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## ADAPTATION AND TUBERCULOSIS.\*

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N casting around for some aspect of the tuberculosis problem upon which to addres this meeting, it struck me that it might be serviceable to take up the matter of adaptation in its relationship to the disease. The term possibly is unfamiliar to you, but it embraces a series of processes, both on the part of the organism, the human body, and of the micro-organism, the tubercle bacillus, which are of the highest importance. And I am of the opinion that it is the failure to realize the existence of these processes which renders it difficult for the majority of men to appreciate the various happenings in the course of this disease, and again the points at issue and their significance in the controversies that have arisen of late years regarding the same. It has seemed to me that all those, and they are many, who are interested in the work of prevention, would possess a more intimate appreciation of that work if they could acquire, as it were, a mental picture of the moves in the game,--of those moves whereby now the organism, now the micro-organism seeks to gain the advantage and checkmate the other. In truth it is a gruesome game but one of very vital import, this of the cells against the bacilli and the bacilli against the cells. Some of our moves are instinctive, or have been practised before against other bacteria; many have to be learned and Too often, not knowing the science tested during the course of play. of the game, and playing "bumblepuppy"-I forget its equivalent in chess-we make a wrong move at a critical moment and the game is lost, and loss is death,

Let us consider first the moves on the part of the organism, and in order to gain a clearer picture let us take the case of a disease of briefer course and apparently more self-contained in its gross effects upon the body. Has it ever struck you I wonder, what takes place in a case of acute pneumonia? This you know is a bacterial disease, due to a micrococcus, a minute rounded or lance-head shaped organism that hunts,

<sup>\*</sup>Being the address delivered at the annual meeting of the Dominion Association for the Prevention of Tuberculosis, at Ottawa, March 15th, 1905. [ \$67 ]