CANADIAN

OUT-DOOR LIFE.

A MAGAZINE DEVOTED TO THE GOSPEL OF OUT-DOOR LIFE IN THE TREATMENT OF TUBERCULOSIS, AND THE VALUE OF FRESH AIR AND HYGIENIC LIVING FOR EVERYONE

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NO. I

Tuberculosis---What it is, and its Cause

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UBERCULOSIS is a disease which may be contracted by any person, at any age, and in any locality, provided that the two conditions necessary for its development are present. It is a disease, moreover, which is now known to be not only communicable, but also both preventable and curable. But it is not, as people generally suppose, a disease which is either hereditary or limited to but one form. On the contrary it is, as we may say, mildly communicable, and its manifestations are so numerous and so totally different in appearance the one from the other that it is often difficult to believe that there is any connection between them or that they are due in all cases to one and the same cause.

Tuberculosis may show itself as:-

- (1) Consumption of the lungs.
- (2) Joint Disease—such as Hip Disease, or the familiar old White Swelling of the knee or other joints.
- (3) Bone Disease, producing curvature of the spine, or "hunch back" or "broken back."
- (4) Disease of the Skin (Lupus).
- (5) Consumption of the Bowels, with long continued diarrhoea.
- (6) Brain Disease (Meningitis), or the brain fever of the infant.
- (7) The so-called scrofulous affections.
- (8) Enlarged and Diseased Glands (a large proportion of all cases).
- (9) Consumption of the Bladder, and other parts of the genito-urinary system.
- (10) Pleurisy (most of the cases).

Of all of these forms, there is, it is true, one which is much more common than any

of the others. This is the form which is often spoken of as Consumption, and once it has taken a firm hold it is comparatively easy of recognition even by those who know very little about the disease generally. In this form it is the most insidious, the most widespread, and the most dangerous of all diseases in this country.

In its various forms this disease destroys annually in Canada upwards of 10,000 human lives, while the figure for the United States is 150,000. Two-thirds of these are, moreover, carried off during the most productive and reproductive period, 20 to 40 years of age. And in addition it is estimated that in Canada alone some 50,000 are annually incapacitated for industrial usefulness, and thus become dependents either on their friends and relatives, or upon the State.

FOR THE DEVELOPMENT OF TUBERCULOSIS two conditions are necessary, viz.:—(1) the presence of the disease germ, known as the tubercle bacillus, and (2) tissues of low vitality or constitutions with reduced power of resistance. These two conditions must be present in all cases, and without both of them acting together there can be no development of the disease.

The germs of the disease are minute vegetable micro-organisms, so small that it has been estimated that 500,000 of them could be placed side by side on one face of a five cent piece, and so numerous that upwards of seven billions of them are coughed up by the average tuberculous patient in 24 hours. These germs have remarkable powers of reproduction when planted in a favorable soil. They live and grow only in the animal organism, and their powers of life outside of living animal tissues are very feeble. They