

Vol. 105
No. 2728

Pages 373-398

April 11, 1947

Science

THE SCIENTISTS NEWSWEEKLY



Officers of the American Psychological Association: Helen Peak, Connecticut College, recording secretary; Donald G. Marquis, University of Michigan, president-elect; Carl R. Rogers, University of Chicago, president; and Dael Wolfe, executive-secretary. The late Willard L. Valentine, editor of *Science*, was treasurer. The officers and Board of Directors met at the University of Michigan on March 28-30, 1947.

Published by the
AMERICAN
ASSOCIATION
FOR THE
ADVANCEMENT
OF SCIENCE

Fundamental Research in the Clinical Specialties
V. Everett Kinsey



Observing the data shown by a Knorr-Albers Microphotometer used in metallurgical research and quality control by Koppers Co., Inc., American Hammered Piston Ring Div., Baltimore, Md.


SPECTROGRAMS
"Write" their own Analyses
 With a
KNORR-ALBERS
MICROPHOTOMETER

Spectrographic analysis has new speed and accuracy when implemented with a Knorr-Albers Microphotometer, particularly in such general situations as these:

1. Examinations of negatives which contain spectrum lines of unknown metals.
2. Examinations in which a relatively large number of spectrum lines are present.
3. Examinations in which an automatic record is desired.

The Knorr-Albers equipment passes a beam of light through the spectrogram onto a photocell, in such a way that the varying film densities modulate the light to the cell, and cause corresponding variance in the current from the cell. The equipment's Speedomax Recorder shows this current as a continuous graph. It preserves data both of peak density and of lines which might be hardly visible if projected.

The equipment is completely described in our 12-page Catalog E-90(1), which will be sent on request.



LEEDS & NORTHRUP COMPANY, 4926 STENTON AVE., PHILA., PA.

LEEDS & NORTHRUP

MEASURING INSTRUMENTS • TELEMETERS • AUTOMATIC CONTROLS • HEAT-TREATING FURNACES

Jrl. AaE-90(3)

*Distinguished for Its Simplicity
in Dealing with Difficult Subjects*

HOWELL-FULTON'S
TEXTBOOK of PHYSIOLOGY
Fifteenth Edition

THIS BOOK is distinguished for its simplicity in dealing with difficult subjects, and its clarity and force in describing physiologic processes. In the *Fifteenth Edition* those facts which are directly helpful in pathology, diagnosis, therapy and the other practical branches of medicine are stressed much more than ever before. 507 vivid illustrations, more than half of them new, have been included by the authors to add to the book's effectiveness and clarity. Many new fields of active physiologic research are revealed in the text, and many new facts are presented for the first time. The recent references to monographs and journal literature are included.

For more than 40 years, Howell's Physiology has held its leadership; and the *Fifteenth Edition*, emphasizing *applied physiology* as it does, has enhanced the book's prestige to an even greater degree.

From first page to last, you will be impressed with the new authority, up-to-date approach and stimulating freshness of this classic work. It is unhesitatingly recommended to all interested in the field of human physiology.

Edited by JOHN F. FULTON, M.D., Sterling Professor of Physiology, Yale University School of Medicine, with Collaboration of 10 Other Authorities. 1304 pages, 6" x 9 $\frac{1}{4}$ ", 507 illustrations, many in colors. \$8.00

W. B. Saunders COMPANY

West Washington Square

Philadelphia 5

Willard Lee Valentine

Editor

January 1, 1946–April 5, 1947

Vol. 105

No. 2728

Friday, April 11, 1947

Science

CONTENTS

Fundamental Research in the Clinical
Specialties: *V. Everett Kinsey* 373

Environment and Food Intake in Man:
Robert E. Johnson and
Robert M. Kark 378

The Terminology of Pollination:
J. R. King and *R. M. Brooks* 379

News and Notes 381

Comments by Readers 386

Technical Papers

The Effect of Body Temperature on the Duration of
Barbiturate Anesthesia in Mice:
Frederick A. Fuhrman 387

Hyperheparinemia: Cause of the Hemorrhagic Syn-
drome Associated With Total Body Exposure to
Ionizing Radiation:
J. Garrott Allen and *L. O. Jacobson* 388

Treatment of Plutonium Poisoning by Metal Displace-
ment: *Jack Schubert* 389

Effect of Temperature on the Growth and Sterility of
Maize: *Donald F. Jones* 390

Failure of Sodium Salicylate to Inhibit Hyaluronidase
in Vitro: *Robert M. Pike* 391

The Carcinogenic Action of Smegma:
Alfred Plaut and *Alice C. Kohn-Speyer* 391

In the Laboratory

A Simple Laboratory Apparatus for the Demonstration
of Cardiac Ballistics: *Vernon E. Krah* 393

Control of *Nosema* Disease of Potato Tuber Worm, a
Host Used in the Mass Production of *Macrocentrus*
ancylivorus: *H. W. Allen* and *M. H. Brunson* 394

A Single Flashlight Source for Ultracentrifuge Research:
Lionel L. Lipschultz and *Kurt G. Stern* 395

An Apparatus for the Determination of the Tensile
Strength of Healing Wounds: *Jesse Charney*,
Martin B. Williamson, and *Finn W. Bernhart* 396

Book Reviews

Analytical method in dynamics: *H. O. Newbould*.
Reviewed by *Henry Margenau* 398

Scientific Book Register 398

Science, a weekly journal, is published each Friday by the American Association for the Advancement of Science at Mt. Royal & Guilford Avenues, Baltimore 2, Maryland. Founded in 1880, it has been since 1900 the official publication of the AAAS. Editorial, Advertising, and Circulation Offices, 1515 Massachusetts Avenue, N.W., Washington 5, D. C. Telephone, EXecutive 6060 or 6061. Cable address, SCIMAG.

Articles offered for publication should be sent to the Editor, 1515 Massachusetts Avenue, N.W., Washington, 5 D. C.

Membership correspondence for the AAAS should be sent to the Administrative Secretary, 1515 Massachusetts Avenue, N.W., Washington 5, D. C.

Change of address. Four weeks notice required for change of address. When ordering a change, please furnish an address stencil label from a recent issue. Address changes can be made only if the old as well as the new address is supplied.

Annual subscription, \$7.50; single copies, \$25; foreign postage (outside the Pan-American Union), \$1.00 extra, Canadian postage, \$50 extra. Remittances and orders for subscriptions and for single copies, notices of changes of address, and claims for missing numbers should be sent to the Circulation Department.

Entered as second-class matter January 17, 1947, at the postoffice at Baltimore, Maryland, under the act of March 3, 1879.