

tem table. Nay, more, I soon became firmly convinced that even in those cases that succumbed to tubercular disease there was usually more or less marked evidence of a sturdy war waged by the tissues against the invading tubercular process, and that in most cases the tissues failed in their endeavour to check the advancing process simply because they were placed under disadvantageous conditions, not as the result of the action of the specific *materies morbi*, but as the result of interference with their nutrition. The cod-liver oil treatment, so long the most successful of all, had its foundation in the belief that this substance served some special nutrient or therapeutic purpose, as a result of which the tissues were strengthened and were thus enabled to resist the attacks of the disease-producing factor; whilst the present-day treatment of tuberculosis is founded on a similar belief that fresh air, good food, efficient excretion of waste products, rest (opportunity for building up the tissues, food that will supply energy with least draft on the tissues), will enable these tissues to withstand the attacks of the tubercle bacillus in the first place; to kill it in the second, or at any rate to render it harmless; and finally to assist in the removal not only of the bacillus, but of the dead or degenerated tissue in which it had managed to effect a lodgement.

It is perhaps superfluous at this stage to show slides of the tubercle bacillus but some few of you may not have seen these microbes—low vegetable parasites—so fully studied by Robert Koch in his epoch-making work sent out from the Royal and Imperial Institute of Public Health in Berlin. (A series of slides illustrating the form and relative size of the tubercle bacilli as found in experimentally produced tuberculosis, in the tuberculosis of the human subject, and in phthisical sputa was then thrown on the screen.) For some time after the appearance of Koch's wonderfully lucid and convincing paper a certain number of sceptics,—perfectly justifiably, no doubt, on account of the extreme novelty of the ideas so promulgated,—attempted to throw doubt first on the accuracy of the observations and then on the reliability of his conclusions, but it may now be fairly claimed that Koch's work has, in the main, withstood the attacks even of the ablest of his critics. There seems to be no manner of doubt that we may accept Koch's tubercle bacillus as the *causa causans* of tuberculosis. Here, however, let me put you on your guard, as I guard myself, against a mistake into which it is very easy to fall: i. e., that because a tubercle bacillus comes near, or even into contact with, the human or brute body, an attack of tuberculosis necessarily results. This bacillus must make its way not merely onto a free surface, but into the tissues of the body, before it can do any harm; nay, more, it seems that, in the human body at any rate, the tissues must be damaged or weakened and a special mode of entrance into