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## SIR WILLIAM OSLER'S "GIVE IT UP."

SIR WILLIAM OSLER, the author of probably the best and most complete System of Medicine ever published, speaks with a freshness and authority on every subject he touches, which secures for his suggestions immediate consideration. Sir William made a model president of the Hospitals Conference at Oxford last week, and was generous enough to preside at all the sections throughout and to give close attention to the various subjects dealt with. No more successful conference of hospital managers has ever been held. Much of the success of the Oxford meeting was due to the spontaneous hospitality and goodwill extended to those present by Queen's College through Mr. G. B. Cronshaw, who made a most genial and courteous host. The occasion was full of interest from the circumstance that the Radcliffe Infirmary, Oxford, is erecting a new wing, which will give this institution the most complete clinical and pathological laboratories yet attached to a county hospital in this country. This new development, which may be traced no doubt to the influence of the Regius Professor of Medicine, backed by his colleagues, adds weight to the advice which Sir William Osler gave to county hospital managers throughout the country.

Sir William's advice is fourfold. He urges that the time has come (and in this we agree with him) when the voluntary hospital system must be extended if it is to continue as the great hospital system of the British Islands. At present these hospitals do everything for the poor, who are rich in their hospital care and treatment, but they do practically nothing for the middle classes, or the poor-rich, as Sir William defines them. The second point was that, although the general hospitals of this country are excellent so far as the care of the patient and all that appertains to its success is concerned, they lack the full equipment for the adequate treatment of disease by modern methods. In other words, every county hospital throughout the country is advised without a moment's avoidable delay to procure adequate plans and to erect and open clinical and pathological laboratories. Without these it is not

possible to provide means for the best available treatment of the patient, and no efficient hospital in these days can do without such modern equipment. There should not be a single hospital throughout Great Britain which has to send to the research laboratories in London to enable a diagnosis to be made as to whether a particular case is one of carcinoma or not.

Sir William next urged, with great force and truth, that the day has gone by when the work of a county hospital can be properly done, so far as medicine is concerned, by three or four men in general practice. The developments of modern medicine make it impossible for a general practitioner to devote the necessary time for special study and research and keep himself up to date thoroughly in laboratory methods and those of research. Sir William therefore advocates the substitution of one pure physician to devote his whole time to medicine and to be in charge of the whole of the medical work at each of the county and smaller hospitals throughout the country. A hundred years ago nearly every county town in England had such a physician, and the reason for his disappearance was mainly due to the fact that there are often two or three physicians so-called where one would do. It would be a practical reform of the utmost value to the people in each community and to the general members of the profession practising within its area to maintain one physician, and he a consultant, at each hospital containing only fifty or sixty medical men. We make no doubt that as the general knowledge of modern developments in medicine spreads throughout the community, unless this reform is spontaneously effected, the public will insist upon its being carried out as the condition of their continued support of the county and smaller hospitals. The fourth recommendation is equally important to all the interests concerned in the efficiency of these hospitals. It is that every county hospital should be utilised for the purposes of graduate instruction so as to make its work of the maximum value to the practitioners residing in the district which it serves.

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It is not possible to deal fully with Sir William Osler's four points in the present article. They are all admirable, and will, we have no doubt, within a few years be introduced and form part of our British system of hospitals. The one essential difficulty to be overcome is the deep-rooted conservatism which embraces the English hospital system and creates difficulties which have little real foundation apart from this conservatism. The sphere occupied by the voluntary hospital is undoubtedly too limited at present, and if it is to endure it must be extended to meet fully modern requirements. It needs the promulgation of a well thought out and practical scheme to embrace the whole voluntary hospital system, and to supply adequate hospital care for all classes of his Majesty's lieges on a paying and *pro rata* base, combined with the fullest clinical and pathological laboratories. We are confident that this reorganisation can gradually be effected with complete success. It would bring with it to the voluntary hospital system in this country new strength and popularity.

We have to evolve out of the voluntary system the best and most complete hospital organisation, with a perfected health service, that the world has ever seen. One effect of the National Insurance Act should be that this reorganisation will be carried through with the co-operation of the voluntary hospital managers and the great body of medical practitioners. Failing some such system, the Poor-Law infirmaries will be first turned into State hospitals, and with this change must gradually come, as Sir William Osler shrewdly foresees, a State service, with a rival scheme of municipal hospitals. The sooner this is appreciated by the managers of voluntary hospitals, the easier must it prove to safeguard the interests of these noble institutions. We want the hearty co-operation of all the interests involved to perpetuate these establishments by bringing them into complete harmony with modern developments in medicine. This would enable the voluntary hospitals to meet the present needs of those classes of the community which have heretofore not been able to obtain the hospital care they so urgently require.

### THE MALINGERING PROBLEM.

ONE of the most serious difficulties which threaten the finance of the Insurance Act is the detection and prevention of malingering. This question was one of those which were never seriously discussed when the Act was a Bill before Parliament, owing to the fatal haste with which all the proceedings had to be rushed from motives of party and political expediency. Now, however, there is no avoiding it, for facts are stubborn things, and successful malingering fairly spells ruin to some of the approved societies. First, there seems no doubt that malingering is vastly more prevalent among women than men. Hence societies composed wholly or mainly of women are feeling the pinch much more than those consisting wholly or mainly of male members. Exactly why this should be can be guessed at rather than proved; probably several reasons combine to favour it. But the evil of malingering is a desperately serious problem not only in approved societies composed of women but throughout the operations of the Act, and for that matter throughout the country. Observers well qualified to judge believe that the malingering problem was first created by the Workmen's Compensation legislation of one and two decades ago; and the Insurance Act has merely stimulated and fertilised this growth.

Social reformers—and every decent citizen realises that mid-Victorian conditions of life for the labouring classes were in most ways very unsatisfactory—are faced with a dilemma which

impales them whenever they try to deal with the health of the proletariat. Either they must allow a percentage of the population to suffer real hardship owing to the hazard of sickness and accident, or else, when they seek to minimise this evil by Factory Acts, Compensation Acts, Compulsory Insurance, and the like, their action will result in rendering large sections of the population permanently work-shy. It is no use blinking this difficulty, as some of those who have discussed it are doing when they seek to lay the blame on the doctors. Doctors are human beings; they are working an Act which most of them do not like on terms which they do not think adequate. Some of the good men are on the panels; all the wasters are. Most of them are overworked. Is it likely that such a medical service can be trusted to check malingering, a feat which requires much time, skill, and patience? The most practical proposal hitherto suggested is for the appointment of medical referees, who shall themselves have nothing to do with the treatment of the insured. But this involves very considerable expense, which the Committees can ill afford. Still, it seems to be the only way out of a difficulty which ought to have been foreseen by Parliament, just as it was foreseen by medical men and friendly society officials. However great the temptation to malingering offered by the Act may be, we cannot condone the moral offence of those who succumb to it; and to assert, as one speaker at a recent conference did, that the stigma is greater on the doctor than on the malingeringer seems to us simply disgraceful. Verily, the chickens of stifled discussion are coming home to roost!

## THE BRITISH HOSPITAL SYSTEM, ITS EFFICIENCY AND NEED FOR DEVELOPMENT.

By SIR WILLIAM OSLER, Bart., M.D., F.R.C.P., Regius Professor of Medicine, Oxford.

### Being the Presidential Address at the Oxford Hospitals Conference.

MR. VICE-CHANCELLOR, Ladies and Gentlemen,—I should like to congratulate this Association on its organisation, on the work which it has done, as an encouragement to the better work which no doubt it will do in the future. To all interested in hospital organisation it must be of the greatest benefit to meet every year and discuss the many problems that come before you. It is exceedingly kind of you to have asked me to be your President this year. I am singularly deficient in the necessary qualifications for such a task. There is probably no one so long and intimately associated with hospitals who really knows less about their administration. Patients, the house physicians, the nurses, and directors I have known intimately, but I have persistently avoided knowing anything about hospital administration as such. If the patients were comfortable, if the beds were clean, if the nurses were happy and the house physicians well housed and well fed, I knew that the administration was sound. It is a pleasure to look back over many years and to feel that I have worked harmoniously with the administration of every hospital with which I have been connected.

There are several points to which I would like to refer. After working for many years in Canadian and American hospitals, it is a very interesting experience to come here and see the contrast that exists. They are many and striking. In Canada the hospitals with which I was associated for many years were organised by Englishmen and by Scotchmen. English rules and English methods were followed. In the United States, when the Johns Hopkins Hospital (with which I was associated for sixteen years) was organised, we followed the German methods of organisation, so that I have been associated with both. Both have advantages and disadvantages into which I cannot here enter. One special feature, I think, in this country is the admirable quality of the smaller hospitals. Go to any county town in England and you will find a hospital, well equipped, clean, and up to date, the patients well looked after—indeed, a thoroughly good, efficient modern hospital; and it is more particularly with reference to the work of these institutions that I wish to speak this morning. In the first place, they arouse an extraordinary amount of interest among the people at large. Take this district, for example; the number of people in the city and in the county who are interested in the Radcliffe Infirmary—prominent citizens, busy men—who are willing to spend much time in its behalf, is very gratifying. Then the management is admirable. The arrangements are excellent so far as the nursing and care of the patients is concerned; and as a rule the operating rooms and dispensary are up to date. The country at large may congratulate itself on having an admirable hospital system. Do not be over anxious that you

have fallen upon troublesome days, that you are full of worries as managers—it is good for you, and I hope that your worries may be increased by what I am going to tell you this morning. (Laughter.) It is well to be thoroughly chastened when the rod is upon you!

To four points I wish to refer this morning. The first is the debated one of the voluntary system. My advice is very brief and direct: give it up! It is antiquated, out of date, and it is not going to continue. Make up your minds that you must accept the principle of taking pay from patients. It answers admirably elsewhere. There is not a general hospital in Canada or in the United States which does not take all the money it can get from all classes of patients. There is no difficulty about it. You will have to take it from the insured patients. What reason is there for not taking pay from any patient who can afford it? The practice works well in the Canadian and American hospitals. A patient is asked first if he is a poor man. If so he is taken in without any question. If he is not poor, and comes from within or outside the district, he is admitted at a fixed rate. He is allowed to pay a certain definite amount, or he is asked to pay for operations or special work. There is one striking contrast between the hospitals in this country and those of Canada and the United States. Here you do everything for the poor, who are rich in their hospital care and treatment. Here you do nothing whatever for the poor-rich. (Hear, hear.) They are the most neglected people in the country. If Hodge has acute appendicitis he is taken into a beautiful hospital, operated upon in a splendid operating room, with all the modern advantages; he is put into a big airy ward, and during his convalescence he is out on a balcony, and he has fresh air and is surrounded by all the advantages that hospital administration can give him. What happens to Lady Clara Vere de Vere with acute appendicitis? She is probably taken into a stuffy house transformed into a nursing home; she is operated upon in an upper back room transformed into an operating room. She is transferred to a stuffy room where she stays during her convalescence. No wonder she hates doctors, no wonder she hates nurses and the medical profession. The medical profession is alienated very largely among the upper classes in this country, medical science is alienated, owing to the miserable conditions under which many of the patients of this class have had to live during illness. It would have been a totally different thing if they had been put into beautiful surroundings in many of our general hospitals. (Applause.) There are plenty of nursing homes which are admirable and up to date, but there are a great many that are not; and there is not a nursing home that can take care of a patient as well as a general hospital. (Hear, hear.) What happened in Canada the other day when the

Duchess of Connaught was ill? She was not taken to a nursing home, she was taken to the best place available—to a general hospital. It was her second or her third visit there. I should like to see every general hospital with a big private pavilion. (Hear, hear.) And they pay. There has been a statement current that the private wards in general hospitals do not pay. They do, and they can be made to pay very well.

The second point I would like to worry you about is this. Excellent as are the general hospitals of this country in regard to the care of the patient, the nursing, and the general arrangements—always clean, always tidy, always looking well—when I go to a general hospital I am usually asked to see the wards and the kitchens. I say “No, I do not want to see them, they could not look better here than they did in the last place I visited; show me your clinical laboratory, show me your pathological laboratory.” And then the manager has an engagement. (Laughter.) He says “Will you kindly show him that room in the basement?”—(laughter)—and he goes away with a blush that leaves a radiance. And that is what I would emphasise before this Association. You may just as well know the truth, and it is that so far as your clinical and pathological laboratories in the county hospitals are concerned, I will not say they are out of date, because they never were in date, but I say they are shockingly behind the times. You may as well know the truth, and you have got to reform it; you have got to change it. You have got to rearrange your ideas, because many of you are ignorant on this question. Upon chemical and bacteriological research modern medicine is built, and you cannot have proper treatment of your patients, you cannot have the cases investigated properly, unless you have a good chemical, a good bacteriological, and a good pathological laboratory. In the great majority of the county hospitals those things do not exist, and you should make provision for them at the earliest possible date. They cost money, but that is your business, it is not ours. You are there to provide means for the best possible treatment of the patients, and that you cannot do, without the modern equipment of good laboratories. I hope that at an early date there will not be a single hospital in this country that has to send to the research laboratories in London to have the diagnosis made as to whether a case is one of carcinoma.

The third point is a somewhat delicate one dealing with the medical profession. Medicine is a progressive science, which takes a large share of a man's time if he is working at it thoroughly. I mean what is called internal medicine—the study of disease. In every county in connection with every county hospital there should be a man who is a student working at these problems, and one who is not practising except as a consultant. A hundred years ago nearly every county town in England had its pure physician, and it is a curious piece of history how it is that they should have lapsed, how the conditions have changed, so that now there are very few county towns with hospital physicians who are pure physicians—that is to say, who see cases only

in consultation, or who only see purely medical cases. And one reason, I think, is this, that on the medical staff of the hospitals there are often two or three physicians where one would do. It would work much better if a hospital with, say, only fifty or sixty medical beds had but one physician and he a consultant. He should even be paid a fixed stipend sufficient to enable him to devote a very large part of his work to medical investigation and the care of the patients. With the development of modern medicine it takes so much of a man's time for special study and research that it is impossible, if he has to earn his living by taking care of patients in general practice, to keep up to date thoroughly in laboratory methods and in methods of research. In hospitals with a hundred and fifty or two hundred beds the managers should look forward to the day when one pure physician had charge of the medical department instead of, as at present, three or four men in general practice.

The fourth point I would bring before you is the importance of utilising the county hospitals for purposes of instruction. In the old days they were utilised by the medical students and by the apprentices, and every county hospital had five or six or sometimes a dozen medical students in attendance during the Long Vacation. Now it is the rarest possible thing to see a medical student. There is a work they can do which is of the greatest importance—the county hospital should be not only the consulting centre for the doctors of the neighbourhood, but it should be the centre to which they should come for systematic instruction. No body of men need more persistent brain-dusting than do doctors. The profession of medicine is progressing at such a rate that in five or six years a man's knowledge is rusty, and it is a most important thing for the public that the average doctor should keep up to date. One way in which he can keep himself thoroughly informed on the progress of knowledge is by having post-graduate courses in connection with the county hospital. I hope that a British committee which has this post-graduate instruction in hand will present within this year to each county hospital a scheme dealing with this matter. It can be very easily and satisfactorily arranged. The idea is to have, say in the month of October, once a year, possibly in some places twice a year, a week devoted to post-graduate teaching which would be conducted partly by the staff of the hospital, partly by men who would be invited to come, and partly by a group of men who may be under the control of this committee for post-graduate instruction; that is to say, certain specialists throughout the country will be ready to come here, for instance, for four or five days and give instruction or be ready to go to Worcester, or Gloucester, or Norwich, or anywhere they were called upon. I hope next autumn we shall have a post-graduate week here at the Radcliffe Infirmary; and I am sure that throughout the country at large it would be not only a means of conveying a great deal of valuable information to the doctors in each community, but it would help to link the doctors more closely with the hospital.

and be a mutual benefit. The plan has worked admirably on the Continent, and I think it should be introduced here. It is not expensive, and the cost could be very readily met by the profession of the country.

These are the four points I wanted to bring before you. They are not, perhaps, connected directly with hospital organisation, but they are connected very intimately with the work which you have to control. And the two points I would particularly impress upon you are the necessity for more scientific work in the way of clinical laboratories and pathological investigation, and the necessity of making every hospital over which

you have control a centre for the whole profession. No doubt the linking of the hospital in the Insurance scheme will promote that very much, for you should make every panel doctor feel that the hospital is the place to which he may go for advice and for aid in his special emergencies. If you alienate the panel doctor from the general hospital you have only one alternative in this country, and that is State service; you have got to work your hospital with the panel system, or else the panel authorities will have their own municipal scheme, and you will have rival institutions.

I thank you for having listened to me so patiently.

## Tuberculosis and the General Hospital.

By SIR THOMAS OLIVER, M.D., LL.D., D.Sc., F.R.C.P.

(Read at the Oxford Conference in the author's absence by the Rev. G. B. Cronshaw.)

THE discovery of the tubercle bacillus by Koch gave not only a fresh impetus to the study of preliminary and other forms of tuberculosis, but it united all the forms together and raised hopes that the malady would be brought within the sphere of prevention and cure. Since it is of all maladies the one disease which claims the greatest number of victims—50,000 annually in this country, or one-ninth of the total death-rate—the problem of tuberculosis remains for medical men one of the most fascinating of our time. In the wards of our general hospitals there are almost always cases of tuberculosis. With our increasing knowledge of the disease and of its infectious nature, we naturally ask ourselves whether it is desirable that such a disease should be treated in general hospitals. It seems something of a contradiction that, while hygienists are teaching the necessity of segregating phthisical patients in their homes or of removing them to sanatoria, hospital physicians should be treating them in their wards. The experience of the Brompton Hospital is quoted to show that, given good conditions and plenty of ventilation, the infectiousness of tubercle is slight. Medical practitioners also tell us that only in a few instances, considering the opportunities for infection, is the disease directly conveyed from a sick husband to a healthy wife, and *vice versa*. Opposed to these there are instances on record of nearly whole families having been wiped out by the introduction into the home of an infected member. The case quoted by Dr. H. G. Sutherland\* of the serious consequences which followed the introduction of illness by a sick daughter into the home of a crofter at Tarbert, Morar, cannot be ignored. The father, who was a ghillie, had lived in the same house for twenty-one years. His wife was healthy and was the mother of seven sons and five daughters, their ages ranging from twenty-one to two years. In April 1906 the eldest girl, aged twenty-one, who had been in service, came home suffering from a suppurating finger. Shortly afterwards symptoms of phthisis showed themselves, and she succumbed to tubercular meningitis on May 26. Six months afterwards a sister, aged fourteen, developed phthisis, and died in the following January. During her illness the father developed a cough, and the mother suffered from pain in the abdomen and left ankle. Two daughters, aged twenty and ten, became ill, and the infant, aged two, became anæmic and rapidly emaciated. The mother was subsequently found to be suffering from tuberculous disease

\* *Control and Eradication of Tuberculosis*, by Many Authors, p. 12. (Edinburgh: Wm. Green and Sons.)

of the ankle, and the two girls and the baby from pulmonary phthisis. The baby died in January, having been ill three months. The father gradually got worse, and ultimately succumbed to phthisis. In March one of the boys, aged sixteen, was found to be suffering from pulmonary tuberculosis.

The cases just quoted place beyond all doubt not only the infectiousness, but the virulence which tubercle may occasionally assume. And yet, notwithstanding these and other cases, the infectiousness of tubercle is on the whole of a comparatively mild nature. Circumstances are, however, now and again in operation whereby the virulence of the tubercle bacillus becomes increased. We have two factors to deal with—an organism whose virulence can vary, also the individual whose resistance to the micro-organism may be increased or diminished in accordance with the influence of heredity, the immunity acquired by harbouring the bacillus in small numbers; also the opposite—viz. an increased susceptibility to the disease or anaphylaxia.

### THE PLACE OF INFECTION.

It is a question as to how far infection has played any notable part in spreading the disease in the wards of a large hospital. That flies are carriers of the disease, and therefore objectionable intermediaries, is now beyond all dispute. Last year I carried out with Dr. Slade, bacteriologist to the Royal Victoria Infirmary, a series of experiments to test the infectivity of the expired air and of the sputum of phthisical patients. I got three patients to speak into, read aloud for ten minutes into, and to cough into specially prepared agar-glycerine films from which cultures were made and emulsions injected into the bodies of guinea-pigs. In one case where the patient, a pronounced tuberculous subject, had coughed into the film thirty-seven times an emulsion injected into guinea-pigs did not give rise to tuberculosis; nor did it do so in the case of another guinea-pig, but in a third case the emulsion made from the droplets caught in the film during coughing was followed by miliary tuberculosis in which the liver and lungs were much implicated. Of equally infective power did I regard the expectoration of these three patients who coughed on to the prepared films, and yet only from one of them did tuberculosis in animals follow. Still even this is too high a percentage of risk to be run in a hospital by bringing susceptible persons within the range of infection from tuberculous patients. In order to test how far the blood of persons suffering from well-marked pulmonary phthisis might contain the tubercle

bacillus, Dr. Slade and I carried out several experiments, but not in one did a guinea-pig become tuberculous.

I must admit that in all these experiments I expected more serious results to have followed inoculation of animals. With ordinary care, therefore, as regards ventilation, cleanliness, removal and disinfection of the sputum, the risk of infection in the ward of an infirmary is not so great as to cause alarm; but the point rather is this: Is it wise to run any risk at all? What, too, is the best thing for the patient himself, and what is the best for others? There is also another side to the problem: Can the admission of tuberculous patients into a general hospital be altogether prevented; and, if so, is it desirable from a teaching point of view that they should be excluded? On the whole there is not the least doubt that the best results of the treatment of tuberculous patients are obtained by residence in sanatoria, and yet to sanatoria unqualified praise cannot be given, for results have not always come up to expectation. There is not the least doubt that those who adopt the open-air treatment of tuberculosis are proceeding on the most satisfactory and most hygienic lines. Compared with cattle which are housed during the winter months, and which thereby become susceptible to tubercle, the herds which live out-of-doors all the year round and roam about freely in the open do not suffer. An appeal is made to this fact in favour of the open-air life. But what of wood-pigeons sleeping on the tops of trees, breathing the purest air, and yet dying from tuberculosis? Such a circumstance weakens our belief in the efficacy of pure air. Notwithstanding all this, the crowded ward of a general hospital is not the ideal place for the treatment of tuberculosis. There is not the quantity nor the purity of the air the patient requires.

TUBERCULOUS PATIENTS IN GENERAL HOSPITALS.

With this mixed experience before us, we return to the question: Ought tuberculous patients to be admitted into a general hospital? And to that I must return the answer "No" and "Yes." You cannot, in fact, keep them out. Take, for example, acute miliary tuberculosis attended by high fever, and which is with difficulty differentiated from typhoid fever. Such a case may find its way into the ward of a general hospital, and I must admit that I have never seen any bad effects follow. Wherever housed, the patient is almost sure to succumb to his malady, and there is little likelihood of the disease spreading through the wards of an infirmary, since patients are not only admitted into the wards, but are treated and die without, in some instances, the diagnosis being accurately made until on the post-mortem table. I have never known of a case of acute miliary tuberculosis treated in a general hospital followed by the development of the disease in other patients in the wards. There are, too, cases of men and women who when at work or out walking are suddenly seized with hæmoptysis, so that should the blood-spitting be rather profuse and the shock great, it would be impossible from a humane point of view to refuse admission to such patients. Or, again, a patient is sent into hospital suffering from pleurisy with effusion. Seeing that such a large percentage of cases of pleurisy are tuberculous at the commencement, or become so afterwards, the admission of such a case into a general hospital cannot be refused. It is almost useless to discuss a problem like this, when post-mortem statistics show that in 70 per cent. or more of the bodies of persons dying in infirmaries from all causes, including accidents, there are evidences of cured tuberculosis. Take, again, peritoneal effusions. Who can say in the first instance what is the pathology of

such cases? In young persons probably most of the effusions are tuberculous. They not only do well under treatment in hospital wards, but they do not spread the disease to others. Apart from bacillus coli, gonococcal and streptococcal infections of the uro-genital tracts in men and women, is not salpingitis with adherent tubes, also similar focal accumulations of pus in the kidney, frequently of tuberculous origin? When we deal with diseases of the alimentary canal, are we always sure of our diagnosis? Cases of tuberculous ulceration of the intestine and patients with enlarged glands in the abdomen find their way into hospitals, where their malady may be accurately diagnosed or not.

THE DANGERS OF INFECTION.

There are the two extremes of life at which tuberculosis may occur and the dangers of infection not be recognised: (1) Young children under two years of age with meningitis, and (2) old asthmatic and emphysematous patients over sixty years of age. Children under two years of age who are the subjects of pulmonary disease do not expectorate. Tuberculosis assumes many forms and underlies many anomalous affections not at first believed to be tuberculous, as seen in various types of joint disease primarily regarded as rheumatic, but which later experience has proved to be pulmonary osteoarthropathies. Tuberculosis is too subtle a malady, and its influences and ramifications are too widely spread to bring it under the unqualified ban of prohibited admission into a general infirmary, as the following illustration will show. A mason's labourer falls from a scaffolding and receives an injury to the wall of his chest. He is admitted into an infirmary suffering from fractured or injured ribs, pleurisy develops, and this is subsequently found to be tuberculous. The pleurisy may or may not have been tuberculous shortly after the injury, but it becomes so. Is such a patient to be refused admission into a general hospital?

It is another thing when we come to discuss the question of open forms of tuberculosis, cases in regard to which there is no difficulty of diagnosis, such as advanced pulmonary phthisis with abundant expectoration, also suppurating glands in the neck. I do not know whether there are instances, in the surgical wards, of patients, the subjects of suppurating glands, having conveyed the disease to others. It is not desirable that patients in advanced or rapidly advancing pulmonary phthisis should be admitted into the wards of a general hospital, but this is as much from the point of view that for the patient himself a crowded ward is not the best place for him nor for the other patients, whose night's rest may be disturbed by the frequent coughing of the intruder. The men or women in the ward must not only be protected from the phthisical patient, but the phthisical patient must himself be protected. The possibilities of infection cannot be ignored, for the opportunities are freely given to the inmates of the ward to sit beside and talk to a phthisical patient in the same ward, whose frequent cough and expectoration cannot but be without some risk to men and women whose own health at the time is not good. It may take months for a tuberculous infection to reveal itself, and as we cannot always follow the after-history of the patients who leave infirmaries, we cannot be quite sure whether all who may have been placed in the way of infection remain free from the disease. Years ago a larger number of cases of pulmonary phthisis was admitted into general hospitals than is admitted to-day. During my experience of thirty-four years as a hospital physician I can only recall two cases of possible tuberculous infection of one patient by another. I refer to cases of the disease