

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; 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, MARCH 24, 1899.

CONTENTS:

| | |
|---|-----|
| <i>The Early Tertiary Volcanoes of the Absaroka Range</i> : ARNOLD HAGUE..... | 425 |
| <i>The Physiological Basis of Mental Life</i> : PROFESSOR HUGO MÜNSTERBERG..... | 442 |
| <i>Sophus Lie</i> : PROFESSOR GEORGE BRUCE HALSTED | 447 |
| <i>Scientific Books</i> :— | |
| <i>Newbigin on Color in Nature</i> : PROFESSOR T. D. A. COCKERELL. <i>Weir on the Dawn of Reason</i> : DR. EDWARD THORNDIKE..... | 448 |
| <i>Scientific Journals and Articles</i> :..... | 450 |
| <i>Societies and Academies</i> :— | |
| <i>The Annual Meeting of the New York Academy of Sciences</i> : PROFESSOR RICHARD E. DODGE. <i>The Philosophical Society of Washington</i> : E. D. PRESTON. <i>The Geological Society of Washington</i> : DR. WM. F. MORSELL..... | 452 |
| <i>Discussion and Correspondence</i> :— | |
| <i>On the Making of Solutions</i> : PROFESSOR M. A. WILLCOX. <i>The Origin of Nightmare</i> : G. V. D..... | 455 |
| <i>Astronomical Notes</i> :— | |
| <i>A New Satellite of Saturn</i> : PROFESSOR E. C. PICKERING..... | 456 |
| <i>Notes on Physics</i> :— | |
| <i>The Nernst Lamp</i> ; <i>Pyroelectricity and Piezoelectricity</i> ; <i>The Rotary Converter</i> ; <i>The Telescope-Mirror-Scale Method</i> : W. S. F..... | 456 |
| <i>Notes on Inorganic Chemistry</i> : J. L. H..... | 457 |
| <i>Current Notes on Meteorology</i> :— | |
| <i>The Theory of Cyclones and Anticyclones</i> ; <i>Carbonic Acid in Death Gulch</i> : R. DEC. WARD... | 458 |
| <i>Zoological Notes</i> :— | |
| <i>Neomyiodon Listai</i> : F. A. L..... | 459 |
| <i>Scientific Notes and News</i> | 460 |
| <i>University and Educational News</i> | 464 |

THE EARLY TERTIARY VOLCANOES OF THE ABSAROKA RANGE.*

It is, I suppose, accepted by many geologists that volcanic energy has played an important part not only in bringing about the present configuration of the Rocky Mountains, but in building up the entire northern Cordillera, stretching from the Front Range, along Colorado, Wyoming and Montana, westward to the Pacific Ocean. Over this wide area the volcanic phenomena of Tertiary time present a varied and complex mode of occurrence, offering from different points of view many problems of geological interest. These problems have been vigorously attacked both in the field and in the laboratory, and something has been accomplished tending toward their final elucidation. The literature upon the subject is already voluminous, being scattered widely through the publications of official reports, both State and National, and in the proceedings of scientific societies. While I desire to call your attention to some of these features, I do not propose to summarize the work that has already been done in this direction in a manner which is perhaps usual on occasions like the present. Neither do I wish to review the field from my own standpoint, possibly because, although much has been accomplished, such a vast amount of work remains to be done that the broad

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.

*Address of the President before the Geological Society of Washington, February, 1899.

Science

9 (221)

Science 9 (221), 425-464.

ARTICLE TOOLS

<http://science.sciencemag.org/content/9/221.citation>

PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. 2017 © The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works. The title *Science* is a registered trademark of AAAS.