

# SCIENCE

VOL. 85

FRIDAY, MAY 28, 1937

No. 2213

<i>A Half Century of American Medicine:</i> DR. SIMON FLEXNER .....	505	<i>Special Articles:</i>	
<i>Scientific Events:</i>		<i>Experimental Determination of the Anticonvulsant Properties of Some Phenyl Derivatives:</i> DR. TRACY J. PUTNAM and DR. H. HOUSTON MERRITT. <i>Extraction of the Nitrogenous Materials from Dried Grass:</i> HERBERT L. WILKINS .....	525
<i>The Polar Expedition of the U.S.S.R.; Scientific Exhibits at the Royal Society Conversazione; The Chesapeake Biological Laboratory; Symposium at the Denver Meeting on the Control of Drifting Soils; Awards of the Lalor Foundation; Recent Deaths</i> .....	512	<i>Scientific Apparatus and Laboratory Methods:</i>	
<i>Scientific Notes and News</i> .....	515	<i>Eggs of Fresh-water Fishes Suitable for Laboratory Studies:</i> DR. FLOYD J. BRINLEY. <i>Aceto-carmin Mounting Media:</i> PROFESSOR CONWAY ZIRKLE .....	527
<i>Discussion:</i>		<i>Science News</i> .....	10
<i>The Flora of California:</i> PROFESSOR T. D. A. COCKERELL. <i>Spargana in Natrix:</i> PROFESSOR JUSTUS F. MUELLER. <i>Photomicrographs and Microphotographs:</i> PROFESSOR WILLIAM T. HALL. <i>A Misleading Article in The American Magazine:</i> FRANK CLAY CROSS .....	518		
<i>Quotations:</i>			
<i>The Soviet Polar Expedition</i> .....	520		
<i>Societies and Meetings:</i>			
<i>The Kansas Academy of Science:</i> DR. ROGER C. SMITH .....	521		
<i>Reports:</i>			
<i>The Union of American Biological Societies and Biological Abstracts:</i> DR. E. V. COWDRY .....	523		

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.

## A HALF CENTURY OF AMERICAN MEDICINE<sup>1</sup>

By Dr. SIMON FLEXNER

THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH

By a happy coincidence it is just a half-century since I entered the University School of Medicine at Louisville as a student. For fifty years, therefore, I have been an observer of the medical developments taking place in this country, and during much of this time I have also followed the developments going on abroad. It is my purpose on this occasion to attempt a brief and rapid review of American medicine of this period in relation to European medicine as it existed at the same time.

But first I must express to you the happiness I feel in returning here to my Alma Mater and to the city of my birth and young manhood. I am moved to salute you on the celebration of the hundredth anniversary of your foundation, to congratulate you on your past,

<sup>1</sup> Address delivered on April 3, 1937, at the celebration of the one hundredth anniversary of the founding of the School of Medicine of the University of Louisville.

and to wish you ever greater achievements in the future.

The early history of the Louisville Medical School is an integral part of the history of the American frontier and the winning of the West. Abler and better-informed writers have recorded the beginnings of the school, brought it into relation with Transylvania University, from which the first nucleus of its faculties came, and followed its later vicissitudes. The school was an important link in that historical chain of peripatetic schools which, before the middle of the last century, attracted the experienced physicians and surgeons of the day who wandered up and down the country from east to west, doing their part, and a very significant part, in subduing the wilderness. It is a pleasure and an inspiration to recall some of the remarkable men who taught here, among whom were Daniel Drake, Samuel D. Gross, Austin Flint, Elisha

---

## New McGraw-Hill Books

---

### *Harlow and Harrar—Textbook of Dendrology*

By WILLIAM M. HARLOW, New York State College of Forestry, and ELLWOOD S. HARRAR, Duke University. *American Forestry Series*. In press—ready in June

Covers concisely yet fully all the important forest trees of the United States and Canada with special emphasis on identification, tree habits, pertinent silvical data, and tree ranges. The description of each species is introduced by a section, "Distinguishing Characteristics," which summarizes Key information. The book includes hundreds of fine new photographs illustrating the distinguishing features of leaves, flowers, fruits, seeds, twigs, bark, and habits of trees.

### *Bitter—Introduction to Ferromagnetism*

By FRANCIS BITTER, Massachusetts Institute of Technology. *International Series in Physics*. 315 pages, \$4.00

This valuable contribution to the study of magnetism has been written with a threefold objective: (1) to define as clearly as possible the problems whose solution may be expected to reveal the fundamental processes which constitute ferromagnetism; (2) to pave the way for a consideration of the subject from the point of view of solid solutions rather than homogeneous pure substances; (3) to serve as an introduction and guide to the literature on the experimental side of the subject.

### *Eastman—Fundamentals of Vacuum Tubes*

By AUSTIN V. EASTMAN, University of Washington. 437 pages, \$4.00

In this elementary but thorough engineering analysis of vacuum tubes the author seeks to steer a middle course between the purely descriptive text on the one hand and the highly mathematical on the other. The book discusses at length the principal types of vacuum tubes. The laws underlying each are fully treated, and engineering analyses of the more important applications are presented.

### *Sherbon—The Family in Health and Illness*

By FLORENCE BROWN SHERBON, M.D., University of Kansas. *McGraw-Hill Euthenics Series*. In press—ready in July

The purpose of this new book is to provide a scientific text which will integrate the specific health aspects of such phases of family life as food and nutrition, clothing, child care and development, and home administration. The book incorporates the latest scientific and practical information on each subject.

### *Macleod and Nason—Chemistry and Cookery. New second edition*

By ANNIE LOUISE MACLEOD and EDITH H. NASON, Syracuse University. *McGraw-Hill Euthenics Series*. In press—ready in July

As in the successful first edition, this book is a concise, readable presentation of present-day chemical theory and its application to the study of foods. The entire book has been completely revised and largely rewritten in the light of changing trends in chemistry. All the material on foods has been brought up to date and new laboratory experiments have been added.

*Send for copies on approval*

---

## McGRAW-HILL BOOK COMPANY, INC.

330 West 42nd Street, New York

Aldwych House, London, W.C.2

# New Wiley Books

## COLLEGE PHYSICS

By JOHN A. ELDRIDGE, *Professor of Physics, State University of Iowa*

"Eldridge" has been prepared as an elementary textbook with a special appeal both to physics majors and to other students who are taking a course in the subject for purely cultural purposes. The content is elastic, in that either a short or a long course may be based upon it, depending upon curriculum requirements. The book offers a good approach to the subject of physics from the standpoint of everyday experience and experiment. The content is clear, logical and thought-provoking, with a carefully chosen simplicity of development. Numerous illustrative problems, both simple and complex, are included.

Ready in June      Approximately 630 pages; 431 illustrations; 5½ by 8½; Probable price, \$3.75

## PLANE TRIGONOMETRY, with Tables

By H. A. SIMMONS, *Associate Professor of Mathematics, Northwestern University*, and G. D. GORE, *Professor and Head of the Department of Mathematics, Central Y.M.C.A. College*

The purpose of this book is to give in simple language and with suitable geometric illustration the best available proof of each type used, to offer a large and diversified set of appropriate problems possessing considerable newness, to alternate exposition and problems in such a way as to make the work as simple and convenient as possible for both students and teachers, and to use tables which are extremely convenient. The book contains enough material for a 48-hour course; however, the arrangement is such that it may be used in a 32-hour course by omitting certain sections.

Published May 25th      282 pages; 133 illustrations; 5½ by 8½; \$2.00

## ELEMENTS OF FORESTRY

By the late FRANKLIN MOON and NELSON C. BROWN, *Professor of Forest Utilization, New York State College of Forestry, Syracuse University*

"Moon and Brown" has been revised and brought up to date by Professor Brown. It now reflects the trend of the times and incorporates the new methods and practices that have grown out of the increasing emphasis upon forest conservation as a project of national importance.

*Third Edition*

Ready in June      Approximately 344 pages; 71 illustrations; 5½ by 8½; Probable price, \$3.25

## ELEMENTS OF OPTICAL MINERALOGY

### Part I. Principles and Methods

By ALEXANDER N. WINCHELL, *Professor and Chairman of the Department of Geology, University of Wisconsin*

Numerous changes and modifications have been made to bring the book up to date, especially in the sections dealing with the theoretical aspect of the refractive index and elements of symmetry. More than sixty new or revised illustrations are included. This book presents not only the material necessary for the study of minerals occurring in thin sections but also in powders and fragments, and those involving immersions in liquids.

*Fifth Edition*

Published in March      263 pages; 305 illustrations; 6 by 9; \$3.50

## A MANUAL OF PSYCHOLOGICAL EXPERIMENTS

By EDWIN G. BORING, *Harvard University*, HERBERT S. LANGFELD, *Princeton University*, HARRY P. WELD, *Cornell University*, and 16 contributors

These experiments are designed for an elementary laboratory course in psychology and can be used with any good general textbook written from the scientific point of view. There are fifty-nine experiments providing for about sixty-five hours of laboratory work. The manual is adaptable to a variety of curricular needs.

Ready in June      Approximately 230 pages, 8½ by 11; Probable price, \$2.00

**John Wiley & Sons, Inc., 440 Fourth Avenue, New York**