## SCIENCE

## FRIDAY, FEBRUARY 9, 1917

CONTENTS	
The Philosophy of Geology and the Order of the State: Dr. John M. Clarke	125
Reports of Subcommittees of the Committee of One Hundred on Scientific Research of the American Association for the Advancement of Science:—	
Astronomy: Professor E. C. Pickering	135
Chemistry: Professor J. Stieglitz	136
Research Funds: PROFESSOR CHARLES R. CROSS	136
Scientific Notes and News	137
University and Educational News	140
Discussion and Correspondence:— The Fur Seal Census of 1916: George Archibald Clark. Petrunkevitch's Morphology of Invertebrate Types: Professor J. H. Van Cleave	141
Scientific Books:—	
Gregory on Discovery: Professor T. Brailsford Robertson. Baker on the Relations of Mollusks to Fish: Dr. Henry A. Pilsbry.	143
Special Articles:—  The Overlapping of the Leaf Sheath: A. B. CONNER, R. E. KARPER	144
The American Association for the Advancement of Science:—	
Report of the Treasurer for 1916: Dr. R. S. WOODWARD	145
The American Astronomical Society: Pro- FESSOR HENRY NORRIS RUSSELL	146

MSS. intended for publication and books, etc., intended for review should be sent to Professor J. McKeen Cattell, Garrisonon-Hudson, N. Y.

## THE PHILOSOPHY OF GEOLOGY AND THE ORDER OF THE STATE<sup>1</sup>

ONCE each year we come together to renew our strength, like Antæus, by touching the earth.

I am conscious of taking some degree of liberty in departing from the usual form of this established function—the annual address. It would gratify me and might in some measure have diverted or persuaded you, if this occasion were given to the illumination of some specific technical theme. But the spirit of the hour seems to impel me rather to read from out my experience and observation, or at least to portray, as I see it, some part of the obligation of the state to our science and the responsibility of this science to the state.

The occasion is perhaps opportune, not so much in this place of meeting which happens to be the seat of government of but one of the many states here represented, and in the presence of members from two great federated governments; but essentially because, for the sake of all parties of interest, we must recognize more clearly the civic element in geological science and insist more pertinaciously on the immediate as well as the ultimate dependence of a state, if organized to endure, upon the demonstrated laws of this science.

I wish I might extend to my colleagues among the official geologists of many states an assurance that this address is to be devoted to some added demonstration of the obligation of the state to exploit to the utmost its geological resources, for the sake

<sup>1</sup> President's address before the Geological Society of America, Albany, December 28, 1916.