

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; 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. I. 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, JANUARY 25, 1901.

THE ORIGIN, SCOPE AND SIGNIFICANCE OF BACTERIOLOGY.*

CONTENTS:

<i>The Origin, Scope and Significance of Bacteriology:</i> PROFESSOR WM. T. SEDGWICK.....	121
<i>Certain Stroboscopic Phenomena in the End-on Projection of a Single Wave:</i> PROFESSOR CARL BARUS.....	128
<i>The International Geodetic Association:</i> ISAAC WINSTON.....	129
<i>The Albany Meeting of the Geological Society of America (II.):</i> PROFESSOR J. F. KEMP.....	133
<i>Anthropology at Baltimore:</i> PROFESSOR FRANK RUSSELL.....	139
<i>Leland Stanford Junior University.....</i>	142
<i>Scientific Books:—</i>	
<i>Schäfer's Text-Book of Physiology:</i> G. N. I. S. FRENKEL'S <i>Die Lehre vom Skelet des Menschen:</i> PROFESSOR THOMAS DWIGHT. <i>Bolton on the Evolution of the Thermometer:</i> J. L. H. Books Received.....	144
<i>Scientific Journals and Articles.....</i>	147
<i>Societies and Academies:—</i>	
<i>Section of Astronomy, Physics and Chemistry of the New York Academy of Sciences:</i> DR. WM. S. DAY. <i>The Chemical Society of Washington:</i> DR. W. H. KRUG. <i>The Philosophical Society of Washington:</i> C. K. WEAD.....	148
<i>Discussion and Correspondence:—</i>	
<i>Whose Fault at the U. S. Naval Observatory:</i> DR. FRANK H. BIGELOW. <i>Potassium Nitrate in Wyoming:</i> PROFESSOR WILBUR C. KNIGHT... ..	150
<i>Current Notes on Physiography:—</i>	
<i>Southern Wisconsin; The Islands of Southern California; Deecke's Italien; Norway:</i> PROFESSOR W. M. DAVIS.....	152
<i>United States Board on Geographic Names.....</i>	153
<i>Scientific Notes and News.....</i>	154
<i>University and Educational News.....</i>	159

BACTERIOLOGY is a child of the 19th century. It is the offspring of chemistry and biology, enriched by physics with the gift of the achromatic microscope.

By the end of the first quarter of the century, natural philosophy, natural history and chemistry had almost wholly displaced the magic and alchemy of the Middle Ages and the Renaissance. Natural law was the explanation indicated by natural knowledge for natural phenomena, and in most cases a natural explanation of these phenomena was either discoverable or conceivable. The Copernican theory, as developed by Galileo, Kepler, Newton and their successors, accounted satisfactorily for the obvious structure and operation of the solar system. The researches of Vesalius and Harvey, and their successors, had made comprehensible the anatomy and physiology of the animal body. The earth, in response to the inquiries of Hutton and Lyell, was yielding up the record of its slow but sublime history, its very rocks bearing eloquent testimony to their natural origin. The lightning of heaven, the thunderbolt of Zeus, interrogated by our own Franklin, had confessed its affinity

* Address delivered by the president before the Society of American Bacteriologists, Baltimore, December 27, 1900.

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.

Science

13 (317)

Science 13 (317), 121-160.

ARTICLE TOOLS

<http://science.sciencemag.org/content/13/317.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.