

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.

FRIDAY, MARCH 4, 1904.

CONTENTS:

<i>The American Association for the Advancement of Science:—</i>	
Section D—Mechanical Science and Engineering: PROFESSOR WILLIAM T. MAGRUDER	361
A Reply to Recent Strictures on American Biologists: DR. LEONHARD STEJNEGER:.....	371
<i>Scientific Books:—</i>	
Lévy-Bruhl on the Positive Philosophy of Auguste Comte: PROFESSOR LESTER F. WARD. Michelson on Light Waves and their Uses; Tuckerman's Index to the Literature of the Spectroscope: C. E. M.....	376
<i>Scientific Journals and Articles.....</i>	381
<i>Societies and Academies:—</i>	
Anthropological Society of Washington: DR. WALTER HOUGH. Clemson College Science Club: DR. F. S. SHIVER.....	381
<i>Discussion and Correspondence:—</i>	
Convocation Week: PRESIDENT CHARLES S. HOWE, PROFESSOR J. C. BRANNER, DR. CH. WARDELL STILES, PROFESSOR C. JUDSON HERRICK. The Case of William J. Long: FRANK M. CHAPMAN. The Metric System: DR. ALFRED C. LANE. Sex Determination in Bees and Ants: PROFESSOR W. E. CASTLE	383
<i>Special Articles:—</i>	
Amitosis in the Egg Follicle Cells of Insects: PROFESSOR VERNON L. KELLOGG. Variations in the Protective Value of the Odoriferous Secretions of Some Heteroptera: ALFRED F. CONRADI.....	392
<i>Notes on Inorganic Chemistry:—</i>	
Mendeléef's Conception of the Ether; Atmospheric Corrosion of Zinc: J. L. H.....	394
<i>Current Notes on Meteorology:—</i>	
Meteorological Phenomena of the Mont Pelée Eruption; Dentschinsky's Long-range Forecasts; The 'Line Storm' Fallacy; The Climate of Iowa: PROFESSOR R. DE C. WARD	395
<i>Recent Zoopaleontology:—</i>	
Revised Edition of Zittel's Paleontology; Tertiary Elasmobranchs from Southern Italy; Jurassic Fishes from Spanish Lithographic Limestone; Further Light on the Tremataspidae: DR. C. R. EASTMAN.....	396
<i>Scientific Notes and News.....</i>	397
<i>University and Educational News.....</i>	400

MSS. intended for publication and books, etc., intended for review should be sent to the Editor of SCIENCE, Garrison-on-Hudson, N. Y.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

SECTION D—MECHANICAL SCIENCE AND ENGINEERING.

THE work of Section D of the American Association for the Advancement of Science is in mechanical science and engineering. The section devotes itself to showing the advances which recently have been made in the principles and applications of science in regulating and using the forces of nature. The papers which are presented usually deal with what are commonly known as the applied sciences, more particularly with those which are based upon physics and chemistry. Under electricity are included its generation, adaptation and use on a commercial scale. Under heat are included such practical questions as the generation and use of steam. Under chemistry are included the combustion of coal and other fuels, and the production and use of gas for heating, forging and annealing, and for the generation of power in gas and oil engines; while in the allied science of metallurgy the problems of the mining engineer and metallurgist of iron and steel are included. Under hydraulics we find a long list of problems, the advancement of which has been rapid in recent years in the utilization of the results of the work of the sun as a heat agent, and in controlling this same transmuted heat energy when it manifests itself in swollen streams.

The section is to be congratulated on having had as its chairman Vice-President Calvin M. Woodward, of St. Louis, who is