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Royal British Rurses' Association.

Incorporated by



Royal Charter.

THIS SUPPLEMENT BEING THE OFFICIAL ORGAN OF THE CORPORATION.

NOTICE TO MEMBERS.

The Executive Committee will proceed at an early date, in accordance with the requirements of the bye-laws, to make nominations for election to the General Council. We shall be glad if members will submit names of those whom they would like to have placed on the lists for election. Only members of the Corporation may be nominated.

LECTURE ON TUBERCULOSIS. By dr. tempest bennett, m.r.c.s., t.d.d., d.p.h.

In commencing what proved to be a most interesting lecture Dr. Tempest Bennett gave a short account of the history of Tuberculosis, which is a very ancient disease indeed. Some of the mummies of persons of the oldest dynasties in ancient Egypt show evidence of tuberculosis. Hippocrates wrote very extensively and gave an excellent clinical picture of the disease as did Galen also in A.D. 130 The works of certain famous Roman physicians are still extant, dealing with the subject. Avicenna, an Arabian living in the eleventh century, was interested in the disease. For centuries after his time, however, knowledge of medicine was lost in ignorance and superstition. In the Middle Ages tuberculosis was regarded as arising from supernatural causes, witchcraft or poison and some of the treatment used was dreadful. It is not until 1614 that we find a serious attempt to deal with the disease in the writings of one Sylvius. After him the work was carried on by Richard Morton in 1669. From this time, until the beginning of the nineteenth century, another period of ignorance elapses, then the great French physician, Laennec, himself a sufferer from the disease, took up the study of it. He invented the stethoscope, the story of which is worth remembering. He was called one day to see a patient whose room was at the top of a very long flight of stairs. Being in poor health, he was naturally very breathless when he reached the room and his discomfort was in no way lessened by the fact that the patient was lying on the floor. He found himself quite unable to stoop down to listen to the patient's chest and so he used a roll of paper in the form of a trumpet to enable him to hear. Thus was born the first stethoscope. The next development of the instrument was the wooden stethoscope. In the course of time it was found desirable to use both ears and to exclude as far as possible outside noises, thus the present form of stethoscope came into being. Later another Frenchman made the discovery that one animal can infect another with tuberculosis.

It is strange that, for so long, no one discovered what is the cause of tuberculosis. The credit for this goes, of course, to the German, Robert Koch, who, in 1882, discovered the bacillus which now bears his name.

A comparison of the figures concerning the death-rate due to tuberculosis in the past 80 years is very interesting. In 1860 the deaths arising from it in England and Wales were 330 per 100,000; in 1909 the number was 153.7 per 100,000 and in 1934, 76.3 per 100,000. These figures are

compiled from two sources, the notifications of cases of tuberculosis and the notifications of the deaths from the disease which have been compulsory since 1912.

Age Incidence of Tuberculosis.

Dr. Bennett put on the blackboard a diagram showing the peaks of the death-rate from tuberculosis, *i.e.* (a) the infantile peak from birth to about the second year of life, (b) the adolescent peak, from 20 to 25 years, (c) the middle age peak, from 40 to 45 years and (d) the old age peak between 60 and 70. The first peak of infantile tuberculosis, which rises very rapidly and drops more slowly towards the age of five, shows that it is a very fatal disease in young children. The reason for this is that at that age the body has not got the resistance to the disease which it should later acquire and consequently a big infection in an infant usually takes the form of acute pneumonic phthisis or of tuberculous meningitis. During school period the children are usually well looked after and are sheltered so that tuberculosis is comparatively rare, but when they leave school and go to work the disease again becomes more often apparent, probably owing to the fact that conditions of work are bad and the health of the workers not properly supervised.

Immunity.

Immunity is a condition of the body which may be acquired, or there may be in the body an inborn resistance to certain diseases. The reason that so many children are attacked is that they have no immunity to tuberculosis. In these days of big towns, with their overcrowding and dirt, the germs of tuberculosis are practically ubiquitous. The truth is that only a very small proportion of people escape the disease entirely and about 90 per cent. of all autopsies show evidences of healed tuberculous lesions.

The Tubercle Bacillus and its Identification.

In order to determine whether the patient is suffering from tuberculosis it is necessary to demonstrate the presence of tubercle bacilli in the sputum, expectoration or discharges. In order to obtain a positive test it is sometimes necessary to take numerous specimens for examination. It is only expectoration from the right place which will reveal the presence of the germs; it is of no value for a patient simply to clear his throat and think that this is sufficient. The sputum must come from the affected lung. Once the specimen has been obtained a very special process is required to discover the germs, and here Dr. Bennett gave a detailed description of the Ziehl-Neelsen Method.

Actiology.

The tubercle bacillus, once it has obtained a hold in some part of the body, sets up an irritation there. If the resistance of the body is sufficient to provide enough phagocytes to overcome the bacilli then these are simply wiped out and the area remains healthy, but if, as is more often the case, this does not occur, the bacilli divide and multiply, phagocytosis takes place, and what is termed

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