

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 ; JOSEPH LE CONTE, 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, AUGUST 10, 1900.

CERTAIN RECENT ATTEMPTS TO TEST THE
NEBULAR HYPOTHESIS.*

CONTENTS :

<i>Certain recent Attempts to test the Nebular Hypothesis</i> : PROFESSOR T. C. CHAMBERLIN, DR. F. R. MOULTON.....	201
<i>The Illusory Dust Drift—A Curious Optical Phenomenon</i> : PROFESSOR A. H. PIERCE.....	208
<i>Rafinesque's Western Minerva, or American Annals of Knowledge and Literature</i> : Wm. J. FOX.....	211
<i>The International Catalogue of Scientific Literature</i>	215
<i>The American Microscopical Society</i> : PROFESSOR HENRY B. WARD.....	222
<i>Scientific Books :—</i>	
<i>Meyer and Wiglesworth on the Birds of Celebes</i> : DR. J. A. ALLEN. <i>A Monograph of Christmas Island</i> : DR. W. H. DALL. <i>The Humanities in Horticulture</i> : W. T.....	223
<i>Scientific Journals and Articles</i>	227
<i>Societies and Academies :—</i>	
<i>Zoological Club of the University of Chicago</i> : DR. C. M. CHILD. <i>The Botanical Club of Canada</i> : H. M. A.....	228
<i>Discussion and Correspondence :—</i>	
<i>Hermaphroditism among the Docoglossa</i> : PROFESSOR M. A. WILLCOX.....	230
<i>Some Recent Reports of Foreign Museums</i> : F. A. L.....	231
<i>Recent Progress in the Examination of Foods and Drugs ; New Plants and Drugs ; Plant Constituents</i> : DR. HENRY KRAEMER.....	232
<i>President's Address before the Society of Chemical Industry</i>	234
<i>The Jesup North Pacific Expedition</i>	235
<i>Scientific Notes and News</i>	236
<i>University and Educational News</i>	240

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.

It is a far cry from the glacial period to the nebular hypothesis, but yet it is not beyond the view hulloa of logic. Glacial periods have certainly been dependent on atmospheric states, whatever else may have been concerned in causing them. Surely no one will imagine glaciation in the air of the putative molten earth, nor in the warm dense atmosphere currently assigned to the early ages, nor yet in the later periods when figs and magnolias grew in Greenland. If carbon dioxide has the thermal qualities which eminent physicists assign it, continental glaciation could scarcely have occurred while it was a large constituent of the atmosphere. Now the atmosphere has,

* This paper, prepared at the request of the editor of SCIENCE, is little more than an abstract of the following three papers :

I. 'A Group of Hypotheses bearing on Climatic Changes,' by T. C. Chamberlin ; *Journal of Geology*, Vol. V., No. 7, 1897, pp. 653-683.

II. 'An Attempt to test the Nebular Hypothesis by the Relations of Masses and Momenta,' by T. C. Chamberlin ; *Journal of Geology*, Vol. VIII., No. 1, January-February, 1900, pp. 58-73.

III. 'An Attempt to Test the Nebular Hypothesis by an Appeal to the Laws of Dynamics,' by F. R. Moulton ; *Astrophysical Journal*, Vol. XI., No. 2, March, 1900, pp. 103-130.

By 'nebular hypothesis' the gaseous hypothesis of Laplace is always to be understood in this article. The arguments, for the greater part, apply also to all spheroidal hypotheses in convective equilibrium, whether gaseous or meteoroidal.

Science

12 (293)

Science 12 (293), 201-240.

ARTICLE TOOLS

<http://science.sciencemag.org/content/12/293.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.