

SCIENCE

VOL. 73

FRIDAY, MAY 15, 1931

No. 1898

The Union of American Biological Societies and Biological Abstracts:

The Washington Conference of March 7, 1931:

PROFESSOR W. C. CURTIS 509

Biological Abstracts: DR. J. R. SCHRAMM 512

The Union and Biological Abstracts: PROFESSOR C. E. MCCLUNG 517

The American Association for the Advancement of Science:

Preliminary Announcement of the Pasadena Meeting: DR. CHARLES F. ROOS 518

Scientific Events:

Geological Surveys in Alaska; Economic Conference for Engineers of the Stevens Institute of Technology; The Ecological Society of America; The Centenary Meeting of the British Association for the Advancement of Science 521

Scientific Notes and News 523

Discussion:

Undertow and Rip Tides: PROFESSOR W. M. DAVIS. *New Mastodon Finds in European Turkey:* PROFESSOR GEORGE D. HUBBARD. *Vegetative Propagation in the Missouri Gourd:* N. F. PETERSEN. *Meiosis in Hypericum Punctatum Lam.:* PROFESSOR CARL S. HOAR. *Softening Tissues:* A. B. COUCH 526

Scientific Apparatus and Laboratory Methods:

Use of an Improved Null Instrument for Glass Electrode or Other High Resistance Circuits:

SAMUEL E. HILL. *A Tilting Stopcock:* DR. P. LECOMTE DU NOÛY 529

Special Articles:

A Mottled-eyed Drosophila: PROFESSOR J. T. PATTERSON and PROFESSOR T. S. PAINTER. *The Effects of X-rays on the Growth of Wheat Seedlings:* WARE CATTELL. *Respiration Studies on Azotobacter under Controlled Conditions:* J. M. FIFE 530

The National Academy of Sciences 534

Science News 10

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKEEN CATTELL and published every Friday by

THE SCIENCE PRESS

New York City: Grand Central Terminal

Lancaster, Pa.

Garrison, N. Y.

Annual Subscription, \$6.00

Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.

THE UNION OF AMERICAN BIOLOGICAL SOCIETIES AND BIOLOGICAL ABSTRACTS

THE WASHINGTON CONFERENCE OF MARCH 7, 1931

By Professor W. C. CURTIS

PRESIDENT 1931

THE Union of American Biological Societies was formed in 1923 by the organizations that wished to establish the comprehensive abstracting journal known as *Biological Abstracts*. It is stated in the preamble of the Union that "in view of the existence of many biological societies in America, each preoccupied with its own special affairs and problems, in view of the assured interest of all these societies in the broader and more general aspects of the promotion of biological science, and especially in view of the need for improved means of contact and mutual aid between the pure and the applied branches of biological science, this Union is established to facilitate constructive and mutually advantageous cooperation among the several special biological societies and to promote

the major interests of biology." The objects stated are "to stimulate investigation in the field of biology, to organize and promote the interests of bibliography and publication, to deal with questions of general interest in the field of biology, and in general to promote the solution of those broad problems which the specialized societies are not in a position to support effectively, and to do anything else which may serve these ends."

Administration of the Union is vested in an executive committee, consisting of the president, secretary, treasurer and three additional members, and a council, consisting of two representatives of each member-society. At the outset there were seventeen member-societies. There are now twenty-nine, with another

Latest McGraw-Hill Books

Hilliard's The Prevention of Disease in the Community

By CURTIS M. HILLIARD, Professor of Biology and Health, Simmons College; Health Supervisor, Wellesley and Weston, Mass. 193 pages, $5\frac{1}{2} \times 8$, 25 illustrations. **\$1.75**

A concise treatment of the principal factors in the control of communicable diseases in the community.

Smail's College Algebra

By LLOYD L. SMAIL, Professor of Mathematics, Lehigh University. 450 pages. $5\frac{1}{2} \times 8$. **\$2.50**

This textbook of college algebra is unusual in that a unified presentation has been secured by basing the arrangement and classification of material and manner of treatment on the *function concept*.

Moyer and Wostrel's The Radio Handbook

By JAMES A. MOYER, Director of University Extension, Massachusetts Department of Education, and JOHN F. WOSTREL, Instructor in Radio Engineering and Supervisor in charge of Industrial Subjects, Division of University Extension, Massachusetts Department of Education. 886 pages, $5\frac{1}{2} \times 8$, illustrated. **\$5.00**

This book is planned to provide radio engineers, operators and workers with a complete digest of authoritative radio data, both theoretical and practical, in one logically arranged and thoroughly indexed volume with descriptions, definitions, design data, practical methods, tables and illustrations in profusion.

Fajans' The Radioelements and Isotopes: Chemical Forces and Optical Properties of Substances

By KASIMIR FAJANS, University of Munich. *George Fisher Baker Non-Resident Lectureships in Chemistry at Cornell University Series*. 125 pages, 6×9 , 34 illustrations. **\$2.50**

This book presents an explanation of the development of the problem of the origin of Actinium, a discussion in some detail of the phenomena of atomic linkage and the adsorption of ions and a consideration of several applications of the latter phenomenon.

North's The Community and Social Welfare

A Study in Community Organization

By CECIL CLARE NORTH, Professor of Sociology, Ohio State University. *McGraw-Hill Publications in Sociology*. 359 pages, 6×9 . **\$3.50**

A book discussing the welfare problems of the modern city, the specialized agencies that have been developed to deal with these problems and the building of adequate and effective welfare programs.

Send for copies on approval

McGRAW-HILL BOOK COMPANY, Inc.

Penn Terminal Building

370 Seventh Avenue

New York

Recent Wiley Books

Handbook of Chemical Microscopy

By E. M. CHAMOT and C. W. MASON
Both of Cornell University

Vol. II

This second volume is devoted to chemical reactions as studied under the microscope, with particular reference to inorganic qualitative analysis and with emphasis on the time and labor-saving features of the super-sensitivity of the selected identity tests.

Vol. II. \$4.50

Vol. I. \$4.50

The Soil and the Microbe

By SELMAN A. WAKSMAN and
ROBERT L. STARKEY
Both of Rutgers University

This book embodies the most advanced knowledge and scientific data concerning soil microbes and their rôle in soil processes and plant growth. It presents a clear picture of the microscopic population of the soil, its numerous physiological reactions, and also the relation of these processes to the origin and formation of soil, to the cycle of elements in nature, and to plant nutrition.

\$3.50

Electricity and Magnetism

By VINCENT C. POOR
University of Michigan

This book is well written in a concise and interesting manner. It is a direct path through the subject and in no sense a treatise. The vector treatment makes the book brief and to the point. The problems at the end of the first four chapters are illustrative, their purpose being primarily to arouse a critical attitude towards the text.

\$2.25

Elements of Water Bacteriology

With Special Reference to Sanitary Water Analysis

By SAMUEL C. PRESCOTT
Massachusetts Institute of Technology
and CHARLES-EDWARD A. WINSLOW
Yale School of Medicine

5th Edition

"A book of value to the water bacteriologist, and an essential text for the student who desires to acquire a fundamental comprehension of the problems with which he is to deal in actual practice."

\$2.50

Foundations of Geology

Being a Combination of Outlines of Physical Geology and
Outlines of Historical Geology

By the late LOUIS V. PIRSSON,
CHARLES SCHUCHERT and CHESTER LONGWELL
All of Yale University

This new book is divided into two parts, namely: Physical Geology and Historical Geology. There is now a desirable balance between the physical and historical parts of the text. Illustrations are chosen for their teaching value, and not merely to embellish. The book is excellent for first year students in geology.

\$5.00

John Wiley & Sons, Inc.

440 Fourth Avenue, New York City

BIOLOGICAL and NATURAL HISTORY MATERIAL



Zoological Groups
Embryological Slides
Botanical Life Histories
Drosophila Cultures

Catalogs on request: Address

MARINE BIOLOGICAL LABORATORY

Supply Department
Woods Hole, Mass., U. S. A.

Microscopical Preparations

Botany, Zoology, Petrology,
Diatoms, Fossil Plants, Textiles, etc.

96 page Catalogue. Post free.
We are the largest mounters in Great Britain.

Flatters & Garnett, Ltd.

309, Oxford Road,
MANCHESTER, ENGLAND



Hq-Speed MIXERS

Clamp to any tank, operate from light circuit, mix all liquids, maintain even temperature baths. Thousands used in sizes for 1 to 50,000 gallon tanks.

Write for Catalogue

ALSOP ENGINEERING CO.
39 West 60th St., New York



NEW LISTS FINE SHELLS

A Generic List of recent Mollusca covering 34 sheets has just been issued and will be mailed to those interested. Nothing quite like it in existence. Also 5 sheets covering books on Conchology. Will quote prices on any Mollusca desired from any part of the World. Largest scientific stock in existence.

WALTER F. WEBB

202 Westminster Road

Rochester, N. Y.



WE SPECIALIZE IN REPAIRING Microscopes, Colorimeters, Scientific and Laboratory Instruments. Agents of Bausch & Lomb products. New and rebuilt microscopes for sale. We also buy used microscopes and parts.

Oswald Griner Co., 1108 Oak St., Kansas City, Mo.



VISITRON PHOTOELECTRIC CELLS

for SCIENTIFIC RESEARCH
These cells are noted for their high sensitivity and long life.

SEND FOR BULLETIN 119

GM LABORATORIES INC

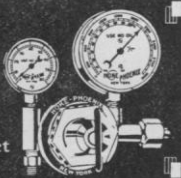
1785 Belmont Ave.

Chicago, U. S. A.

Use **Hoke** reducing valves with hydrogen, oxygen or other gases

Several Models—Ask for folder S-3

Hoke Inc. 22 Albany Street
New York City



New (3rd) Edition

Just Published

The Principles and Practice of PERIMETRY

By **LUTHER C. PETER, A.M., M.D., Sc.D., F.A.C.S.**

Professor of Ophthalmology in the Graduate School of Medicine of the University of Pennsylvania
Ophthalmologist to the Hospital for the Graduate School of Medicine, University of Pennsylvania, Polyclinic-Medico-Chirurgical Section; to the Friends' Hospital for Nervous and Mental Diseases; and to the Rush Hospital for Consumption and Allied Diseases

Octavo, 315 pages, with 194 engravings and 5 colored plates. Cloth, \$4.50, net

In this new fourth edition, fully revised and considerably enlarged, the author clarifies and simplifies a complex and difficult subject, bringing it within the grasp of the student.

The book covers the anatomy and physiology of the visual pathway and then proceeds to study the disturbances of its structure and function. It discusses the methods, technique, instruments and charts which are needed in diagnosis and includes all the many recent discoveries and changes which facilitate the task. Its colored plates and new and original drawings add greatly to the value of the work.

LEA & FEBIGER

Washington Square, Philadelphia

Second Edition: Revised and Enlarged

THE RAT: DATA AND REFERENCE TABLES

Memoir No. 6: 548 pages. Bibliography: 2206 titles

HENRY H. DONALDSON

Published by THE WISTAR INSTITUTE

Philadelphia, Pa., U. S. A.

Price, \$5.00

The Rat: A bibliography. 1924-1929.

L. E. DRAKE and W. T. HERON.

1353 titles—with subject index.

Price—50 cents.

Orders may be sent to

The Wistar Institute, 36th Street & Woodland Ave.,
Philadelphia, Penna.

THE MICROSCOPE

By **SIMON H. GAGE**, of Cornell University

Revised, Dark-field Edition (1927) now Available.

The Old and the New in Microscopy, with a special chapter on Dark-field Methods and their Application.

Postpaid, \$3.50

COMSTOCK PUBLISHING CO., ITHACA, N. Y.

SCIENTIFIC PERIODICALS

Chemical, Medical and allied subjects. Complete files, volumes and copies, bought and sold. Kindly send us a list of your wants and items of which you may wish to dispose.

B. LOGIN & SON, INC.

29 East 21st Street

New York, N. Y.