

# SCIENCE

VOL. LXXII

FRIDAY, SEPTEMBER 12, 1930

No. 1863

<i>The American Association for the Advancement of Science:</i>		
<i>The Fourteenth Annual Meeting of the Pacific Division:</i> DR. J. MURRAY LUCK .....	255	
<i>Obituary:</i>		
<i>Recent Deaths; Memorials</i> .....	266	
<i>Scientific Events:</i>		
<i>The Beit Memorial Fellowships; The Museum of the City of New York; The New Wall Map of the United States; The Conference of Agricultural States of Eastern Europe</i> .....	266	
<i>Scientific Notes and News</i> .....	269	
<i>Discussion:</i>		
<i>Nomenclature and Me:</i> PROFESSOR ARTHUR PAUL JACOT. <i>A Note on the Life History of the Large American Fluke, Fasciola magna (Bassi):</i> DR. D. F. SINITSIN .....	272	
<i>Scientific Books:</i>		
<i>Roberts' Plant Hybridization before Mendel:</i> DR. ROBERT K. NABOURS .....	274	
<i>Scientific Apparatus and Laboratory Methods:</i>		
<i>A Simple Method for Staining Spirochetes:</i> DR. MINNIE B. K. HARRIS. <i>Arcuate Mountains Produced by Modification of Stone's Structure Machine:</i> R. H. MITCHELL and ALAN STONE .....	275	
<i>Special Articles:</i>		
<i>The Relation of Total Nitrogen to Regeneration in the Willow:</i> PROFESSOR P. A. DAVIES. <i>Effect of Freezing and Thawing on the Extractability of the Alleged Chicken Sarcoma Agent:</i> WARO NAKAHARA and HIDETAKE YAOI .....	276	
<i>Science News</i> .....	x	

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 AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

### THE FOURTEENTH ANNUAL MEETING OF THE PACIFIC DIVISION

By Dr. J. MURRAY LUCK, Secretary

THE fourteenth annual meeting of the Pacific Division of the American Association for the Advancement of Science and Associated Societies was held at the University of Oregon, Eugene, from June 18 to 21, 1930. The registration totaled 457, inclusive of 33 who attended the meeting of the Western Society of Soil Science held in Corvallis on the Monday and Tuesday preceding the Eugene meeting. Excellent hospitality was provided by the hotels of Eugene and the new dormitory of the University of Oregon. Over half of the members were thus cared for. Auto camps provided accommodation for 50. The remainder, many of whom were residents of Eugene and Corvallis, were guests in private residences.

The sessions commenced on the afternoon of June 18 with reviews of the scientific contributions of the

past year. In accordance with the custom of recent years the speakers confined their attention to a few of the most significant papers contributed from the Pacific Coast and far western states. J. A. Anderson, of the Mount Wilson Observatory, and R. B. Brode, of the University of California, reviewed the physical sciences; Olaf Larsell, of the University of Oregon, and C. B. Lipman, of the University of California, surveyed the progress in the life sciences. This division of the field proved a happy one. Recognizing, as it did, the rapprochement that has been steadily growing among the sister sciences, it gave to the speakers in each group the wide domains of several interrelated sciences from which to sketch sweeping panoramic views of an entire field or details of a portion. At 4 P. M. two of the excellent sound films pre-



## PURE PROTEINS OF MILK VS. CRUDE CASEIN

**T**HE PURE PROTEINS of milk are so difficult and expensive to prepare, that only too often the crude products are inadvisedly used in researches of importance. One "crude essential element" of the diet may invalidate all other good features of a costly investigation, thereby disqualifying the deduction of the author.

In recent journals such papers have appeared.

"Crude Casein" of the usual industrial type represents simply an acid or rennet curd and is purely "Glorified Pot Cheese," containing unknown products of milk—in unknown amounts.

### FOR RESEARCHES OF PRECISION

"Casein - Harris" and  
"Lactalbumin - Harris"  
have been prepared

Through years of study in the Protein Laboratory of Osborne & Mendel (Yale Univ. & Conn. Expt. Sta.), we have learned how to prepare these two proteins in state of highest molecular purity.

Each protein contains highest nitrogen content, lowest mineral ash, freedom from each other and other substances of cow's milk.

They are made directly from fresh skim milk, which is the only possible way to prepare them in high purity.

Assayed upon growing white rats.

Free from all vitamins.

#### AVERAGE ANALYSIS OF CASEIN—HARRIS

Moisture .....	10.73	Casein (N x 6.38) ..	87.09
Ash .....	.59	Ether-soluble .....	.20
Calcium .....	trace	Nitrogen;	
Nitrogen .....	13.66	water, fat, ash-free	15.44

(cf.—Osborne & Harris, Jr. Am. Chem. Soc., 25-IV, 346)

Also

Purest powdered Medicinal Yeast  
(standardized for Vitamines "B"  
(F & G) and Concentrates from  
this yeast.

Also

Vitamine factors, pure food  
mixes, deficient foods, salt mix  
and methods for vitamine assays  
upon the Norwegian white rat.

**THE  
HARRIS LABORATORIES  
TUCKAHOE NEW YORK**

## PRINCIPLES OF HYGIENE

By

THOMAS A. STOREY, M.D., Ph.D.

*Director, School of Hygiene and Physical  
Education, Stanford University*

A text-book that outlines the determining and contributory causes of health, surveys the various agents that may injure health, considers the defenses against and carriers of pathogens, and enumerates the causes that may contribute to ill health. It thus grounds the student in the facts of health and disease, without a knowledge of which no application can be made of the rules of hygienic living.

*Postpaid, \$3.50*

\* \* \*

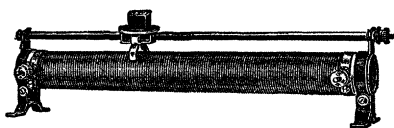
STANFORD UNIVERSITY PRESS  
STANFORD UNIVERSITY - CALIFORNIA

## SCIENTIFIC SURVEY OF PORTO RICO AND THE VIRGIN ISLANDS

The results of the natural history survey of Porto Rico and the Virgin Islands conducted by The New York Academy of Sciences, in cooperation with the Government of Porto Rico, are being published.

Thirty-one parts, distributed through eleven octavo volumes, have been issued, including documents on Geology, Physiography, Paleontology, Descriptive Botany, Plant Ecology, Mycology, Mammalogy, Ornithology, Herpetology, Ichthyology and Entomology.

Schedules, advertising these parts in detail, with announcements of the parts in preparation, may be obtained from the Recording Secretary of The New York Academy of Sciences, 77th Street and Central Park West, New York City. The price of each part is \$2, the thirty-one parts published costing \$2.



### JAGABI RHEOSTATS—

wound on porcelain tubes instead of porcelain enameled iron tubes, have high insulation and low inductance. They meet an ever increasing demand by Educational, Research and Industrial Laboratories for better and more rugged Jagabi Rheostats. Write for new Catalog 1230-S listing 57 standardized ratings, which are carried in stock.

JAMES G. BIDDLE, 1211-13 ARCH ST., PHILADELPHIA

Second Edition

## BIOLOGICAL STAINS

Published October 1929

This booklet, already quite well known among biologists, has 224 pages, discusses the chemistry and uses of about 100 dyes and also gives in detail about 75 of the most important staining formulae and procedures calling for stains. This latter feature makes it a useful laboratory handbook.

The book is written by the Chairman of the Commission on Standardization of Biological Stains, and is published by the Commission. Price, \$3.00, postage additional; or \$2.75 postpaid if cash accompanies the order.

## STAIN TECHNOLOGY

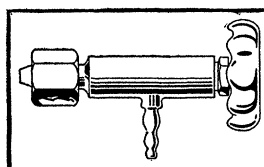
A quarterly journal devoted to staining and microscopic technic.

Subscription price, \$1.50 a year

*Orders for the book and subscription to the  
journal to be sent to*

H. J. CONN, *Chairman,*

Lock Box 299, Geneva, N. Y.



Needle Valve with Hose  
Connection ..... \$5.00

## New Opportunities for Research

**FOLLOWING** the designs and suggestions of Professor H. S. Booth, Western Reserve University, our chemical engineers have developed a laboratory set of Unit Parts which greatly facilitate the manipulation of high-pressure gases from cylinders. These open a fascinating new avenue of research to those who previously have been hindered by the inadequacy of the available apparatus.

Send for catalog describing the Unit Parts and a price list of our rare and common gases. Simply fill in the coupon.

### The Ohio Chemical & Mfg. Co.

1177 Marquette St., N. E., Cleveland, Ohio

"Save Time in Research"

The Ohio Chemical & Mfg. Co.,  
1177 Marquette St., Cleveland, Ohio.

☐ Please send me a catalog of your Unit Parts and a price list of rare gases.

Name..... Street.....

City..... State..... S.-90

New

## McGraw-Hill Books

### **Thomson's Wave Mechanics of Free Electrons**

By **G. P. Thomson**, Professor of Natural Philosophy, University of Aberdeen. *George Fisher Baker Non-Resident Lectureship in Chemistry at Cornell University Series.* 172 pages, 6 x 9, illustrated. \$2.50

This book represents the substance of lectures delivered at Cornell University. They are an attempt to state the principles and applications of the new wave mechanics, in so far as these concern electrons not forming part of an atom, using the minimum of mathematics.

### **Fitzpatrick's The Lower Fungi—Phycomycetes**

By **Harry M. Fitzpatrick**, Professor of Mycology, Cornell University. *McGraw-Hill Publications in the Agricultural and Botanical Sciences.* 331 pages, 6 x 9, 112 illustrations. \$4.00

A comprehensive general reference work on the Phycomycetes. This book offers the only complete modern treatment of the taxonomy of the lower fungi available in any language.

### **Crawford's Determination of Orbits of Comets and Asteroids**

By **Russell Tracy Crawford**, Professor of Astronomy, University of California. *McGraw-Hill Astronomical Series.* 233 pages, 7 x 10, formulas and tables. \$4.00

A textbook on the subject of orbit determination which is adaptable for use in a one-semester course in the introduction to theoretical astronomy.

### **Tarr's Introductory Economic Geology**

By **W. A. Tarr**, Professor of Geology and Mineralogy, University of Missouri. 664 pages, 6 x 9, 249 illustrations. \$5.00

An introductory treatment presenting in as simple a manner as possible a general picture of the earth materials used by man.

### **MacMillan's Theoretical Mechanics—The Theory of the Potential**

By **William Duncan MacMillan**, Professor of Astronomy, the University of Chicago. 469 pages, 6 x 9, 112 illustrations. \$5.00

This book is intended for students of advanced grade in mathematics, mathematical astronomy and mathematical physics. It is distinguishable for its appealing and comprehensive treatment.

*Send for copies on approval*

**McGRAW-HILL BOOK COMPANY, Inc.**

Penn Terminal Building

370 Seventh Avenue

New York