

SCIENCE

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CONTENTS

The American Association for the Advancement of Science:—

Twenty-five Years of Bacteriology: DR. SIMON FLEXNER 615

Scientific Events:—

Museum of the Buffalo Society of Natural Sciences; Medals of the Royal Society; The Philadelphia Academy of Natural Sciences; The New York Academy of Sciences..... 632

Scientific Notes and News 634

University and Educational News 636

Discussion and Correspondence:—

High Temperatures and Emission from Gases: G. M. J. MACKAY. *A Possible Relation between Mechanical, Electrical and Chemical Quantities:* DR. CARL HERING. *Request for Separates:* LESTER W. SHARP. *An Appeal for Publications for Czechoslovakia:* DR. ALEŠ HRDLÍČKA 637

Notes on Meteorology and Climatology: DR.

C. LE ROY MEISINGER 638

Special Articles:—

The Collection of Radium Emanation for Therapeutic Use: S. C. LIND. *A Quantitative Survey of the Flora of Lake Mendota:* H. W. RICKETT 640

The American Chemical Society: DR. CHARLES

L. PARSONS 642

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TWENTY-FIVE YEARS OF BACTERIOLOGY: A FRAGMENT OF MEDICAL RESEARCH¹

IMMUNITY

JUST a quarter of a century ago, that is in 1895, the announcement was made at the 67th meeting of the German Society of Naturalists and Physicians that diphtheria, one of the most severe and fatal diseases of mankind, had been conquered by means of an antitoxin. This great event is a landmark, not alone in the history of medicine, but also in the history of the world, and it provides a high peak of achievement from which the growth of bacteriology may be viewed. In order that we may follow the growth with understanding, it is necessary, at first, to cast a glance backward before we begin on the narrative, the aim of which is to bring us to the state of knowledge of bacteriology existing in our own day.

Since disease is so universal a phenomenon and communicability from individual to individual so obvious an incident of its epidemic prevalence, the conception of a *contagium vivum* or *animatum* and hence of an invisible form of life as the initiator of the condition, can be traced far back in the written records of human events. And yet it was not until about 1850 that a microscopic body, which we would now call a bacterium, was actually detected in the blood of a sick animal. The anthrax bacillus, as it has since been named, which is now recognized as the inciting microbe of splenic fever, was destined to play a leading part in the development of the future science of bacteriology, but at this early period its full meaning was not perceived. When, however, in 1863 Davaine succeeded in communicating splenic fever to a

¹ Address of the president of the American Association for the Advancement of Science, Chicago, 1920.