

be accepted as we find it; and why it exhibits certain apparently innate potentialities and modes of action which have caused it to evolve in a certain way is a question which really lies beyond the sphere of natural science. Such considerations, if they do not exactly remove the vitalistic dilemma, yet separate sharply the scientific problems which organisms present from the metaphysical questions to which the phenomena of life—more than any others—give rise. If we consider the organism simply as a system forming a part of external nature, we find no evidence that it possesses properties that may not eventually be satisfactorily analyzed by the methods of physico-chemical science; but we admit also that those peculiarities of ultimate constitution which have in the course of evolution led to the appearance of living beings in nature are such that we can not well deny the possibility or even legitimacy of applying a vitalistic or biocentric conception to the cosmic process considered as a whole.

Although disagreeing with the author's main contentions, the reviewer wishes to recognize the merits of the book as an interesting, enthusiastic and ingenious contribution to the literature of its subject. We have noted some errors in matters of biological detail, but these are not such as to affect the main argument. The brief account of certain physiological processes seems somewhat out of date; the account of the nerve impulse is unsatisfactory, and certainly few physiologists now hold that a muscle is a thermodynamic machine in the sense conceived by Engelmann; there is some evidence of unfamiliarity with biochemistry; the term "animo-acid" instead of amino-acid recurs a number of times, a mis-spelling perhaps appropriate to a book which is really a modern plea for animism.

RALPH S. LILLIE

CLARK UNIVERSITY,
October 12, 1914

*THE COMMITTEE OF ONE HUNDRED ON
SCIENTIFIC RESEARCH*

ON the invitation of the chairman of the executive committee of the Committee of One

Hundred on Scientific Research of the American Association for the Advancement of Science, there was held at his house on the evening of November 28 a meeting of the executive committee and of some members of the subcommittees and of the general committee resident in or near Boston. There were present Mr. Charles W. Eliot, president of the association and chairman of the committee, Mr. E. C. Pickering, chairman of the executive committee, and Messrs. E. W. Brown, J. McKeen Cattell, W. T. Councilman, Charles R. Cross, Reid Hunt, Richard C. Maclaurin, A. A. Noyes, Theodore W. Richards, Elihu Thomson and Arthur G. Webster.

Plans for the work of the committee were discussed, and preliminary reports were presented from four of the subcommittees, as follows: Research funds, by Mr. Cross; research work in educational institutions, by Mr. Cattell; the selection and training of students for research, by Mr. Brown, and improved opportunities for research, by Mr. Richards.

In addition to the subcommittees whose membership has been announced, the committee on improved opportunities for research has been completed, and consists of Messrs. Theodore W. Richards, chairman, W. T. Councilman, Richard C. Maclaurin, T. H. Morgan and E. H. Moore. The subcommittee on the selection and training of students for research has also been formed, and consists of Messrs. E. W. Brown, chairman, Ross K. Harrison, George A. Hulett and W. Lindgren. Subcommittees have been authorized on research institutions, research in industrial laboratories, research under the national government, research on the Pacific coast and research in the south, but these committees have not yet been completely organized.

Reports from subcommittees will be presented at the meeting of the Committee of One Hundred, which will be held in the Houston Club, University of Pennsylvania, Philadelphia, at 2 o'clock, on the afternoon of December 28.

J. McKEEN CATTELL,
Secretary