

The Cultivation Problem

Leads from the Psittacine and Rickettsial Groups

Chairman: R. S. Weiser

Dr. Weiser. Until the leprosy organism can be cultivated we are forced to consider it an obligate parasite in the strictest sense. By that I mean an organism that demands the living host for its reproduction, and, more particularly perhaps, an intracellular environment. Inasmuch as the organisms of leprosy are commonly seen in cells, particularly phagocytic cells of the macrophage series, I think we must consider that these organisms demand this intracellular environment for their reproduction. Until we can fulfill all of Koch's postulates, we must also consider the possibility, however remote, that this organism is not actually the etiologic agent of the disease. Of course other alternative possibilities come to mind, e.g., that the organism is simply

along for the ride, and some other microbe is causing the disease. I do not believe this myself for one moment. Still another possibility is that the form of the organism that we observe, i.e., acid-fast rods, is not the form in which the etiologic agent operates; it is possible that soft forms may be involved. With these possibilities in mind, however remote, I believe it is highly appropriate at this time that we hear from Dr. James W. Moulder, who is Professor of Microbiology at the University of Chicago, chairman of the department, and one of the contributors to the famous textbook of Jordan and Burrows on bacteriology. We will now hear from Dr. Moulder on the "Metabolic capabilities and deficiencies of rickettsiae and the psittacosis group."