## SCIENCE

EDITORIAL COMMITTEE: S. NEWCOMB, Mathematics; R. S. WOODWARD, Mechanics; E. C. PICKERING,
Astronomy; T. C. Mendenhall, Physics; R. H. Thurston, Engineering; Ira Remsen, Chemistry;
J. Le Conte, Geology; W. M. Davis, Physiography; O. C. Marsh, Paleontology; W. K. Brooks,
C. Hart Merriam, Zoology; S. H. Scudder, Entomology; C. E. Bessey, N. L. Britton,
Botany; Henry F. Osborn, General Biology; C. S. Minot, Embryology, Histology;
H. P. Bowditch, Physiology; J. S. Billings, Hygiene; J. McKeen Cattell,
Psychology; Daniel G. Brinton, J. W. Powell, Anthropology.

## FRIDAY, MAY 13, 1898.

## CONTENTS:

The New York Academy of Sciences:— Address of the President at the Fifth Annual Reception: Professor Henry F. Osborn649
The Function of Large Telescopes: PROFESSOR GEORGE E. HALE650
Julius Sachs: Professor K. Goebel662
Current Notes on Anthropology:— The 'Monumental Records'; The Passamaquoddy Wampum Record; The Significance of the Scalp- lock: Professor D. G. Brinton
Current Notes on Botany:— The Morphology of Ginkgo; The Re-arrangement of the Gymnosperms: PROFESSOR CHARLES E. BESSEY
Scientific Notes and News:— The Recent Eclipse; The Beneke Prizes; The Statistician of the Treasury Department; General670
University and Educational News676
Discussion and Correspondence:— A Century of Geography in the United States: DR. S. F. EMMONS. Color Vision: PROFESSOR W. LE CONTE STEVENS. The Geological and Biological Survey of Alabama: PROFESSOR EU- GENE A. SMITH
Scientific Literature:— Lamb's Elementary Course of Infinitesimal Calculus: Professor W. F. Osgood. A Text-book of Botany: Professor Charles E. Bessey678
Scientific Journals680
Societies and Academies:— Academy of Natural Sciences of Philadelphia: EDWARD J. NOLAN. Boston Society of Natural History: SAMUEL HENSHAW. Section of Geology and Mineralogy of the New York Academy of Sciences: Heinrich Ries. The Chemical Society of Washington: WILLIAM A. KRUG681

MSS. intended for publication and books, etc., intended for review should be sent to the responsible editor, Prof. J. McKeen Cattell, Garrison-ou-Hudson, N. Y.

THE NEW YORK ACADEMY OF SCIENCES.

ADDRESS BY THE PRESIDENT, PROFESSOR
HENRY F. OSBORN, AT THE FIFTH
ANNUAL RECEPTION.

Members of the Academy and of the Scientific Alliance: Welcome to the Fifth Annual Reception!

An Academy of Science stands as a clearing house for scientific ideas; for the encouragement, diffusion and interchange of methods and principles between all branches. The elasticity of our own Academy is well illustrated in this fifth annual exhibition of the progress of science. Thanks to the energy of our Secretary, Professor Dodge; of the Chairmen of the many different sections and the cooperation of institutions in all parts of the country. it appears to cover a broader field than ever before. Here you can obtain glimpses of the work in many lines progressing at Harvard, the Johns Hopkins, Princeton, the U. S. Coast Survey, Chicago, the Troy Polytechnic, the Allegheny Observatory, besides our own City College, University of New York, Columbia University and, not least, this great Museum.

Methods.—Here, too, the methods and instruments of research, as well as the results of work in the most diverse fields of scientific enterprise, are brought together and stimulate us by their very contrast. Our inventiveness is as notable in the beautifully delicate instruments for studying