

FIGHTING CONSUMPTION.

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(From "*Medical Missions in India.*")

"HE is in a decline." Such in the memory of most of us was the frequent doleful refrain. The look and tone of the speaker told of hopelessness and helplessness.

And the speaker's story was true. Disease had got too firm a hold. It preyed on the patient's vitals, and the frail human fabric shivered and withered. The consumptive, dying inch by inch for weeks or months, was the most pathetic picture in the gallery of suffering. It were vain to seek to appraise what of genius and beauty has been thereby lost to the world.

Happily times have changed. Thirty years ago to one of earth's great seers there came a whisper, and with the whisper, came a vision. Consumption was not the insoluble riddle men had supposed. In 1882 Robert Koch demonstrated conclusively that consumption depended on the invasion of the body by a minute organism—the tubercle bacillus—so minute that no fewer than 400,000,000 might be placed shoulder to shoulder on the surface of a postage stamp.

It was difficult at once to appreciate all that this meant. We had got accustomed to the dark and were dazzled and bewildered by the light. Here and there a solitary worker realized the meaning of the sudden unexpected illumination. Then, groups of men understood, and ever enlarging groups, until the whole world now believes. The scientist has joined hands with the social worker. Everywhere there are signs that man has recognized that the vast roll of disease and death due to the tubercle bacillus can be prevented, and has determined that this black spot on civilization shall not remain.

Tuberculosis is an endemic disease, that is, it abounds where men congregate. It appeared in the train of civilization, and has spread with its spread. It is not essential to civilization. It is our own fault that we let it remain. Consumption, and tuberculosis in all its forms, can be eradicated and prevented just as surely as leprosy, plague, and typhus fever have ceased to decimate these islands.

Fifty years ago typhus fever was one of the commonest of fatal diseases in Great Britain. Now it is scarcely known. The battle with typhus fever has been fought and won. The fight with tuberculosis, begun twenty-five years ago, is now raging. Victory is assured, but the fight will be long and arduous.

There is an urgent call to arms. Every citizen must be a soldier. Universal service, for men, women, and children, is the order of the day. The occasion merits the supreme services of the

pulpit and the press. Why should column on column of the daily papers be given to the latest disaster costing a score or two of lives while the course of this ghastly tragedy, which culminates in the sacrifice in the United Kingdom of over 60,000 persons annually, receives scanty notice? Who is responsible for so strange a lack of proportion?

There is a call to the individual. There is a call to communities. Each individual can do much in his own interest and that of his fellows. Our intelligence department must be popularized. The citizens must learn that sunlight and open air are the best germicidal agents against the tubercle bacillus. Each individual should insist on the freest supply of these. If sunshine and fresh air entered every room in every home, and every byre in every farm in sufficient amount, tuberculosis would become extinct. Tuberculosis remains because mankind is content to be defrauded of his birthright.

It is one of the extraordinary paradoxes of life, that men and women, who insist on clean water to drink and wash in are content with a scanty and frequently contaminated supply of air. If only a tax had been levied on air supply, the demand for supplies would have risen. But, like the river of Jordan, it is too easy of reach.

Why the unclean people, who prefer to breathe half-used and tainted air, should have it all their own way, I fail to understand. Our churches, our places of amusement, our halls, our railway carriages, our tramway cars, all participate in the same airlessness, and many of our houses too. It is time to revolt against such mediævalism. Were it merely a question of individual taste, it would matter little. But where there is airlessness, sickness and death are close at hand.

"The Lord God...breathed into his nostrils the breath of life; and man became a living soul. And the Lord God planted a garden eastward in Eden; and there He put the man whom He had formed." These words would form my text if, in place of scratching a few rambling phrases, I had to preach a sermon.

The words contain the highest physiological truth. By the breath of Heaven man was called into life. He was given the breath of life and placed in a beautiful garden, to "dress it and keep it." By the same breath of life man still "lives and moves and has his being."

One of the misfortunes of the fall has been, that in leaving the Garden of Eden man has dropped the lesson of the garden. He has lost sight of the quickening, vitalizing principle of the inexhaustible atmosphere with which the Creator surrounded him. He has been content with miserable, parsimonious supplies—only too obviously of his own provision. They are unworthy of his origin and unfitted to his needs.

If life is to be something more than existence, he must lay aside such foolish makeshifts and claim his rightful share of light and air. If from to-morrow this claim—which only requires to be made intelligently to be granted—were made by every man, woman, and child within these islands, the fortune of the war against tuberculosis would be quickly decided. For the tubercle bacillus shrinks before the searchlight of the sun and is extinguished by a volley of oxygen.

Get down to the bedrock of preventive principles. It is admitted frankly that what is chiefly needed to ensure a successful issue to the campaign is a clear understanding by the people, in the interests of the people, of the physiological needs of life.

The prevention of tuberculosis means the gradual re-creation of our towns and country by the renovation of the homes of the people—particularly the homes of growing children. Every re-created home contributes to the route of the enemy.

Man's health is for the most part of his own making. In proportion as he desires to be vital and resist the onslaught of disease he will eschew the caves and dens of the earth and return to the Garden of Eden.

Meantime the caves and the dens remain tainted, and disease and sickness abound. Of the grim and unclean progeny of disease which results, tuberculosis is the most frequent, the most protean, the most illusive.

How are we to act towards those who have fallen a prey to infection? How are we to cure them? How are we to mitigate their sufferings? How are we to prevent their being a menace to others? How are we to lead them back to the Garden?

The answer to these questions affords the basis of an intelligent national movement against the disease. It was an answer to such questions which formed the *motif* of what is known as the Edinburgh Anti-Tuberculosis Scheme.

If we are to control and eradicate tuberculosis, it is clear that we must know as much as possible about its occurrence and distribution throughout the community. There must be a centre for collecting such information. The centre must in turn be prepared to distribute freely information and advice about its prevention. To be really practical, this centre should be a receiving house, towards which sick persons of the poorer class who may have tuberculosis should be invited and directed, and where, when their case is diagnosed, they should be advised what is best to be done—whether treatment may be sufficiently carried out at home, or whether they should go to a sanatorium or an hospital, or a farm, colony or a tuberculosis school.

No two cases of tuberculosis are quite the same. Each patient must be considered by himself. It is because of this remarkable difference of manifestation that a variety of institutions and agencies is required.

The central institution is the Tuberculosis Dispensary. It is of fundamental significance in our large towns. While it constitutes a receiving and distributing bureau, it must be in direct relationship with all other institutions and agencies whose service may be required in the interest of the tuberculous patient.

The Tuberculosis Dispensary is an instrument of much value and assistance to the general practitioner. He will find it ready to co-operate with him in the care of indigent patients requiring special treatment. It returns to him, as from a clearing house, all patients who ought to be attended by a private doctor.

The great aim of the Tuberculosis Dispensary is that not a single case of tuberculosis shall remain undetected and uncared for, and that not one dwelling in which tuberculosis has occurred shall escape observation.

The other associated institutions which must, in some fashion, be created by each community for itself, are the sanatorium for early cases, the hospital for more advanced cases, the farm colony and the school for tuberculous children.

The Sanatorium is a home of healing for many tuberculous patients. Most persons could be cured if their disease were diagnosed soon enough. In the Sanatorium the sick man is placed under suitable conditions, and receives skilled care and treatment. He is restored to health, and during the process he learns the great lesson of how to keep well. The sanatorium is not only a home of healing, it is a school of health.

The essence of sanatorium treatment, wherever it be carried out, is the free use of open air as a curative agent. We seek thereby to assist the human organism to oppose the invasion of the tubercle bacillus. We endeavour to increase vital resistance and establish immunity to attack.

Under sanatorium treatment thousands of lives have been saved. Men and women have been restored to working capacity. It is the exception to find a patient who does not respond satisfactorily to treatment when this is commenced early enough.

For cases that have passed the early stage, and for emergencies of different kinds, other hospital accommodation is needed. Even for the far-advanced cases much can be done by medical care and nursing. Patients with chronic disease are helped so far on the

road, and learn how to look after themselves at home and avoid the risk of infecting others.

When, sadly enough, the disease cannot be arrested, it is remarkable how, under open-air treatment, the suffering of the dying patient is reduced. His couch is softened and his pillow smoothed.

The Farm Colony is a fascinating subject. I should have liked to linger over this ideal retreat for a certain number of patients, to whom early return to their ordinary work would mean relapse, disappointment, and economic loss.

The Farm Colony is, as it were, a continuation school which carries on, for certain cases, the process of cure and education during longer periods than is possible at the sanatorium. At the farm colony the exhausted frame is literally restored to the Garden of Eden. With the pleasurable sense of returning life in contact with nature, the "colonist" is taught to look after himself domestically, and has the chance of learning the different departments of farm life, and thus becomes in the best sense a "handy" man or woman.

The sick child with tuberculosis deserves special attention. For him, too, when the disease is acute, perfect rest in the open-air is enjoined. As the symptoms grow less urgent, the child is gradually taught to take up the occupations of growing childhood. School lessons are adapted to its age and progress, and respiratory exercises and lung gymnastics are practised. The child's recovery is aided by the mental and physical exercises. The School for Tuberculous Children is a first line of defence in the fight.

Such is a rapid sketch of the various factors which go to constitute a satisfactory scheme against tuberculosis. Each factor serves its own purpose. But it must not be allowed to stand alone. The awakened intelligence of the people must insist on a combination of all the forces. Success will depend on thorough organization, harmonious co-operation, and careful co-ordination.

Two years ago I was asked to cable a message to a great meeting in New York State in answer to the question---What the citizens of the State might expect to accomplish towards the reduction of the death-rate from tuberculosis by 1920, if those agents I have described were satisfactorily established, and no uncared-for case remained in the year 1915? It was in no ultra-optimistic mood, but of sober judgment, that I wired the words:

"Prosecute great programme proposed: watch child as potential tuberculous seedling; correct faulty compulsory environment; and expect 40 per cent. reduction by 1920, and practical disappearance within a generation and a half."

The goal is worthy of a nation's grandest efforts