

Bacilluria has been cut short by urotropin.

A variety of fever, paratyphoid, has been separated from the small group of typhoid infections simply because of the presence of a specific bacillus (not the Eberth), for, clinically, the two are identical. Here we find another example of the role of bacteriology in fixing the identity of disease.

Of very great interest bacteriologically, and of far-reaching import therapeutically, is the discovery by Wright and Douglass of the substances in the blood fluids called opsonins, which prepare the microbes for ingestion, and digestion by the leucocytes (phagocytes), and that the serum acts upon the microbes, that is, is bacteriotrophic, and not upon the leucocytes, bactericidal. By an ingenious comparative test Sir A. E. Wright gets what he terms the "opsonic index," and by the "vaccine," which is prepared from cultures of the typhoid bacilli sterilized by heating for ten or fifteen minutes at 60° C., and which is injected internally, secures at least a modified immunity, which may persist for at least two years. This method has been tried on a large scale on British troops in India and South Africa, and after a careful study of the results has been commended by the Secretary of State for War. As Trudeau says, "Sir A. E. Wright has made a brilliant contribution to our knowledge of the mechanism of artificial immunization, and a striking attempt at the practical application of exact laboratory methods to the treatment of disease."

A most interesting if not fascinating chapter in the history of modern medicine is that of the role of protozoal parasites of the blood as the cause of specific fevers; and to the members of the Association now enlisted in the Schools of Tropical Medicine of Liverpool and London is the credit largely due for the very important and most valuable results already accruing.

Major Ronald Ross's discovery that malaria is conveyed by mosquitoes, which act as an intermediate host, has not only led to successful measures to practically eradicate malaria with its attendant evils, but has given the clue to the cause of yellow fever and its treatment, etc. The first positive proof that the *Stegomyia* was the carrier of the infecting agent of yellow fever was given when Carroll, in July, 1900, offered himself for a test experiment with a self-sacrifice worthy of all praise. He had a very narrow escape, but Lazear, of the American Commission, and Myers, of Liverpool, lost their lives. That the labors and sad deaths of these heroic men were not in vain is amply attested by the remarkable vigor and success with which