point: the question as to whether the life should be loaded where an operation had been done with an apparently successful issue. He quite agreed with him that a certain extra premium should be put on, because he had seen cases where that idea had been borne out within the last two months. A child of 2 years had a mastoid operation done some time ago for mastoid disease, and after three weeks in hospital went out quite well. From the age of 3 to 9 she had an interval of perfect health, but there must have been some mischief left behind, as there was a recurrence of the old trouble, which spread to the brain, and temporo-sphenoidal abscess resulted, and as the child was in a critical condition he operated. Next morning he went down to see her, as he thought, dead, but he found her well. The case did splendidly, and she went out apparently perfectly cured. But the question arose, if that life was to be insured, what were they to do, as there might be a recrudescence? One point they should insist upon was that, even though operation had been done, the patient might be sitting over a powder magazine, or one might get a recrudescence of the disease. In this operation complications might not have occurred if the original Stacke's operation had been done instead of trephining the mastoid antrum only, as the cavities were not thrown into one, and therefore some disease was probably left behind. Every case must be treated on its own merits; that was very important and obvious to all of them. They got on the forms of insurance companies certain questions and were asked, and, so to speak, to draw a hard-and-fast line. It was absolutely impossible to draw a hard-and-fast line; it was very important when it got into a law court. It was ridiculous and foolish to swear anything absolute in reference to the human body, for cases must be treated on their own merits, and it seemed to him that it would save insurance companies a lot of risk, and would be of some advantage if, in doubt, the person referred to consulted an expert, and each case was treated absolutely on its own merits.

DR. MCBRIDE'S REPLY.

Dr. MCBRIDE, in reply, said he could only thank them for the very kind way in which they had received his contribution, and also for the valuable contributions to the discussion. There were really very few points to take up. Dr. Barr's valuable suggestion to have a register of 5,000 cases, and to follow them out would be of the greatest value in making statistics, but he feared the class of cases seen in hospital clinics were a floating population, disappearing from one town to reappear in another, although he admitted the idea was a most excellent one. With regard to Dr. Pritchard's remarks, he could agree with most of what he said, but he thought that where he used a mop, he (Dr. McBride) had used a probe; he used a probe because he did not know how to sterilise a mop, whereas one could sterilise the probe before passing it. Then he ventured to discuss also another point of detail which Dr. Ritchie also mentioned, and really he thought the difference between polypus and granulation was purely accidental. Of course, he was aware that pathologists found epithelium in the polypus, not in the granulations; but the terms were more academic than practical. With regard to Mr. Low's and Dr. McKenzie Johnston's statistics, he thought Dr. Johnston's statistics referred to the death-rate; his statistics referred to the total death-rate in relation to death-rate from ear disease. Then he thought that the remarks of Dr. Muir called perhaps for some reply. Dr. Muir had treated the matter with considerable oratorical skill, and that oratorical power was apt to carry conviction with it where no conviction ought to be carried, if he might say so without offence, and, as it were, sweep the specialist to one side. He would be inclined to take up the same position in regard to cough as Dr. Muir assumed in relation to ear disease. He could not classify all cases of coughs and occasional pain in the side; no more could Dr. Muir classify all cases of middle-ear disease with occasional attacks of pain; it was of serious importance. He was strongly inclined to think that most of them overrated the danger, but on the other hand Dr. Muir inclined to underrate it. It was of great importance not to overestimate the dangers; it was equally important that the question should not go forth that they homologated any expression of opinion that seemed to indicate that the risks were very slight. He thought perhaps that some of his

friends—not necessarily those present—who had written textbooks and papers, were inclined to lay too much stress upon the importance of ear disease. He was willing to draw deductions from statistics, but he, as one who had written upon this subject, had taken great pains first of all to get valuable information, then had taken great care to try to impress upon his readers, as Drs. Pritchard and Greville MacDonald had done, that a larger number of deaths were due to middle-ear disease than his figures indicated, and were to be deprecated on that account. On the other hand, Dr. Muir seemed to attach rather too little importance to statistics.

REMARKS ON THE RATIONAL TREATMENT OF PHTHISIS, WITH REFERENCE TO NORDRACH SANATORIUM.

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THE QUESTION OF CLIMATE.

THE almost mediæval darkness which exists amongst the public as regards the necessity of fresh air for all human beings, and especially for those suffering from pulmonary tuberculosis, has of late been considerably enlightened. It is to be hoped, however, that while importance is being rightly attached to this factor of sanatorium treatment, others of equal or even greater moment will not fall meanwhile into the background.

A recent distinguished writer, relating his experiences in the treatment of consumption, states that the only remedies he knew were air and sunshine. Doubtless we must not take this too literally, for a consumptive cannot live, still less make progress, on air or even sunshine, but one might say with some degree of truth that it was a treatment not infrequently attempted.

Diet, and the improvement of nutrition, rest and exercise, and their right adjustment to febrile and quiescent cases, supervision and regulation of every habit of life, are of far higher importance to the consumptive than excessive purity of the air he breathes, or the amount of sunshine he is able to enjoy, desirable as these factors undoubtedly are.

The idea so firmly rooted amongst even medical men that the one thing needful for a consumptive was to live in a "climate" selected with reference to some artificial classification of cases, is gradually giving ground to one more rational—namely, constant treatment in any right environment of all cases regarded from an identical pathological standpoint, that of, pulmonary tuberculosis.

Whilst we shall hardly differ much now as to the value of sanatorium treatment, we are by no means necessarily agreed as to its best form. What is the right environment, and what the most successful system? The present attitude of medical thought in this country is directed towards the collection of data to form opinions upon these questions, and for this purpose the already established Continental sanatoria are eagerly reviewed.

It is now forty years since Hermann Brehmer, the founder of sanatorium treatment, was denounced as a charlatan in Germany for treating consumption in a systematic way, on the assumption that it was curable. Some of his ideas have, it is true, proved erroneous; notably the supposed necessity for carrying out the treatment in a district which was itself immune from the disease, and also his dogmatic requirement of a definite minimum altitude above sea level varying with the latitude. But, on the other hand, his excellent and oft-repeated advice against placing sanatoria in or near centres of life and traffic, or in a health resort frequented by other invalids and pleasure seekers, the need for strict supervision, and for carefully graduated exercise as well as for rest, have all been often disregarded since in practice.

Nevertheless, results more or less favourable have been published by many of these institutions, and although I am far from agreeing with those who pronounce them "superb," yet observers of such experience as Dr. Hermann Weber consider them to be somewhat better than those obtained outside sanatoria in the open health resorts of high altitudes. The success of a sanatorium, however, naturally depends upon

many factors, and not only upon the principles of treatment professed, but upon the thoroughness with which these are actually carried out in practice.

PECULIARITIES OF THE TREATMENT AT NORDRACH.

There is at least one sanatorium on the Continent which stands out pre-eminent both in its methods and results. It has fallen to my lot to obtain a somewhat deeper insight into the working of this sanatorium—namely, Dr. Otto Walther's at Nordrach in Baden—than can be obtained in the flying visit which a busy medical man can usually afford. I became acquainted with the existence of this institution about five years ago through the illness of a relative, and was later myself a patient there, a sufferer from acute phthisis, having after recovery enjoyed the privilege of assisting Dr. Walther in his work.

The methods of treatment differ materially in practice, if not in theory, from those of all other described European models, and the results are proportionally different. It is time, therefore, to draw attention to the exceeding importance of Nordrach in connection with the present movement for the suppression of tuberculosis, which, if it takes the right direction, will be the means of doing untold good in reducing the sum of human misery in our land.

It may appear strange that an institution so successful, beset by applicants at all seasons, should have remained so much unmarked by the medical profession in Germany, as also in England. It is still quite unique, although Dr. Saugmann is engaged in founding what purports to be a similar sanatorium on a fiord of the East Coast of Denmark, near Vejle, and I am engaged in establishing a small one in England. The reason is chiefly the careful avoidance of publicity by the physician and the remote and private nature of the institution, which for the sake of the patient's quiet is not open for every visitor to make a stay in.

One result of this seclusion from the world has been that until quite recently the cases received have been of a serious character, many a patient, drifting from bad to worse in different "climates," and not infrequently in other sanatoria, having come there as a last resource, not usually at the recommendation of his physician, but of some friend who had been cured there.

I am not in a position to publish statistics of the results. Dr. Walther has never done so, considering that as his sanatorium has only been in existence nine years the space of time was not long enough to enable him to make weighty statements about the permanence of cures. I am only able therefore to state as the result of my own observations that though the cases treated are probably of a more advanced nature than those of better known sanatoria, and certainly than those sent to high altitude resorts, the results are actually far better than those obtained in these places.

In reading some recent favourable statistics of treatment in high altitudes one is struck by several things. One is the very high proportion of cases in the first stage of phthisis; in the instance I refer to, 65 per cent., as compared with about 27 per cent. in one of the larger German sanatoria. These cases, it is not too much to say, are rarely seen at Nordrach. Yet the average length of treatment in high altitudes was about twelve months, whereas the average for all cases at Nordrach is about five months. Another aspect of the same point is the careful exclusion of all severe and advanced cases from high altitudes. Pyrexial and acute cases of all kinds, cases of double cavities, "catarrhal phthisis" (whatever that may be), and laryngeal cases, were all unsuited for the "climate." Of course, a careful selection of cases makes a vast difference to statistics. Even under ordinary and disadvantageous conditions of life the earlier lesions tend to heal, as every *post-mortem* room amply shows, but the difficulty of making a cure progresses *ceteris paribus* in a geometrical ratio with the extent of the disease. I do not believe, therefore, that altitude has any favourable effect on the course of the disease, and as we see it is said to be prejudicial to the advanced cases. That also I doubt, except in cases in which the loss of lung is so great as to influence respiration in the rarefied atmosphere. It is indeed treatment that is required for these cases, not climate, and hotel life in a high altitude health resort is not treatment, or at any rate it is a very bad one.

I have seen at Nordrach occasional relapses in cases which were expected to remain well, but it must be remembered that comparatively few of the patients come from the leisured classes, and that much depends on the patient's circumstances and way of life in the two years following his cure. Sometimes necessity demands that he should at once return to hard work, sometimes he lives foolishly afterwards. Still, these relapses usually prove slight.

One was the case of a young German who had previously spent two periods of several months each at a famous sanatorium to no effect. He came to Nordrach, became rapidly well, and in the following year went to work on a plantation in Honduras. In an expedition on the coast he had a very severe attack of malarial fever, which brought down his weight. It recurred on his return to Germany. With this upset of his general health there was a slight return of his former symptoms of phthisis. He came to Nordrach last winter, and in two months completely regained his health and strength, and is now at work again in Germany.

Perhaps a good test of the results of treatment is afforded by the case of an English doctor who was the subject of advanced disease, and had tried in turn a voyage to South Africa, a residence in the Riviera, and our own South Coast. He made a complete recovery at Nordrach, returned to London, and there soon fell ill with typhoid fever, losing 40 lbs. in weight and suffering from double pneumonia as a complication. Instead of old cavities bursting into activity as one might have supposed, the lungs emerged perfectly sound from the trial, he regained the weight lost, and now, nearly three years since, he maintains robust health in full work, is able to take long bicycle rides, and to lead a perfectly active life.

In contrast to the list of contraindications given for high altitudes, I have never observed at Nordrach any prejudicial effects of change of season or bad weather upon the patients, and the fact may be emphasised that the inclemency of the weather is often just as great there as in this country, the winters being much more severe. The results are solely dependent upon the character of the disease and the co-operation of patients in their treatment. Results are the same in winter as in summer, and I have seen rapid cures made in periods of comparatively sunless weather. Sunshine, therefore, is by no means essential, though one naturally would not elect to do without it.

Nor, indeed, is extreme purity of the air, though desirable, of such prime importance as has been supposed. I have seen better progress on Nordrach lines made by patients in the dust-laden atmosphere of great cities than one would have expected them to make in the Alps; and I have at present a case under observation, in a great Midland manufacturing town where the leaves of trees become covered with a thick deposit of dust, making the most striking advance under very disadvantageous circumstances.

PATHOLOGY OF "CHILLS" AND COMMON COLDS.

The timidity of some writers on sanatorium treatment with regard to what they apparently deem the vital factor of treatment, namely, fresh air, is lamentable. "The patient must have fresh air in abundance," say they, "but he must be moderate in its use." He must be well wrapped up, screened from wind, "which lowers the electric tension of the body." His skin must first be rubbed with spirit and douched to enable him to withstand "chills" and cold. Too much fresh air is apparently as bad as too much drink. One writer gravely states that "a species of drunkenness is produced on the first occasion of going out after a more or less prolonged seclusion in the house." One has heard the expression "air as strong as wine," but never before of the production of actual intoxication!

It is indeed greatly to the credit of Dr. Walther that he has been the first to teach the absolute unimportance of the weather, however bad, in the production of a common cold, which he believes to be due to an infection somewhat similar to influenza, and also with regard to the state known as a "chill," loosely used by the laity to mean as a rule nothing, sometimes a cold or a rigor, but which as applied to consumptives in nine cases out of ten is a definite though insidious relapse due to overexertion, and marked by pyrexia and increased expectoration.

If Nordrach taught us no more than this, it would still be worthy of distinction, and it is necessary to be very clear about these facts, because there is an extraordinary confusion of ideas on the subject. These "chills" occur frequently enough in the populous health resorts, from simple lack of measures for their prevention. Common colds occur, also, accompanying civilisation, though I do not believe more frequently in consumptives than in other classes of people. The overexertion "chill" or relapse rarely happens at Nordrach, because the small number under supervision renders it possible to guard against it, and great care is taken that this is done. A fresh acute cold or catarrh we never see at Nordrach, because the isolation and the open-air life render the chance of direct infection practically impossible; but when occasionally a cold is taken, it is transmitted from a visitor or some member of the staff, and can be traced to the village or station below. A remarkable confirmation of this theory was afforded by the analogy of an outbreak of influenza last winter traced to a travelling pedlar in the valley. Many members of the staff were infected, some quite severely, while not one of the patients, who are constantly exposed to draughts and all weathers, was attacked.

Nor are fresh attacks of bronchitis, pleurisy, and other complications so common in the progress of phthisis, and so often attributed to "fresh cold," ever seen at Nordrach. Where all are making progress towards recovery, symptomatic treatment is reduced to a minimum, and drugs are therefore hardly ever called for.

It is apparent that if the risk of colds and "chills" from exposure can be disregarded, all difficulties in the way of enjoying the fresh air, even in the most changeable climate such as our own, are at an end. At Nordrach, therefore, no unnecessary "hydrotherapy" or "acclimatisation" is indulged in. Patients are at once encouraged to discard overcoats, macintoshes, and all heavy clothing, in walking, whatever the season of the year, though for the sake of comfort they may wrap up as much as they like while at rest, but with open windows. No regard is paid to wearing sound boots or keeping the feet or clothes dry, nor even to wearing flannel next the skin, the patient's comfort being his guide in such matters.

Sandals or thin canvas shoes are often worn in winter to prevent chilblains, and in summer on account of the heat. These are soaked through in the first puddle. Personally, in common with others, I practically never wore an overcoat during the last two winters either in England or Germany, and in the country rarely a hat, nor carried an umbrella. I have, while a patient, worn wet shoes for days together, sat by open windows for hours in draughts when the temperature of the room was at freezing point, waded in ice-cold water, etc., on purpose to test the truth of this infection theory. But like the schoolboy, who also tried similar means to get a bad cold and play truant, I failed entirely, neither did any other evil follow. It is in truth certain that no harm need be apprehended from an absolutely fearless exposure of consumptives to any weather, in our country as on the Continent, provided overexertion is avoided. A strong wind is not injurious *per se*. It is only in walking against it that a patient is liable to dyspnoea and fatigue—in a word—overexertion. At rest there is no harm, but always good, to be obtained from the free draught.

TREATMENT OF FEVER.

Brehmer's original ideas included seclusion for febrile cases, and carefully-graduated exercise combined with rest for those free from fever, but most of the modern institutions which have spread through Germany and Switzerland have deviated from these principles, and adopted the less troublesome and less effectual "rest treatment" in the open air, started by Dettweiler, of Falkenstein, which consists in immobilising even febrile patients on couches in *Liegehallen*, large verandahs open to the air, for the greater part of the day.

This treatment has also influenced experimenters in our country. At Nordrach, however, the principles of Brehmer have in reality been more strongly emphasised, and I think it should be stated "that the proper place for a patient whose disease is in any degree active, that is to say, a patient whose morning temperature does not keep below 37° C. (in the rectum), and the evening temperature below 38° C., is in bed,

alone in his room with wide-open windows in all weathers, obtaining the maximum amount of rest, which is certainly not possible on a couch in a *Liegehalle*, amongst talkative neighbours and other distractions. Rest on a couch is not the same as rest in bed, and is unfit for all pyrexial cases, although it is largely practised. In fact, the pyrexia of pulmonary tuberculosis is inconsistently accorded far less importance than is demanded in other diseases, the acute specific fevers for instance. It is this inconsistency much more than climatic considerations which still impedes the successful treatment of phthisis in this country as in others.

THE VALUE OF REGULATED EXERCISE.

On the other hand after the temperature has remained practically normal for a week, and the chronic, or acute, inflammatory process is in a quiescent state, regular exercise without fatigue, however slight, is urgently needed to strengthen the weak heart, to stimulate all the functions, to bring about a reorganising effect on the constitution, and eventually to fit the patient for the stress of everyday life again. This exercise has to be apportioned according to the patient's strength, state of nutrition, and even his temperament, and above all with constant regard to the temperature; so that the quiescent state is never interfered with, but goes on gradually to ultimate arrest. This is obviously a matter that can only be undertaken in surroundings which afford every advantage, and by a physician who devotes his whole energies to the task.

My indictment of the open-air "rest treatment" is therefore, that it does not provide adequate rest for patients with active disease, nor properly graduated exercise for those whose disease is quiescent. In consequence I have seen patients coming from other Continental sanatoria with, it is true, a certain accretion of subcutaneous fat, but with flabby tissues, unequal to any exertion when they returned home, and uncured. I have seen these same patients go away after a course of treatment at Nordrach, fully nourished, very muscular, capable of considerable exertion, long walks, etc., and with their disease completely arrested. These facts, I think, clinch my argument.

THE ENVIRONMENT DESIRABLE FOR A SANATORIUM.

The environment, therefore, of a sanatorium is of far greater importance than meteorological conditions, and the success of Nordrach is in some measure due to the isolation of the sanatorium from towns and traffic. The nearest stations are nine and ten miles away, the nearest town seven miles distant, and cut off by hills rising 1,500 feet above the sanatorium. It is, therefore, impossible for any but the strongest, who are nearly ready to leave, to make these walks, and without making invidious comparisons, I need only give one instance out of many to show the importance of this. A young English girl who was for some months at a large German sanatorium, and who has since been cured at Nordrach told me that patients used to go out into the adjacent villages to drink, and that she had sometimes seen them driven home drunk. Comment is needless, except perhaps to add that where such things are possible, no wonder "hydro-therapy" is found necessary to prevent "chills"!

THE ADVANTAGES OF SMALL SANATORIA.

Another very important point is the size of the sanatorium. In a large barrack a patient is lost in the crowd, so to speak. The Nordrach sanatorium has been wisely limited to 45 patients, distributed in four houses of 4, 5, 16, and 20 beds, although great pressure is put upon the accommodation, and vacancies are taken up two, three, and four months in advance. Probably no sanatorium should have more than 50 beds, and not even so many unless the supervision is highly satisfactory. To quote yet again. A German gentleman, who had been treated at a large sanatorium, told me that he once went away for three days to the neighbouring city for amusement without his absence being noticed by those in charge of the institution!

Some sanatoria allow friends to visit the patients from the very commencement; at one it is possible for the whole family to live with the patient. This execrable arrangement contravenes the first essential of sanatorium treatment—namely, that the patient should be absolutely removed from his home

surroundings, and detached from the environment in which he continues to lose ground or to remain stationary.

At all events it is most essential that at first he should be left entirely to the doctor and nurse, until indeed he is fully settled in the new way of life. The influences of friends, however intelligent and well intentioned, are in the majority of cases undesirable. It must naturally be so, for the friends know nothing of the patient's needs and supply him with sympathy when he wants only rest and quiet; and those whose needs are the greatest, who must refrain from conversation and mental exertion, who must conserve in short their diminishing vital energy are often visited for the very reason that they are ill in bed.

The way of life in the great health resorts is of course worse still. Such a place as Davos reproduces and perhaps adds to all the evils of the home surroundings. Hotel life in a town, with "caretakers," that is, untrained friends in attendance upon the invalids, brings with it temptations of all kinds in the shape of amusements, theatres, balls, even violent exercises, which so far from conducing to the patient's health in many cases produce "chill" after "chill," that is, relapse after relapse, so that what may have been an early and curable case becomes perhaps well nigh hopeless. Even amongst these however I have seen the most extraordinary arrests produced under the régime of Nordrach, arrests that one would have deemed incredible had not one observed their whole course.

The physicians at most of the high altitude resorts are practically consultants, although I understand that many arrange now for a season fee in order to see their patients as often as they like. That is a step in the right direction, but the control is very slight, and however good advice may be it is impossible to be sure that the patient carries it out. No wonder we find medical writers seeking a refuge in a list of contraindications. "Pyrexial cases," says Dr. Theodore Williams, "should not go to high altitudes, for as a rule the climate augments the pyrexia." Why? Is it indeed the climate that is to blame, or is it the mode of life the patient leads in that climate? In the few cases I have investigated in high altitudes the persistence of pyrexia was simply due to the fact that the patients were walking about with active disease.

Von Jaruntowsky says that the "action of the climate is too strong for the late stages of phthisis." Perhaps his remark had been better altered in translation to "the treatment is not usually strong enough for such cases." Amusements, in the usual acceptance of the term, are not so necessary when the treatment is efficacious, for then the patient's mind takes a positive emotional tone from the hopeful character of his surroundings, the disease loses its terrors as its curability is demonstrated, and he finds an occupation and interest in "working out his own salvation."

It is certainly a plausible theory that amusements are harmless in moderation, and even necessary for the patient's comfort. Unfortunately human nature, especially consumptive human nature, is not firm enough to draw the line at strict moderation. Even in a small institution it is difficult enough to regulate individual temperament unless amusements are very limited and unexciting, as Brehmer himself well knew. One of his sayings was—and there is no truer maxim in his writings—"Der Mensch stirbt an seinem Character." And again, in quoting from the *Davoser Blätter*, he says: "What kills us at last is not usually consumption but our temperament." In fact, at many health resorts one would imagine that the patient's business there was to be amused, rather than to be cured.

For this reason, also the principle laid down by Dr. Léon Petit—that access to a sanatorium should be easy and not far from a railway station—is thoroughly bad in practice. Easy access means the proximity of that civilisation which it is so necessary to avoid if absolute quiet is to be obtained, and the nearer the civilisation the more difficult is rendered that *al fresco* and unconventional life which the patient ought to lead.

DIET.

There are other points which might be touched upon, more especially the great question of diet. It will, however, suffice for the present to say that in many sanatoria there is no proper guidance for the patients in the selection of their

food, and too many meals are usually provided. Only three meals a day are given at Nordrach, and yet a much greater improvement of nutrition is usually brought about there than in other institutions. Forty or 50 lbs. (German) is by no means an uncommon increment. In one case a patient weighing under 100 lbs. (German) went away 190 lbs. In another case a lady who weighed 60 lbs. went away over 150 lbs. Both these cases were most serious; the latter was for weeks subject to profuse diarrhoea, probably tuberculous. They have been both cured, the latter for the last seven years.

DISCIPLINE.

The methods of a rightly-conducted sanatorium are, then, strictly analogous to the splint, which in surgical cases of tuberculosis keeps the diseased part continuously at physiological rest. The methods of a populous health resort hardly constitute a splint at all, and whatever restraint the treatment affords is customarily applied only in the winter. What surgeon would commit the folly of treating a tuberculous ulcer in the winter only, allowing the patient to be practically free from treatment during the summer months? And yet this is precisely what happens to many a similar case of tuberculous ulceration of the lungs, owing to our fallacious notions about climate.

In a sanatorium much depends, as I have already said, on the degree to which theoretical principles are put into practice. The splint may be so loosely applied that it may only be effective in comparatively slight cases. The best climate, then, is not, as has been poetically said, that which woos one most into the open air, but that in which this "splinting" is most effectively carried out.

It has been said that English people do not care to submit to the rigid discipline practised abroad. An observation of the faces gathered around the dining table at Nordrach will entirely dispel this idea, and will demonstrate that hope is more effectual than dissipation and distractions in making the invalid contented with his temporary lot.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

ANOTHER CASE OF POISONING BY LINIMENTUM CAMPHORÆ: RECOVERY.

B. MACG., a girl, 2 years, was brought to me on September 1st, at 1 P.M., her mother explaining that she had taken at least two tablespoonfuls of "camphorated oil" half an hour previously. No symptoms had arisen until the child had taken several mouthfuls of her dinner, consisting of meat and potatoes, when she suddenly "went in a fit." Her mother then found that she had burnt her gums, that the breath had a strong smell of camphor, and that the bottle of oil with which the child had been meddling showed the above quantity deficient. On examination the patient was unconscious, pupils dilated, deeply cyanosed, limbs and trunk rigid, and pulse hardly perceptible. I administered 5 gr. of sulphate of zinc in solution, and introduced my finger into the pharynx. The recently-taken food was ejected with a strong odour of camphor. I then had the child placed in a hot bath, applied cold to the head, and repeated the dose of the emetic. The child vomited several times in the bath, the fluid ejected having the characteristic odour of the poison. The rigidity subsided, and consciousness gradually returned. The child then slept for three hours, and when I saw her again at 6 P.M. was quite herself. There were no convulsions throughout. No after-trouble.

This is the second case I have had in this year with the same alarming symptoms. I attribute their severity to the fact that mothers like to keep the oil "by them" for external use in any and every complaint, and that as time goes on the camphor collects near the bottom of the bottle, converting the fluid there into a strong poison. As Dr. Moore remarks in his case reported in the *BRITISH MEDICAL JOURNAL* of September 10th, so in both my cases, the camphor acted as a poison on the circulatory and nervous systems, rather than as a gastro-