the great variety we now possess of convenient compound aperients, will enable you to find some one suitable to the constitution of any body, and reconcilable with almost any prejudices.

There are others, whose prejudices are unconquerable, and who will not take laxatives at all, though their bowels do not move of themselves above once a week, if even so often. And it is right you should be aware that this apparently most unnatural and preposterous habit is not of necessity, and in all

cases, a habit injurious to health. You will occasionally meet with men so singularly constituted, that they enjoy sound health upon a weekly stool. And, indeed, all perhaps that can be said of them is, that they are rather to be envied by their fellow-creatures, for an endowment which must be frequently found very convenient. But such people sometimes get into difficulties. About two years ago, a gentleman from Wigtonshire, a landed proprietor, attached to agricultural pursuits, and therefore never without free air and exercise, consulted me about a serious difference he had with his medical advisers in the country. Having recently recovered under their care from a severe pneumonia, they made the not unreasonable stipulation, when they ceased to attend him, that he should take a laxative every three days, to correct a constipated habit. To this he demurred, on the very natural ground, that, until his late illness, he had enjoyed excellent health for sixty years, although his bowels had been habitually moved all his life only once a fortnight. This gentleman had made a journey of a hundred and twenty miles, for no other reason than to get the question between him and his physicians settled by some competent authority in therapeutics; and, in referring to me for the purpose, he mentioned, for my further guidance, that a neighbouring gentleman of his acquaintance, of the age of seventy, had told him that he too had immemorably evacuated his bowels only every alternate Sunday, without being able to recollect having ever had an illness. It was scarcely to be wondered at that their common experience half inclined them to think that their constitution was the natural and patriarchal one.

Our hospital patient seems to have been of the same opinion with these elderly agriculturists. Like them he has had some experience of life, being now 74. Like them, too, he has enjoyed singularly good health, being a surprisingly fresh looking man for his years, notwithstanding that he had passed through severe trials in early life. As a soldier in India, he sustained, when very young, a spear wound of the leg, where he has had, almost ever since, a small open ulcer, which he ascribes to the spear having been poisoned. In the Spanish war he was wounded at the battle of Barossa, in 1811. There are now evident marks of the bullet having passed through him from the left groin, piercing the blade of the *os ilium* in its course. For two years he lay in hospital; and recovering with a shortened limb and stiff joint, he was invalided on a pension of one and sixpence halfpenny, as a wounded serjeant and soldier of twenty-one years' service. This he has now enjoyed for forty-one years. Nor has his wound much incapacitated him; because for many years, and down to his present illness, he had actually worked as a railway labourer. During this long period he lived on his pension and wages in great comfort and sound health, until, on lately leaving off work, he became liable to constipation. At first his bowels were moved every other day in general, and afterwards seldom oftener than once a week, unless he took physic, which he did seldom. At last the action of the bowels seemed to cease altogether, and he went for four weeks without any evacuation, even though he made occasional trial of a laxative. At the end of the fourth week, a strong dose brought away a great accumulation. After that he had no farther evacuation, and it is now three weeks ago. He had again made a few gentle attempts to assist nature; but he did not much insist upon this, because his lodging-house had no convenience, as he said, for a man under physic. During the entire period of seven weeks, he assures us he had no pain or suffering whatever. But at last his belly got very large, so that his trousers would not button over it; and on this account he applied here for relief, and not from any actual illness.

On admission, he had no appearance of any suffering. He seemed a fresh, vigorous, active, cheerful man. He took his food tolerably well; the pulse was natural; and the tongue was only a little furred. "The abdomen", to quote the Hospital journal, "is much distended, especially in the iliac regions, where there are two large prominent swellings projecting laterally, so that the crest of the ilium on each side is quite sunk, the tumours projecting much beyond the bones. There are different irregular swellings at different parts of the abdomen, especially in the track of the colon. Over some of these points percussion is quite dull; over others it is tympanitic. The circumference of the abdomen, where largest, is 39½ in."

As it was judged unsafe to give him active purgatives by the mouth at once, in case of the great gut being firmly obstructed with hardened faeces, a turpentine injection was properly administered by the clinical clerk in charge of him. The result was "a prodigious discharge of fecal matter of all degrees of consistence", much of it composed of very hard scybala. A dose

of jalap and calomel given immediately after this forerunner, brought away also a great mass of feculent matter. Next day, being quite well, but with the abdomen as large as ever, another similar dose occasioned only an ordinary discharge. On the third day, the swelling being equally great, though now quite uniform, and everywhere clear on percussion, I gave him what has always appeared to me the most effectual of all safe energetic purgatives in cases of simple fecal accumulation—two drachms of oil of turpentine with six drachms of castor oil in the form of emulsion. But he had only two scanty loose discharges, and the belly continued in the same state, presenting especially the singular enlargement and overlapping of the iliac regions.

It was now apparent that, owing to long continuous distension of the bowels with faeces and gases, their muscular coat had lost its tone, in some regions at least, and especially in the cæcum and descending colon. It was then proposed by the clinical clerk to resort to galvanism for relief from this paralytic condition; which suggestion was at once adopted. It is more than twenty-five years since galvanism was recommended as a useful remedy in cases of obstinate constipation; and we can easily see that it may be useful, and upon what principle it acts. The first way of using it was by directing the galvanic current from the mouth to the arms; and in that way it seems to have been most effectual and prompt in some cases. But its action is thus rather painful; and ulterior observation has shown that passing the current in various directions through the abdomen itself may be sufficient. This remedy seemed even more applicable to the state of our patient after the bowels had been cleared out. And accordingly it acted with wonderful energy and success. After the current had been passed for some time from before backwards, as well as from side to side, he had in an hour a copious evacuation, in three hours another, and next morning a third. Flatus was also discharged in abundance; and the abdomen fell greatly, but still not completely, above all in the iliac regions. The pain of the galvanic action, however, had been so great that the patient begged to have a day's respite. In fact, he declared his willingness, and confirmed it with an oath, that he would rather be shot again than submit to be galvanised a second time. On the second morning, however, the remedy was applied more gently, and on two mornings subsequently. He had a daily discharge from his bowels, and sometimes two. The abdomen had now become natural in size and form. Since then he has had a natural evacuation every morning without aid from either laxative or galvanism. He was dismissed after being fourteen days in hospital.

This is a case a little out of the common run, but not without instruction; and I have therefore thought it well to bring the chief circumstances under your notice. It is an excellent illustration of the influence exerted by galvanism over the animal functions. It appears to me to hold out a probability that the same remedy may prove serviceable in restoring the tone of the intestinal muscles, in other forms of inconvenient chronic flatulent distension of the abdomen.

TURPENTINE VAPOUR BATHS.

The *Union Médicale* for July 16 and 19, copies from the *Revue Thérapeutique du Midi*, an article on turpentine vapour baths, by Dr. A. AILLAND, of Beaucaire.

According to Dr. Ailland, the peasants of Vercars have long been in the habit of employing turpentine vapour baths in catarrhal affections; and this practice has been confined to them.

The apparatus used is first described. It consists of an oven, resembling an egg cut in two, and having at the top an opening closed by a valve, and having at the bottom a grating. The oven is built of stone, with thick walls. When it is required to be used, the grating is scattered with chips which have been hewn from the living trunk of a peculiar kind of pine, which is only met with in the forests of Glandaz, and which is very rich in resinous and terebinthinous principles: fire is applied to the chips, and the valve is opened that the smoke may escape. Combustion continues several hours; its end is announced by the cessation of the formation of pitch. The valve is then closed, so as to extinguish all traces of fire; the ashes are then quickly removed, and the opening by which this is done is carefully closed. At the end of more than eighteen hours, there is still a temperature of from 60 to 80 degrees of Reaumur (167 to 212 degrees Fahr.) Some fresh chips are then placed on the grating, and the patients are introduced into the oven, through a thin iron door in the wall. Benches are placed around, on which the patients sit, with their feet resting on the grating. They are thus exposed to the action of medicated vapours.

They reach the door of the oven by a corridor, having a temperature of from 40 to 65 degrees of Reaumur (122 to 178 degrees Fahr.); they remain here a few minutes, and then enter the oven. Their dress is a white woollen shirt, and woollen slippers. They remain in the oven ten, fifteen, twenty, or thirty minutes: the effect is observed by a medical man stationed at the door of the corridor.

The patients first experience a sensation of excessive heat, which they think they cannot endure, but which in the end becomes even agreeable. Under the stimulating influence of the heat, diaphoresis takes place; it is at first very slight, but soon becomes copious: it commences on the chest, and gradually passes over the whole body. Respiration is accelerated for a few moments; but in two or three minutes becomes easy. The circulation becomes a little more active: sometimes the pulsations rise to 70 or 80; sometimes they remain normal. When the desired effect is produced, the patient is removed from the bath; a woollen covering is thrown over his shoulders, and he is carried to bed, where he takes an infusion of the same resinous wood. The diaphoresis then becomes sometimes so copious, that it escapes through the bed-clothes. At the end of an hour or two, the patient rises as alert and lively as before he entered the bath: he feels none of the disagreeable sensations which accompany or follow febrile sweats. His functions are performed with ease and regularity.

Dr. Aillaud observes, that this treatment includes two distinct principles: the application of heat, and of resinous vapours. He then proceeds to describe the effects of placing a person in a high temperature: increase in the heart's action, hyperæmia of the surface, and also of the lungs, inducing increased activity of respiration, which is at the same time accelerated by the rarefaction of the air; and hence symptoms of syncope. Dr. Aillaud sums up the symptoms produced as those of a factitious fever; and he believes that great advantage may be derived from the excitement of fever in almost all chronic diseases, where there is no organic lesion present. As examples of this, he refers to acute diseases which have been badly treated, and have become chronic; and also to chronic, nervous, and spasmodic diseases, connected with a morbid principle.

The utility of balsamic medicines in chronic catarrhal and rheumatic affections, has been known from the days of Hippocrates and Dioscorides; and is the mode of administration to which Dr. Aillaud wishes to call attention. If a medicine acts more energetically the better it is absorbed, and the more it is in a divided form when taken, we may judge of its power according to the manner in which absorption has taken place, and especially from the characteristic odour which is assumed by the excretions of the persons who have been in the bath.

The pulmonary mucous membrane participates in the effects produced by turpentine on the other mucous membranes. Hence the membrane, under its influence, becomes dry, as in the early stage of bronchitis; and some individuals in these circumstances expectorate sputa streaked with blood. It is in the chronic mucous bronchitis of lymphatic old men that the turpentine vapour bath is most useful. The bronchial mucous membrane is generally pale, but of normal thickness and consistence; the principal change consists in tumefaction of the follicles, and more or less considerable dilatation of the bronchial tubes. The symptoms have a great resemblance to those of the third stage of pulmonary phthisis.

Dr. Aillaud answers the objections that exposure in the turpentine vapour baths may produce impeded respiration, and that it is dangerous for apoplectic patients, by stating that no bad results have been found to follow in any case.

tion of the knowledge that might be derived from such a study in inquiries directed to the causes of various diseases, has long been known and proclaimed. Arbuthnot, in his essay on the "Effects of Air on Human Bodies", affirms in one of his concluding paragraphs, "that from proper journals of the weather, it might be possible to predict epidemics." And several observers of a past age, amongst whom the names of Mussenburgh, Vitet, Hans Sloane, and Ramazzini deserve especial mention, actually made laborious attempts to discover how far meteorological observations could be made of use in accounting for the origin and spread of some diseases. From an ignorance, however, of many important physical laws, the discovery of which has been reserved for modern days, the labours of these observers proved of but little value; so that, whilst few facts have been established, a vast number of vague impressions and wild theories have taken root and flourished.

Even in this day, as you observe, we have "no strict scientific knowledge of the nature and operation of atmospheric changes upon the body in health and disease". The step, therefore, which you are about to take, the endeavour to enrich our stores of medical learning by a systematic inquiry into the effects of meteorological changes on the body, is almost a new feature in medical literature, and promises to do great honour to our Association, and to the Journal in which the opinions and observations of the members of the Association are recorded.

That the table you are to publish weekly, is an improvement on the one already published by the Registrar General, is very evident. One important improvement in your table, lies in the fact that the observations given are to be made in different parts of the country. At the same time, it occurs to me that two or three additional columns are required. A column describing the electrical states of the atmosphere, like that in the table of the Registrar General, would be added with advantage; for although it is possible that far too great an importance is attached by many persons to electrical conditions, I think that, to ensure correctness, all known electrical phenomena should be carefully noted down. Secondly, the place where the observation is made should be supplied; and thirdly, the nature of the earth's surface at the point of observation should be clearly specified. I dwell on this last suggestion, because I believe it to be an important one. Meteorological observations can, as a general rule, be made by professional men but once or twice in the twenty-four hours, and only in the day time. Now, one of the most important changes in relation to the body, is that of its transmission from a cold to a warm temperature, the change consequent on the withdrawal and the return of the sun; and this change will vary very much at different points of observation. At some points, the sun's heat during the day will be absorbed slowly, to be evolved slowly during the night; at other places, there will be little absorption in the day, and rapid radiation and rapid cooling of the earth and of the atmosphere in the night time. Other observations, also, touching the geological nature of the district, deserve especial regard. In short, in commencing your labours, no inquiry that promises an useful result should be omitted; for disease arises in many cases, not so much from the exposure of an animal body to influences that are injurious to it, as from the rapidity with which it has been subjected to those influences.

Another observation should be made, having reference to the effects of light and actinism on the animal body. It is fair to infer that no meteorological table can be perfect without such observations; for that the properties of the sunbeam, to which reference is now made, exert an influence on the living world, animal as well as vegetable, no one can deny. Our ideas on the subject are vague at present; but this is the very reason why knowledge respecting it should be increased. That influenza is more prevalent on the shady than on the sunny sides of streets; that cretinism is most common in valleys, where light is in some degree absent; and that animals may have diseases induced in them by being placed in absolute darkness;—these are all ideas which many professional men hold, but they are ideas altogether unproven. It may be objected, that it would be a difficult matter to make observations on light—an objection, indeed, in which there is some degree of truth. It would not, however, be a more difficult process to test for the actinic principle of the solar ray, than to test for the presence of ozone.

In looking over the interesting calculations of Dr. Moffat which you have transcribed, it is a source of infinite surprise and pleasure to me, to see that that gentleman thinks he has pointed out a connexion between meteorological conditions and the presence of certain diseases. During last winter, whilst

EDITOR'S LETTER BOX.

MEDICAL METEOROLOGY.

LETTER FROM B. W. RICHARDSON, ESQ., TO THE EDITOR.

SIR,—A perusal of the leader on medical meteorology, contained in the Journal of August 26th, has given me so much pleasure, and filled me with such hope for the future, with reference to the investigation of numerous difficult questions connected with the study of disease, that I cannot avoid turning for a few moments from an interesting inquiry, to make one or two observations on your extensive, well digested, and admirable scheme.

The importance of the study of meteorology, and the applica-