such a residence may not occur because the disease of the larynx has progressed so far that it wears out the strength of the patient and prevents proper feeding.

I am inclined to think that whatever improves the general condition, improves the larynx, or, in other words, that if the case is in other respects one for residence in moderately high altitudes, the laryngeal symptoms may not be considered, except that local treatment must be carried out wherever the patient goes.

I have known laryngeal symptoms to improve in the forest at an altitude of eighteen hundred to two thousand feet.

I have made a plea for local treatment of phthisis laryngis. I would not be understood as asserting that many cases can be cured, in fact, very few are cured; but that is not an argument in favor of neglect to attempt to give comfort to the patient and assistance to general treatment, for no matter what general treatment is given if the diseased larynx is not treated the patient will fail rapidly on account of persistent pain and dysphagia.

I state as a matter of not infrequent personal observation that many phthisical patients die, not from the effects of the disease in the lungs, but from exhaustion caused by pain and starvation dependent upon an ulcerated larynx. In many a case, although necessarily fatal, the end could be long deferred and approached with bearable amount and kind of suffering were it not for the agony which an ulcerated larynx produces.

Since the above was written, a pamphlet by Dr. Solly has reached me in which he reports the results of forty-five cases of laryngeal tuberculosis treated by him at Colorado Springs. This report is most interesting, and is corroborative of what I have written. The results of treatment of the forty-five cases were: "Non-ulcerated—six cured, seven greatly improved, four improved, five died, three worse; ulcerated—two cured, two greatly improved, one improved, fifteen died; total laryngeal—eight cured, nine greatly improved, five improved, twenty died, three worse."

"While I believe," he says, "that contrary to what was a common impression, namely, that high climates are injurious *per se* to tubercular laryngitis, they are positively beneficial, speaking as a generality, yet such results as I report could not be reached without, in the majority, especially in the ulcerated cases, careful local treatment."

HOME TREATMENT OF PHTHISIS.¹

BY G. K. SABINE, M.D., BROOKLINE, MASS.

MUCH more has been said and written about the climatic than the home treatment of phthisis; and yet the latter is perhaps the more important, as by far the greater number afflicted with the disease are unable, owing to circumstances, to avail themselves of the advantages to be obtained at the various health-resorts. Probably much of the benefit derived from sending patients away from home is due, not to climate alone, but to removing them from the usual cares and worries incident to daily life, and to the much more important fact that they will follow out rules laid down for them when sent away which they would not do if at home. This is only a peculiar phase of human nature, that to appreciate a thing it must be obtained at some cost.

¹ Read before the Norfolk District Medical Society, March 27, 1894.

It seems that nowhere in the field of therapeutics has so much error in judgment been shown as in sending phthisical patients away, for climate is only one of many things to be considered.

Patients with incipient trouble are often sent away who can ill afford it, and, in consequence, are obliged to so economize as to deprive themselves of many things which are most essential to their welfare; for instance, the best of food, which is, perhaps, quite as important, if not more so, than the air they breathe. Others with advanced trouble are sent away, as we all know, when there is no possible chance of the disease being cured or even arrested. The question has often arisen in the reader's mind, whether a very large percentage of these patients would not do quite as well, and possibly better, if they remained at home, providing that the same rules governing their mode of life could be carried out. Certainly, the result of autopsies tends to show that, not only do very many cases of phthisis recover at home, but do so without any treatment whatever, and are only revealed after death from some other cause.

Be this as it may, many must of necessity recover at home; and the question is, How can they best be cared for? When a patient with incipient trouble consults a physician, what advice and directions ought he to receive? In as few words as possible, I should say: (1) Good food and an abundance of it; (2) fresh air; (3) suitable occupation. First in importance is the subject of food. This should be abundant and nutritious. One rarely sees a phthisical patient gain flesh and the local trouble increase at the same time (perhaps never), so that a gain in weight is a most favorable sign, and worth more than all others. We have here a key to the situation, so to speak; if it is possible to make the patient increase his weight, he will be pretty sure to gain in other respects. An excellent plan is to weigh patients at stated intervals, this being an important guide to the physician and an incentive to the patient to take the greatest possible amount of nourishment. The question might arise whether the gain in weight was not the result of improvement in the local condition, rather than the cause.

Two things are essential for a case of phthisis: the presence of bacilli, and a suitable soil for their development and growth. Certainly it is not every one who is exposed to the influence of bacilli who has tuberculosis, as we well know. It has been a well-recognized fact for a long time that patients suffering from certain wasting diseases (diabetes, for instance) are particularly susceptible to their influence; hence it is only fair to suppose that by bringing the nutrition up to a certain standard by feeding we may render the soil unfavorable to their further development. The diet should be general, and include a large proportion of milk and eggs, as patients can usually be induced to take larger quantities of these than other forms of food.

Too much cannot be said to convince the patient that he must not be in constant dread of catching cold, for it is this fear that usually keeps him from getting the requisite amount of fresh air. The moment most persons learn that they have trouble with their lungs they begin to house themselves and live in a close atmosphere.

It is still almost impossible to convince any except the more intelligent that their trouble is not due to

exposure of some sort or other, so firmly rooted is the old idea of almost everything coming from cold.

As a large portion of one's time — at least one-third — is spent in bed, too much stress cannot be laid on the importance of keeping the sleeping-room well aired. The patient should sleep with the window open. If there is too much wind, and he is afraid of draughts, this can be obviated by putting a frame like that of a mosquito-netting covered with flannel in the window, and allowing the air to sift through this. A number of frames of varying height can be used, according to the temperature and amount of wind. The sleeping-room should have a sunny exposure, be provided with an open fireplace, and be free from upholstery, superfluous furniture, or anything that will tend to make the room stuffy in warm weather. It would be a most excellent plan if patients living in the country could be induced to sleep in tents in summer, as is done in the Adirondacks.

During the day, one should be out of doors as much as possible without over-fatigue, regardless of weather. The early hours are the best. This is especially true of spring and fall in our climate, when so many days are pleasant until towards noon, when they become cloudy. Undoubtedly a certain amount of good can be accomplished by inflating the lungs by prolonged inhalations, especially if the patient is not accustomed to take tolerably violent exercise. He should be instructed to do this at stated times, otherwise it is very apt not to be done at all. Many patients, more especially women, almost never fill their lungs with air. We constantly see this in examining them. When requested to take a long breath they are simply unable to do so, owing to the fact that they have never done it. This may depend upon too tight clothing, or to the fact that their exercise is rarely anything except the most moderate.

Occupation is most essential. This is comparatively easy to provide for in the case of men, but in that of women it is a very different matter. It should be out of doors, if possible. It is much better that a young man should enjoy a healthy, long and useful life at some laborious occupation in the open air than to be confined to an office and die prematurely of phthisis. Frequently, the first thing to do is to induce a patient to change his occupation, as this may be a very important factor in causing his trouble. There are but very few conditions (and this does not apply to phthisis especially) where it is not better for one to be occupied and to have regular duties to perform. It conduces to contentment of mind and happiness, and this prevents patients from watching themselves too closely. Fortunately, consumptives are usually cheerful and hopeful.

One thing all should be cautioned against, and this applies, I think, to all stages of the disease, and especially the latter, and that is to avoid over-fatigue.

It seems hardly necessary to speak of medication, for oftentimes the less there is of this the better.

Of course, symptoms must be met as they appear. For a long time I have been accustomed, where there is any elevation of temperature, to give continued doses of quinine, and, I have fancied, with good effect. Patients almost always demand something for the cough, and it has to be given. It is important that this should be simple, and not interfere with the appetite, digestion or bowels. If it is explained that the cough is not the trouble, but only a symptom of the real disease, they will bear it with much more patience.

It has been generally the custom to give phthisical patients cod-liver oil or some one of its various preparations. This should be done with great caution, as it may easily do more harm than good by interfering with the appetite and digestion, and so preventing the proper amount of food being taken.

The importance of the care of the sputa, and of keeping the patient more or less isolated, especially at night, is now very generally recognized by the medical profession; and it is only fair to the patient and his family that they should have a clear understanding of the matter, that the rules may be carried out intelligently.

TUBERCULOSIS IN MENTAL DISEASE.¹

BY WALTER CHANNING, M.D.

FOR at least the last fifty years, the intimate connection of phthisis and insanity has frequently been observed and commented upon. The greatest mortality among the insane was found to be due to consumption, and in any case of dementia such an outcome was to be both dreaded and anticipated.

In 1862-63, Dr. T. S. Clouston, Superintendent of the Royal Morningside Asylum at Edinburgh, made a careful study of the two diseases. He found, in his own asylum, that from 1842 to 1863 the percentage of deaths from phthisis was 29 in the whole number dying, while from 1879 to 1889 the percentage had fallen to 13.6 — the difference being chiefly explained by the vastly improved sanitary conditions of the institution and the more rational treatment, for, of course, the disease might have become less prevalent in the general community.

The fact was, however, brought out, that the mortality from tubercular disease was three times as great in the asylum as in the general community, being 1.19 per cent. in the former, and 0.40 per cent. in the latter case. It is the more striking when we reflect how much better off the insane person is, in regard to medical and general care in the asylum, than the sane individual in the same class in the general community. As far as these things are concerned, everything possible to prolong life is freely provided for him, with the result, already spoken of, of speedily lowering the mortality.

I find that in 1893, in twenty American hospitals for the insane, there were 1,729 deaths, of which 280, or 16 + per cent., were caused by tuberculosis. The total number of persons treated in these institutions during the year was 22,937.

That, in spite of everything that has so far been accomplished, the mortality should continue to be so considerable calls for serious consideration and study, to see what causes there may still be at work to perpetuate this fatal disease.

Clouston has established a form of insanity, from his researches, which he calls "phthisical insanity," wherein he clearly traces the evolution of the mental disease. It is a curious fact, that in this disease the whole mental outlook is the reverse of that of the sane individual. There is no cheerfulness or hope, but, on the contrary, extreme melancholy and despair. The subject of the disease is irritable, suspicious and hard to satisfy in many little ways. Savage says: "Phthisis in the insane is associated with certain groups of

¹ Remarks in the discussion at the meeting of the Norfolk District Medical Society, Brookline, March 27, 1894.