An address on our duty to the consumptive breadearner : delivered to the Oxford and District and Reading and Upper Thames Branches of the British Medical Association, June 28th, 1901 / by Sir J. Burdon-Sanderson.

AN ADDRESS

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OUR DUTY TO THE CONSUMPTIVE BREADEARNER.

Delivered to the Oxford and District and Reading and Upper Thames Branches of the British Medical Association, June 28th, 1901.

BY

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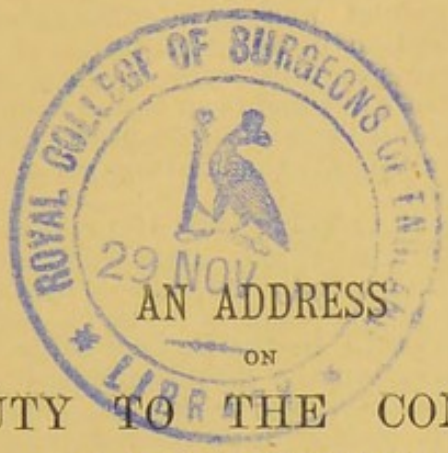

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OUR DUTY TO THE CONSUMPTIVE BREADEARNER.

Towards the end of next month, as you all know, a Congress will be held in London "for the prevention of tuberculosis." It will, without doubt, receive the cordial support of the medical profession, but this support cannot be given effectively unless we have beforehand some more precise notion than is expressed in the word "prevention" of the purposes for the accomplishment of which we are invited to meet. We may, I trust, take it for granted that the aim of the Congress will be practical rather than scientific, that we shall meet rather to act than to discuss pathological or even etiological questions. The researches of the past twenty years have taught us much that we did not know before both as to the nature and causes of tuberculous diseases, and have thereby furnished us with generally accepted principles for our guidance. What now chiefly concerns us is to come to right conclusions as to the way in which these principles ought to be applied.

Preventive and General Sanitary Measures.

These practical considerations may be divided according as they concern on the one hand the individual invalid whom we desire to benefit, or on the other the community which we desire to protect. Among the measures to be used for the former purpose we may further distinguish between those which aim at the relief of the patient's symptoms by medical treatment, and those which tend to the re-establishment of his health and working power. It is to this last subject (as I trust the title of my address will have indicated) that I wish specially to invite your attention; but before I go further I must, to avoid misunderstanding, say a word as to prevention.

The promoters of the great movement which culminated in the Berlin Congress of 1899, "*Zur Bekämpfung der Tuberculose*" (How to Conduct the War against Tuberculosis), worked along the two parallel lines I have just referred to—the preventive and the sanatory. That movement originated, I need not say, in Germany; but let us not forget that the admirable work which has been recently done in that country

relating to the etiology of tubercle was founded on the inquiries made some forty years ago under Sir John Simon's direction by the late Sir George Buchanan and Dr. Headlam Greenhow. It was they and their chief that first taught us to regard phthisis as a preventable disease. The influence of the knowledge thus gained was no doubt enhanced by its practical exemplification in the diminution of the mortality from phthisis which resulted from sanitary improvement; for the observation of what had been thus accomplished many years before in England certainly exercised a considerable influence in bringing about the movement in Germany to which I have referred.

As to the practical carrying out of preventive measures against phthisis there is happily little difference of opinion. No one, so far as I know, doubts that the overcrowded, sordid dwellings that the poorer class of working people are compelled to occupy contain in themselves sources of danger, nor does anyone question the disease-producing influence of poverty. In like manner, the researches conducted by Dr. Martin for the first Tuberculosis Commission have taught us what we chiefly required to know as to the dangers of meat and milk; and those of Professor Cornet in Berlin have informed us as to the mechanism and sources of pulmonary infection. In these various ways the data for a new prophylactic code have been furnished, as to the effectiveness of which there is little room for discussion.

Our Duty as Citizens and as Christians to the Consumptive Toiler.

As I said just now there are two parallel lines of action along which the combat with pulmonary tubercle must be carried on. Let me now ask you, leaving questions of prophylaxis for the moment out of consideration, to fix your attention on the vast population of persons who gain their bread by labour, and to bear in mind that of these a large proportion do not earn enough to maintain themselves and their families in anything like comfort. They may not be destitute and are not objects of charity, but the conditions under which they live are so unfavourable as to render them more liable than the well-to-do classes to the invasion of the tuberculous infection. When such a person becomes phthisical, he loses the one possession which constitutes his fortune. He loses his earning power. As the disease progresses the burden of poverty becomes harder and harder to bear. He suffers himself, and those who are dependent on him for their subsistence suffer with him. Their condition is helpless, and, unless more effectual means of aiding him than are at present available can be devised, hopeless. No one doubts that we are bound in common Christian charity to do what we can for those whom sickness has brought by no fault of their own into destitution, but most people find it much more difficult to understand that the earning power of the workman is a commodity far too valuable to be wasted, and that the duty of preserving it is no less incumbent on us as citizens than as Christians. The question I desire to place before you relates to both of these obligations, but chiefly to the second. I would ask you for the moment to consider the case of the workman in the first stage of consumption with exclusive reference to his loss of earning power. Let us assume that it is only half of what

it was a year earlier and that in still greater proportion his value to the community has diminished. How can we help him to guard against its falling to a lower level? How can we help him so to husband the strength that remains to him, that life may be still worth living—not a mere slow descent into the dark valley?

The Kind of Help the Consumptive Bread-earner requires.

The answer to the question, How is this to be done? depends on what we know of the character of the evil we have to combat. And here I must ask your permission for a moment to speak as if I were addressing laymen. We call the disease consumption—phthisis—because it gradually but surely deprives its victim of health and strength, but it is not less characteristic of it that the decline is not a continuous one. We habitually divide it into stages—an initial stage characterised by gradual impairment of all functions, and, as regards the affected organ, by consolidation; and a second stage, by fever, rapid emaciation, cough, and expectoration, and the "physical signs" of disintegration. But although it is convenient to call them stages, the two conditions are not consecutive. The first stage is not an even downward progress, but a progress broken by catarrhal and febrile accessions, each of which is attended by signs of disintegration. During these attacks the patient is unfit for work and requires bodily rest in bed. In general, the tendency of the attack is to pass off. If the patient is taken care of he returns after a few weeks' illness to the same general condition that he was in before, but a little weaker, a little more incapable. Finally comes the time when the process of breaking down goes on more rapidly, the tendency to a fatal termination of the disease is more decided, when, instead of moderate health interrupted by occasional illness, you have illness with occasional intervals of partial recovery.

I have referred to these familiar facts in order to make it clear that the kind of help to be given must be determined by the condition of the individual that we desire to benefit. Our main purpose is *to enable the breadearner whose health has been impaired by disease to make the best of the strength that remains to him.*

With this view two things are necessary. The first is to bring within his reach havens of refuge, to which he can betake himself with the assurance that he will find an immediate welcome during the periods of temporary illness to which he is liable. The second is to furnish him with the means of relieving himself from the burden of overwork from the moment that the progress of the disease makes him incapable of sustaining it.

Importance of Prompt Admission to Hospital whenever the State of the Patient requires it.

Of these two requirements the first can be dealt with much more easily than the second. Wherever there is actual suffering, Christian charity and pity are at hand to alleviate it. The enormous sums which are annually contributed by the charitable for the relief of consumptive patients might, if rightly used, almost suffice for the purpose. Unfortunately, the same vicious principle which prevails in the administration of other medical charities supported by voluntary contribu-

tions is all-powerful in our hospitals for consumption. Benefactors are not satisfied with the assurance that their gifts are administered by competent persons in the most effectual way for securing the end which they profess to have in view. They are unwilling to forego their undeniable right to do what they will with their own. Like those charitable donors of whom we read in Holy Scripture, they must needs "keep back part of the price"—not indeed in the form of money, but in the exercise of a paltry kind of patronage.

What is required is roughly that there should be a haven of refuge in every industrial centre (consisting of a hospital ward or a hospital) to which the need of the sufferer—in this case the existence of the physical signs and symptoms of advancing phthisis—should be the only claim for admission, and that every admission should be conditional on liability to removal at the discretion of the medical authority in charge. By the enforcement of this condition the risk of converting the temporary refuge into a permanent asylum would be guarded against, while at the same time the workman who had found the tide of adversity too strong for him would be enabled to regain his footing, and once more resume the struggle, if not with renewed vigour, at least with some renewal of hope and courage.

Now it cannot be said that anything effectual has as yet been done in the direction I have indicated. In London the phthisical workman has no great difficulty in obtaining an out-patient letter for a general or special hospital; but from the moment that the progress of his disease renders him unable to attend, his position becomes a painful one. The nature of his disease shuts against him the doors of the general hospital, and if by good luck he obtains an "in-patient letter" for a special hospital, the delay which undue regard for the rights of governors necessarily entails is so long that he does not arrive at his desired haven until too late. Prompt admission might have restored him to comparative health, but the time for successful treatment has been spent under the unfavourable conditions of his home, where he has not only undergone suffering that might have been prevented, but has been a source of danger to his neighbours. The risk of allowing a patient with acute symptoms to live among others is indeed, irrespectively of the detriment to himself, a sufficient reason for his immediate removal from his surroundings.

Measures to be taken for the Prolongation of the Life of the Consumptive Breadearner and for the Maintenance of his Earning Power.

Let us now go on to the second of the two requirements to which I referred a few minutes ago. The obligation to make adequate provision for the prompt medical relief of the phthisical workman during the acute accessions to which he is liable is one which no one will be inclined to disregard, but it is only a small part of the duty that is imposed upon us. The motive which actuates us should be rather economic than charitable. Our aim should be not so much the relief of suffering as the maintenance of earning power. The important problem we have in hand is to determine the line of action which ought to be adopted to help those who, although they are in a certain true sense invalids, neither desire nor require the intervention of charity.

For this end the first step to be taken is to obtain information as to the persons whom we desire to benefit. This information is of value as a guide in carrying out sanitary improvements, for we know that the prevalence of phthisis is now recognised as one of the most certain indications of sanitary defects. It is not, however, for purposes of sanitary administration that it is chiefly required, but as enabling us to enter into personal relation with the workman in the initial stage of the disease, this being the first step towards giving him the aid that he needs. To a certain extent the investigations of the prevalence and distribution of phthisis which have been made at Brighton, in Oxford, and a few other places by zealous medical officers of health have, so far as these places are concerned, accomplished this end. The results have at all events been sufficiently good to show that if the system of voluntary registration could be extended all over the country it would afford an excellent foundation for prophylactic measures; but *sanitary improvement is only one of the lines along which we have to work in the combat with pulmonary tuberculosis*. The knowledge that we gain as to the prevalence of phthisis, whether obtained by registration or otherwise, will be of little use to the man who has lost his working power, unless we are in a position to aid him in regaining it. Now there is no difficulty in indicating by what means this must be accomplished.

To the phthisical invalid who without requiring much doctoring or nursing finds his strength gone and his earning capacity reduced to half of what it was before, the one restorative that is indispensable is temporary immunity from labour. To this the other two items of sanitary treatment, namely, good air and good food, are consequential. If we were now concerned with well-to-do persons, whether bread-earners or not, we should have to consider whether the home is not in many cases the best resting place, but no such question can for a moment be entertained in dealing with the invalid workman. Consequently for him, if he is to have rest, good air. and good food, a resting place away from his home must be provided. In other words, sanatoria for the poor are a necessity.

Origin of the Sanatorium Movement in Germany.

It is ten years since this great necessity was recognised in Germany. It has not even yet been recognised in England. There are several reasons for this, but the chief one is that there are difficulties in establishing such sanatoria, which do not exist in any other European country. Why can we not do what has been successfully done elsewhere? I shall, I think, best answer this by giving you a sketch of the origin and progress of what may be called the sanatorium movement in Germany.

The initiation of the movement was somewhat as follows: The experience of sanatoria for persons in good circumstances had shown that in cases of consumption in the first stage judiciously selected, health could be maintained and life prolonged by placing these persons under favourable climatic influences combined with good food and moderate exercise. But the result would hardly have been brought about had not Dr. von Leyden, who has for years occupied a most prominent position as a physician in Berlin, given to the movement the

required impulse by certain addresses delivered to the medical societies of Berlin in 1888 and 1889, in which he treated of the prevalence of consumption among the working population as a matter of national concern, and insisted on the necessity of establishing sanatoria for the poor as the only means by which it could be combated. The result of these discussions, and more particularly of that which took place at the International Congress in 1890, was that von Leyden's suggestions were warmly taken up by leading men in and out of the profession, who at once set to work to devise practical ways of carrying the principle of sanatoria for the poor into effect. At the present moment sanatoria of this kind for men and women exist throughout the German Empire. Their number is still far below the requirement, but every year new institutions are added to the list. The success with which the work has been carried out can be best judged of by the following figures :

At the date of the last International Medical Congress (August, 1900) there were in the German Empire 49 sanatoria for the poor, of which the plans of 41 were exhibited in the Department of Hygiene of the Great Exhibition. There were at that time 11 others in course of construction[1] (besides 28 projected), so that there are probably about 60 of these institutions in operation at the present moment. The 49 sanatoria which were open a year ago contained 4,000 beds. The cost of their erection amounted to about a million pounds, so that the cost per bed, including all internal fittings, may be estimated at £250. It is, however, held that in future this initial cost will not exceed £200 per bed.

The yearly expenditure for each occupied bed is estimated at £65, but about a fifth of this sum is not expended within the walls of the sanatorium, but goes to the maintenance when necessary of the families of the occupants during their period of residence. From this it follows that the total annual expenditure for maintaining the sanatoria was a year ago about a quarter of a million. It is anticipated that when the system is complete its maintenance will cost about five times as much – from a million to a million and a-half annually, that is, that this enormous sum will be required to bring within the reach of every working man and woman in Germany who is threatened with phthisis the means of doing the best that can be done for the maintenance of his earning capacity.

Compulsory Insurance.

As I have already indicated, the reason why we in England have not followed the example which we have had before us for so many years is that in Germany facilities exist for organising a sanatorial system, which we are deprived of. The nature of these facilities I must now explain. The questions which present themselves *in limine* are: First, where does the money come from? and secondly, How is the system brought into relation with the right people? The first question may be answered at once by saying that the resources of the sanatoria are derived partly from organised charity, but chiefly from contributions of the workmen themselves—that, in short, the whole explanation of the success is expressed by the two words, *compulsory insurance*.[2] In Germany every workman whose income is less than £100 a year is required by a law which came into full oper-

ation about ten years ago to insure himself against the two greatest ills that flesh is heir to—sickness and old age.

In this way a national fund is brought into existence, which is applicable to any purpose directly beneficial to the contributors, whether it be the therapeutical or the sanatory treatment of the breadearner himself or the maintenance of relatives dependent on him for their subsistence during the period of his incapacity for work. The number of contributors is about 13 millions, of whom not much more than 1 per cent. are at any one time on the list of recipients as incapacitated for work by illness. Among these one in every three is phthisical. It is estimated that of the initial cost of the sanatoria for the poor which were in operation at the date of the International Medical Congress last autumn, half was furnished by the insurance funds, and that of the annual expenditure about three-quarters were derived from the same source. The remaining half-million for initial expenditure, and £60,000 for maintenance, were contributed by private liberality, by charitable organisations, or, in some cases, by municipal or other local authorities

Selection of Suitable Persons for Treatment in Sanatoria.

As regards the second question, that of the selection of suitable cases for sanatory treatment, the facilities which compulsory—that is, universal—insurance offers for obtaining exact information as to the incidence of phthisis among the working population are obvious. By means of it the poorer breadearners are brought together into a well-defined class within the limits of which every person who is disabled by phthisis, provided that his disease is not too advanced, has offered to him at the moment that he requires it the advantage of temporary rest in a sanatorium, with the assurance that he will not be turned out after a certain number of weeks, in obedience to a senseless rule of the institution, but will remain as long as in the judgment of the medical superintendent it is for his advantage to do so, whether it is for a few weeks or as many months. In this way the cases admitted into the sanatoria are to a certain extent *selected*—it is, at all events, possible to exclude those which are obviously unlikely to derive benefit.

This, however, is not the only or the chief use to which the data furnished by national insurance can be put. For our present purpose the information which it is capable of yielding as to the degree in which those who are admitted to sanatoria are benefited is still more important.

Relation between Poverty and Prevalence of Phthisis.

Before referring to these data let us for a moment consider the kind of people with whom we are concerned and the circumstances which affect their liability to disease. They are for the most part men in the prime of life, at an age when pulmonary tuberculosis is shown by insurance statistics to contribute no less than half of the total percentage of disability. Of the various external conditions which account for this liability poverty is by far the most influential. For if a comparison be made of persons who earn £1 a week (more or less) with those who earn from £2 to £3 a week, the annual mortality from phthisis is 4 per 1,000 of the former class as against 2 per 1,000 of the latter. It is clear, therefore, that

the workmen on whom in Germany the obligation to insure themselves against disease and old age is imposed by law, constitute a class in which the liability to pulmonary tuberculosis is greater than in any other. And inasmuch as these individuals do not all avail themselves of the sanatoria, it is possible to compare those who are so treated with those who are not.

Beneficial Influence of Residence in Sanatoria.

It is by a comparison of this kind, in which the life-history of persons treated in sanatoria is contrasted with that of persons of the same class who remain at home, that it can be best ascertained whether or not substantial benefit accrues to the community or to the individual from the sanatorial system. That system has not been in operation for a sufficient time for it to be possible to follow out the final result of sanatorial treatment. There are, however, facts which are sufficient to show the contrast between the two classes. In persons who, while receiving support when disabled by illness, are not removed from the unfavourable influences to which they are exposed in their homes, the duration of life after the beginning of illness is very much shorter than we are accustomed to find it among patients in easy circumstances. Among the latter, according to the very reliable estimate of Dr. C. T. Williams, the expectation of life is about 7½ years; whereas of every 100 workmen in the initial stage of phthisis earning a little more or less than £1 a week, 50 will have died in three years. Had these 100 persons been treated sanatorially, statistics seem to me to show clearly that in about 70 per cent. health would have been so far maintained or restored, that they would have been able to support themselves and their families, and that if their condition had been investigated two years later, that is, three years after the first indications of illness, there would have been some fifty persons still capable of earning their daily bread. Of the remainder, some would no doubt have died, others would be in various degrees of illness or incapacity, but a large proportion would have been able to do partial days-works. This result does not at first sight seem very brilliant. If it were so, we might be sure that it was untrue. But the benefit conferred is nevertheless real and substantial. No delusive hope of cure is held out to the consumptive toiler, but a new lease of life, though a short one, has been vouchsafed to him. A certain amount of earning power, which would otherwise have been lost, has been restored to him, and through him to the community of which he is a member. As regards the individual, it may seem of little importance whether the struggle is long or short, whether he dies now or two or three years hence, whether he is wholly incapacitated or able to earn a certain proportion only of what he earned before; but if any means can be devised whereby a respite of even a few years may be secured to our tens of thousands of phthisical workmen, we are bound as Christians and as citizens to use them.

How can Sanatoria be supplied in England?

And now I come to my last point—to the most difficult question of all. Granted that sanatoria for the poor are a national necessity, how can this need be supplied in England?

Many will, I know, be inclined to shelve the question, considering it scarcely worth while to prolong a struggle which in each case must eventually and at no distant period end in death, or that no practical result can come of discussing it; but those who admit that human life is of more value than anything else in the world, and that we have to gather up the fragments that remain even of consumptive life, that nothing be lost, will join with me in considering calmly and without prejudice whether there is any way by which the consumptive toiler can be effectually helped to keep hold of that remainder.

I do not recommend that we should imitate what has been done in Germany, but that we should ascertain what have been the essential conditions of success, and what are the reasons why they should not be realised in this country. These essential conditions relate:

1. To the choice of suitable sites and the erection and maintenance of suitable buildings.
2. To the selection of suitable cases, and to their prompt admission.
3. To the regulation under medical supervision of the time of residence of each invalid; and
4. To the medical supervision of invalids after their discharge from the sanatorium.

It is obvious that the carrying out of these indications all over England could not fail to require an enormous initial and annual expenditure of money. We have seen that German sanatoria have already cost more than a million for building and installation, and that their maintenance already costs a quarter of a million, and will soon cost three or four times as much, There is no reason for supposing that if we followed their example we should do so more economically.

It may, perhaps, facilitate the consideration of the subject if we assume, as I think we may, that the cost of erection of sanatoria might be met by grants from public bodies or by private benevolence. But it can scarcely be supposed that the current expenditure of these institutions could be supplied by voluntary contributions. Here, as in Germany, the sanatoria ought to be self-supporting; they must depend for their maintenance on the earnings of those benefited by them.

The German system of compulsory insurance against sickness is in reality a tax on labour, to the payment of which employers and employed contribute in something like equal proportion. Although, however, in principle there can be no more objection to the imposition of a tax on the earning of a workman who receives under £2 a week than to the tax which those whose incomes are not so very much larger submit to at the present moment with so little grumbling, it is not the less certain that in England any attempt to levy such a tax on the working man would not be tolerated. The most feasible way of accomplishing the end in view seems to be that the employers of labour should consent to levy upon themselves a contribution of which the amount would be proportional to and deductible in whole or in part from the wages paid to their workmen, on whom therefore their due share of the burden would ultimately fall. Such a system would be but a poor substitute for a compulsory system including earners of every class. Within its limited scope it would give equal or greater advantages to the insured, and would probably yield the means of maintaining a sufficient number of sanatoria for their reception when incapacitated by illness. But so far from

being universal, it would exclude toilers of the poorer class—those who in Germany chiefly benefit from the operation of compulsory insurance. It would, moreover, fail as a means of promoting the timely removal of phthisical breadearners from their homes and thus preventing the spread of phthisis among the overcrowded population of our towns.

I have now come to the end of my task. I have placed before you the question of sanatoria for the sons and daughters of toil with all its difficulties. I have endeavoured neither to over-estimate its drawbacks nor to exaggerate its advantages.

The question is in the hands of the medical profession. In all matters which concern the bodily welfare of the people, our function is to furnish to those who are responsible for the government of the country guiding principles.

With reference to the present subject an experiment on a very large scale has been made for us in Germany. It is our duty to examine into the results, not for the purpose of imitating or adopting German methods, but with the view of making up our minds on a question of principle.

This question is whether on the one hand we should leave the consumptive breadearner to struggle against his disease as best he may, contenting ourselves with promoting sanitary improvement and prophylactic measures against contagion, or on the other hand should, without in the least disregarding these objects or relaxing our efforts to prevent the spread of the disease, strive to organise a plan for enabling him to make the best of his life and earning power.

I venture to hope that this great question will be taken up by the approaching Congress and that the medical profession will be thereby awakened to its importance.

NOTE AND REFERENCE.

[1] Engelmann, Die deutschen Lungenheilstätten auf der Weltausstellung, *Zeitschrift für Tuberculose*, etc., vol. i, p. 217. [2] For information as to the system of compulsory insurance see Düttmann and Gebhard's *Handausgabe des Invaliden-versicherungs-gesetzes*, Altenburg, 1900.