

Vol. 105  
No. 2732

Pages 483-506

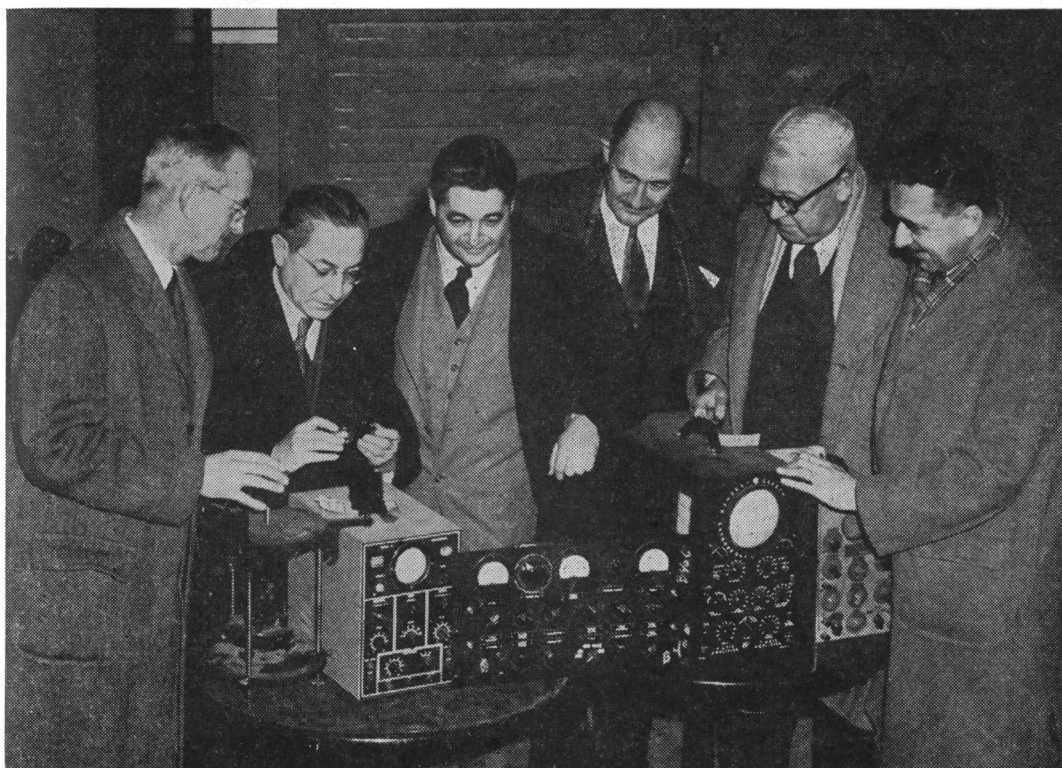
May 9, 1947

# Science

---

THE SCIENTISTS NEWSWEEKLY

---

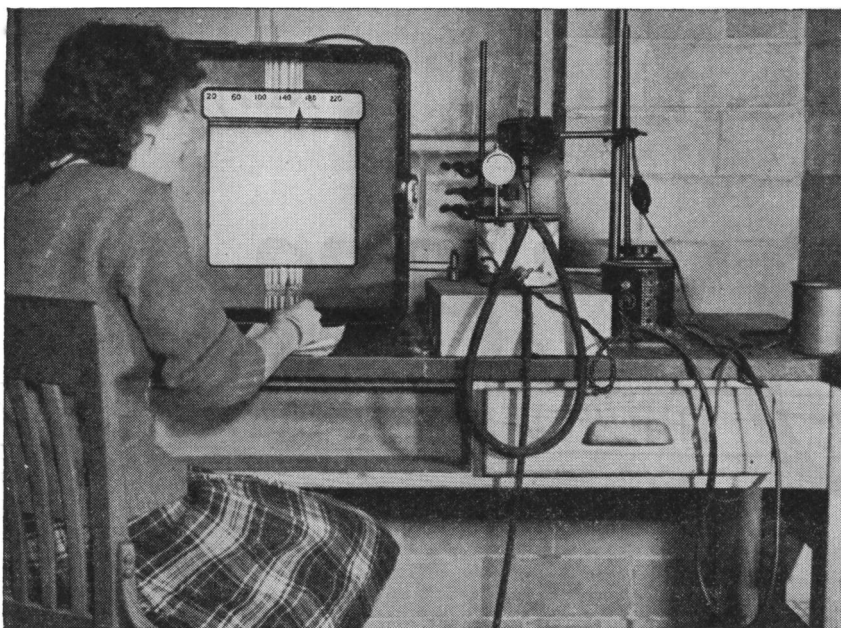


Members of the Executive Committee of Associated Universities, Inc., at their first meeting on the site of Brookhaven National Laboratory, February 28. Left to right: Edward Reynolds, president of AUI and administrative vice-president, Harvard University; I. I. Rabi, executive officer, Department of Physics, Columbia University; J. R. Zacharias, professor of physics, Massachusetts Institute of Technology; P. S. Macaulay, provost, Johns Hopkins University; G. A. Brakeley, vice-president, Princeton University; and Philip M. Morse, director, Brookhaven National Laboratory (see *News and Notes*).

*Published by the*  
AMERICAN  
ASSOCIATION  
FOR THE  
ADVANCEMENT  
OF SCIENCE

An American Bridge to World Science

William Vogt



## Data Are Recorded *Ultra-Promptly* With *Speedomax* Instruments

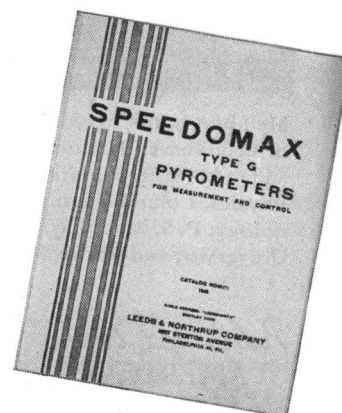
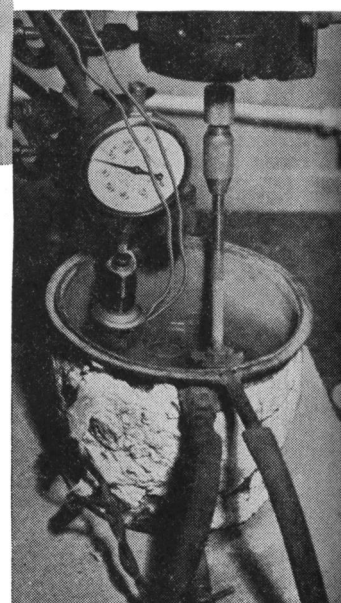
Because speed of measurement is all-important in testing their thermostats, Vernay Laboratories, Inc., has assembled the Speedomax Recorder and other equipment shown above to provide an automatic record, both of temperature and of temperature change.

The bowl at the right of the Speedomax, and in the photo at right, holds the Vernatherm power thermostat under test, and water for heating. The fine-wire thermocouple detects water temperature for the Speedomax.

After using the equipment, Vernay engineers say that Speedomax gives the test the following characteristics:

1. Overall speed of measurement is "several times" greater than with any other method used. Record is automatic.
2. Temperature range can be as wide as desired.
3. Record shows many fluctuations which manual charts miss.
4. Minimum technical skill is required to run the tests.

Speedomax Type G Recorder is described in catalog ND46 (1), sent on request, or an L & N engineer will write or call if you prefer.



*Coming Soon — A New (2nd) Edition*  
*of this Graphic Textbook of Elementary Botany*

**Weatherwax'**  
**PLANT**  
**BIOLOGY**

*New discussions*  
*New illustrations*  
*Thoroughly Up-to-date*

This beautifully illustrated presentation of the principles of botany has been polished and perfected for its *New (2nd) Edition* so that it now gives the very latest practical information on plant life. Nowhere will you find a book that is more suitable for today's one-semester course in elementary botany. Written by one of the ablest botany teachers in the country, the *New (2nd) Edition* is clear, concise and finely balanced. All material is fully within the grasp of the student for whom it is intended. The following points will give you some indication of the remarkably *thorough* way in which Dr. Weatherwax has revised his text—

An entirely new discussion of auxins is given—with their relation to tropisms, flowering, etc.

New material on viruses, penicillin and streptomycin is included in the greatly enlarged coverage of bacteria.

A new section appears on Plant Formations—covering the four major groupings: forests, grasslands, deserts, and tundras.

There is an extended treatment of plant respiration—and the introduction of interesting comparisons with animal respiration and kinetics.

The chapter on stems has been rewritten and reorganized for more logical sequence.

The discussion of heredity now includes a review of plant breeding, its technics, and its importance to agricultural production.

By PAUL WEATHERWAX, Professor of Botany, Indiana University. About 478 pages,  $5\frac{3}{4}" \times 8\frac{3}{4}"$ , with more than 400 illustrations on 200 figures. *Ready soon*

---

---

**W. B. Saunders COMPANY**

---

---

West Washington Square

Philadelphia 5

---

---

**Editor:** Willard L. Valentine (*deceased*)

**Assistant Editor**

Mildred Atwood

**Business Manager**

Theo. J. Christensen

**Publications Committee**

Roger Adams, John E. Flynn, Kirtley F. Mather,  
Walter R. Miles, W. J. Robbins, Malcolm H. Soule

# Science

Vol. 105

No. 2732

Friday, May 9, 1947

## CONTENTS

### An American Bridge to World Science:

*William Vogt* ..... 483

### A New Class of Antifilarial Compounds:

*Arnold D. Welch, et al.* ..... 486

### Nomenclature of Parenteral Proteases:

*John H. Ferguson* ..... 488

### Obituary

William Perry Hay: *James G. Needham* ..... 490

Harris Perley Gould: *George M. Darrow* ..... 490

### News and Notes ..... 491

### Technical Papers

#### Chemotherapeutic Investigations of Cyanine Dyes:

*L. G. S. Brooker and L. A. Sweet* ..... 496

#### Hereditary Obesity and Efficient Food Utilization in

Mice: *G. E. Dickerson and J. W. Gowen* ..... 496

#### A Serological Study of Influenzal Antibodies:

*Seymour S. Kalter, Orren D. Chapman, and*

*Doris A. Feeley* ..... 499

A Bacterial Disease of the Lobster (*Homarus americanus*): *S. F. Snieszko and C. C. Taylor* ..... 500

### In the Laboratory

#### Improved Electrophoresis Cell and Cell Holder:

*Stanley M. Swingle* ..... 501

#### Administration of Micronized Therapeutic Agents by Inhalation or Topical Application:

*George V. Taplin and Fred A. Bryan* ..... 502

#### A Simple Device to Increase Background Contrast in Photomicrography: *Roy J. Pence* ..... 503

#### Crystalline Dihydrate of Calcium Ascorbate:

*Simon L. Ruskin and Alice T. Merrill* ..... 504

### Book Reviews

#### Nieuwe biologische Principes: Inleiding tot de Genese van de Voortplanting: *G. Wolda*.

Reviewed by *H. du Buy* ..... 506

#### Radical surgery in advanced abdominal cancer:

*Alexander Brunschwig*.

Reviewed by *Richard B. Berlin* ..... 506

### Scientific Book Register ..... 506

**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 8060 or 8061. Cable address SCIMAG, Washington, D. C.

**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.