

# 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, Paleon-  
tology ; 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. BOW-  
DITCH, Physiology ; J. S. BILLINGS, Hygiene ; WILLIAM H. WELCH, Pathol-  
ogy ; J. MCKEEN CATTELL, Psychology ; J. W. POWELL, Anthropology.

FRIDAY, DECEMBER 20, 1901.

## CONTENTS :

<i>The Naval Observatory Report</i> .....	945
<i>Report of the Superintendent of the U. S. Naval Ob- servatory</i> .....	947
<i>Annual Report of the Secretary of Agriculture</i> .....	954
<i>Membership in the Association</i> .....	965
<i>Scientific Books :—</i>	
<i>Eddyman's Practical X-Ray Work</i> : PROFESSOR ARTHUR W. GOODSPEED. <i>Hann's Meteorol- ogie</i> : PROFESSOR R. DEC. WARD. <i>Chester's</i> <i>Manual of Determinative Bacteriology</i> : PROFESS- OR H. W. CONN. <i>Kobert's Wirbelthierblut in</i> <i>Mikrokristallographischer Hinsicht</i> : PROFESSOR LAFAYETTE B. MENDEL.....	965
<i>Scientific Journals and Articles</i> .....	969
<i>Societies and Academies :—</i>	
<i>Calendar ; Winter Meeting of Section H, Anthro- pology, of the American Association for the Ad- vancement of Science. Section of Anthropology and Psychology of the New York Academy of Sciences</i> : DR. R. S. WOODWORTH. <i>The Torrey Botanical Club</i> : PROFESSOR EDWARD S. BUR- GESS. <i>The Science Club of the University of Wis- consin</i> : C. K. LEITH.....	970
<i>Discussion and Correspondence :—</i>	
<i>The Mathematical Theory of the Top, Simplified</i> : PROFESSOR CARL BARUS, PROFESSOR A. G. GREENHILL.....	973
<i>Current Notes on Physiography :—</i>	
<i>New Ordnance Map of England ; Hydrography of the Paris Basin ; Hercegovina</i> : PROFESSOR W. M. DAVIS.....	975
<i>Notes on Entomology</i> : NATHAN BANKS.....	977
<i>The Geological Society of America</i> .....	979
<i>The American Society of Naturalists</i> .....	980
<i>Scientific Notes and News</i> .....	980
<i>University and Educational News</i> .....	984

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

## THE NAVAL OBSERVATORY REPORT.

No excuse is necessary for devoting the  
space we do to this important paper in our  
present number. We include with it only  
such portions of the reports of departments  
as seem to be of general interest. Among  
these is the very business-like report of the  
National Almanac Office.

Readers who have followed the discus-  
sions of the organization of the observatory  
which have appeared in our columns dur-  
ing the past year will be interested in this  
branch of the subject. We trust they will  
bear with us if we describe the spirit in  
which we have endeavored to carry on the  
discussion. We have taken as a funda-  
mental principle that our remarks should  
be based on official publications and that no  
heed should be given either to gossip about  
the interior affairs of the observatory, which  
circulates so freely, or to supposed leaks  
through unofficial channels.

The case as thus presented has seemed  
to us too serious to admit of our indulging  
in carping, fault-finding or minor criti-  
cisms, even had we been disposed to do so.  
As presented in the report of the board of  
visitors for 1900 it took the following form :  
Our government has for more than half