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SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKeen Cattell and published every Friday by

THE SCIENCE PRESS
Lancaster, Pa. Garrison, N. Y.

New York City: Grand Central Terminal.

Annual Subscription, $6.00. Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.

Entered as second-class matter July 18, 1923, at the Post Office at Lancaster, Pa., under the Act of March 3, 1879.

PRESENT LINES OF ATTACK ON ANIMAL PARASITOLOGY1

In treating the subject suggested by the secretary of this section, it is my desire to follow out his suggestion by discussing some of the general problems at present being attacked in the field of animal parasitology in order to point out if I can what measure of success is being achieved in each field and what appears to be immediately in sight for future consideration. Evidently within the limits of such an address only general statements can be made and details must be cited sparingly if at all. Animal parasitology has developed more in the last decade than in the entire previous period of recorded science, and the contrast in America is even more striking than in Europe.

Before taking up the general discussion, I wish to deal with a particular item that was included in the duty laid upon me. In common with many other speakers on this occasion which marks the seventy-fifth anniversary of the organization of the American Association for the Advancement of Science, I was asked to review briefly the work done on this topic of animal parasites, under the auspices of the association. I have elsewhere commented on the fact that when about 1845 the distinguished naturalist Dr. Joseph Leidy, founder of American parasitology, began to study and write on animal parasites, he entered upon virgin territory, for no work had been done previously on that subject in America, and for many years he worked alone. The start of his studies was roughly coincident with the founding of the association. Leidy's work was done in Philadelphia, and he does not appear as a contributor on this theme to the printed volumes of the association. In all the early years these volumes contain only four papers on parasitology, and but one of these was more than trivial, viz., that by Weinland on "Human cestodes new to science"; this paper outlined his well-known book with the same title, published a little later in the year.

Between 1885 and 1890 a number of important studies on insect parasites and parasitism were presented at meetings of the association. Special mention should be made here of the work by C. V. Riley, who was evidently a leader and inspirer of the group of workers. Beginning in 1892 came a series of papers on helminthology, slowly but steadily increas-

1 Read before Section N, at the Cincinnati meeting on December 29, 1923.