

SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE
OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION
FOR THE ADVANCEMENT OF 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; CHARLES D. WALCOTT, Geology; W. M. DAVIS, Physiography; HENRY F. OSBORN, Paleontology; W. K. BROOKS, C. HART MERRIAM, Zoology; S. H. SCUDDER, Entomology; C. E. BESSEY, N. L. BRITTON, Botany; C. S. MINOT, Embryology, Histology; H. P. BOWDITCH, Physiology; J. S. BILLINGS, Hygiene; WILLIAM H. WELCH, Pathology; J. McKEEN CATTELL, Psychology; J. W. POWELL, Anthropology.

FRIDAY, NOVEMBER 8, 1901.

SUPPLEMENTARY REPORT ON NON-EUCLIDEAN GEOMETRY.

CONTENTS:

| | |
|---|-----|
| <i>The American Association for the Advancement of Science:—</i> | |
| <i>Supplementary Report on Non-Euclidian Geometry:</i> PROFESSOR GEORGE BRUCE HALSTED... | 705 |
| <i>Section H, Anthropology:</i> DR. GEORGE GRANT MACCURDY..... | 717 |
| <i>Early Winter Colors of Plant Formations on the Great Plains:</i> PROFESSOR CHARLES E. BESSEY. | 721 |
| <i>Rudolph Koenig:</i> PROFESSOR W. LECONTE STEVENS..... | 724 |
| <i>Scientific Books:—</i> | |
| <i>Recent Books on Hygiene:</i> DR. GEORGE M. KOBER. <i>Britton's Manual of the Flora of the Northern States and Canada:</i> PROFESSOR CHARLES E. BESSEY..... | 727 |
| <i>Scientific Journals and Articles</i> | 733 |
| <i>Discussion and Correspondence:—</i> | |
| <i>West Virginia University. Cannonade Against Hail Storms:</i> PROFESSOR CLEVELAND ABBE. <i>The Sacramento Forest:</i> DR. ROBERT T. HILL.. | 735 |
| <i>The Work of the Beaufort Laboratory of the U. S. Fish Commission:</i> PROFESSOR H. V. WILSON.. | 739 |
| <i>A Students' Society of Science</i> | 740 |
| <i>Scientific Notes and News</i> | 740 |
| <i>University and Educational News</i> | 744 |

WHEN at the Columbus meeting of the American Association I had the honor of making a 'Report on Non-Euclidean Geometry,' it was mentioned that my own 'Bibliography of Hyper-space and Non-Euclidean Geometry,' in the *American Journal of Mathematics* (1878), giving 81 authors and 174 titles, when reprinted in the collected works of Lobachevski (Kazan, 1886) gives 124 authors and 272 titles; while Roberto Bonola had just given (1899) a 'Bibliography of the Foundations of Geometry in Relation to Non Euclidean Geometry,' containing over 350 titles with some repetitions.

Bonola in 1900 finished a second part of this bibliography, in which the single section headed 'Historical, Critical and Philosophical Writings' gives 96 authors and 150 titles. It thus becomes very evident that a most important function of your reporter is the selection of what writings to bring forward for especial mention as of paramount importance and typical of the main stream of advance.

In the Columbus report I particularly stressed the work of two authors whom I brought forward together and to whom I devoted about a quarter of that report.

The report first appeared in SCIENCE for October 20, 1899, and you may imagine

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