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THE RELATIONS OF ANIMALS TO DISEASE.¹

A CONSIDERATION of the precise relation of various factors to the cause and spread of disease is of most recent origin. While popular superstition, more often false than correct, has recorded even in the most ancient history of medicine the source of various ailments, it is only within the last century that there has been any critical scientific study of the problem. Less than three score years cover the epoch-making investigations of Koch, Pasteur and their coadjutors which have laid the foundations and built up the already complex superstructure of bacteriology. By the efforts of these men the relations of minute plant germs, unicellular organisms which we call the bacteria, have been elucidated in great detail so as to justify a new theory of the origin of disease and a new and successful line of prophylaxis, or disease prevention. Similar studies have not been made in the zoological field, but recent discoveries seem to indicate the existence of important relations heretofore unsuspected and emphasize the hopeful character of this new field for research. In order to secure a comprehensive survey and place new items in their approximate position it is fitting to review in toto the relations in which animals stand to disease, restricting the inquiry, however, for evident reasons primarily to such ailments as affect mankind.

The simplest relation is manifested when

¹ President's address before the American Microscopical Society at the Cedar Point Meeting, delivered in the Carnegie Library Auditorium at Sandusky, Ohio, July 6, 1905.