

# SCIENCE

VOL. 85

FRIDAY, FEBRUARY 12, 1937

No. 2198

<i>Scientific Research under the Auspices of the Royal Society: SIR WILLIAM BRAGG</i> .....	165
<i>Scientific Events:</i>	
<i>Germany and the Nobel Prizes; A Journal of "Parapsychology"; The Fire in Lyman Hall of Natural History, Syracuse University; The American Philosophical Society Conference on the Responsibility of Endowments; The Twenty-fifth Anniversary of the Johns Hopkins School of Engineering; Recent Deaths</i> .....	171
<i>Scientific Notes and News</i> .....	174
<i>Discussion:</i>	
<i>Hydroponics—Crop Production in Liquid Culture Media: PROFESSOR W. F. GERICKE. Transmission of the Virus of Equine Encephalomyelitis by Aedes taeniorhynchus: MAJOR R. A. KELSEY. Vitamin C in Pasteurized Milk: DR. W. J. DANN and G. HOWARD SATTERFIELD. Paramecium multimicronucleata vs. Paramecium multimicronucleatum: PROFESSOR JOHN A. FRISCH. Glass Globes Cross the Pacific Ocean: PROFESSOR VINCENT P. GIANELLA</i> .....	177
<i>Reports:</i>	
<i>The Commission on Continental and Oceanic Structure of the International Union of Geodesy and Geophysics: PROFESSOR R. M. FIELD and DR. JNO. A. FLEMING</i> .....	180

<i>Special Articles:</i>	
<i>The Isolation of Tobacco Ring Spot and Other Virus Proteins by Ultracentrifugation: W. M. STANLEY and RALPH W. G. WYCKOFF. Vitamin B<sub>1</sub> a Growth Factor for Higher Plants: DR. JAMES BONNER. The Sparing Effect of Dog Distemper on Experimental Poliomyelitis: DR. GILBERT DALLDORF, MARGARET DOUGLASS and H. E. ROBINSON</i> .....	181
<i>Scientific Apparatus and Laboratory Methods:</i>	
<i>The Electrically Driven Ultracentrifuge: PROFESSOR J. W. BEAMS and PROFESSOR L. B. SNODDY</i> .....	185
<i>Science News</i> .....	6

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.

## SCIENTIFIC RESEARCH UNDER THE AUSPICES OF THE ROYAL SOCIETY<sup>1</sup>

By Sir WILLIAM BRAGG, O.M.

THE PRESIDENT OF THE ROYAL SOCIETY

THREE magnificent gifts have been made during the last few months for the furtherance of research in this country. In May it was announced that Lord Austin had placed a quarter of a million sterling at the disposal of the University of Cambridge to be devoted to the work of the Cavendish Laboratory. More recently still Lord Nuffield has presented to the University of Oxford a million and a quarter for post-graduate research in medical science. This afternoon the council of the Royal Society has accepted on behalf of the society a principal share in the responsibility for the administration of a sum of £200,000 bequeathed by the late Mr. H. B. Gordon Warren. The interest of this money is to be applied to the encouragement of research in metallurgy, engineering, physics and chemistry. The administering committee is to consist of eight members appointed by the society and two by the governors of Williams Deacon's Bank.

<sup>1</sup> From the Anniversary Address given at Burlington House on November 30.

These great gifts are naturally a source of deep satisfaction to the fellows of a society which was founded for the purpose of "improving natural knowledge." The givers are men who are or have been engaged in industry: which fact is itself a source of gratification. It is good to see that practical affairs are in accord with the realization of the vital importance of research.

Lord Nuffield's gift recognizes the value of research for the prevention and cure of disease. The obvious success which has already been attained in this way is sure ground for the expectation of further benefits commensurate with the magnitude of the new effort. Lord Austin's gift is for the promotion of investigations which are at the time devoted mainly to the abstruse problems of the atomic nucleus. The terms of Mr. Gordon Warren's bequest suggest a more immediate contact with industry.

Thus these benefactions differ widely in respect to their immediate purposes: but they all acknowledge the same principle, that the improvement of natural

### NEW SPENCER EQUIPMENT —MUST BE SOLD—

- 1 No. 602 Comparison Microscope
- 1 No. 634 Camera (Rhodium finish)
- 2 No. 370-A Lamps
- 1 No. 647 Adapter
- 1 No. 8762 32mm. Micro-Teleplat

ENTIRE LOT ONLY—\$525.00

1 Folmer Graflex Inspectograph  
Camera, perfect condition, \$15.00


**FORENSIC LABORATORIES, INC.**  
Route C, Box 9, Fort Myers, Florida.

### QUARTZ SPECTROSCOPE WANTED

Spectroscope or monochromator with quartz or fluorite optical parts, give full particulars as to make, size, attachments, price.

**Euthenics Products Corporation**  
Denville, New Jersey

*Easily Adjustable*



## SENSITIVE THERMOREGULATORS

To maintain temperatures to 0.02°C.  
*Consult the New Aminco Catalog*

**AMERICAN INSTRUMENT CO., Inc.**  
8010-8020 Georgia Ave. Silver Spring, Md.

### LAMOTTE MORGAN SOIL TESTING OUTFIT



This outfit makes it a simple matter to determine accurately the pH value or to know "how acid or how alkaline" your soil is. It can be used on soils of any texture or moisture content except heavy clay soil. Complete with LaMotte Soil Handbook.

Price \$10.00 F.O.B. Baltimore, Md.  
LaMotte Chemical Products Company  
418 Light Street, Baltimore, Md.

## MANUAL OF THE SOUTHEASTERN FLORA

ILLUSTRATED

Being Descriptions of the Seed-Plants growing naturally in North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee and Eastern Louisiana

By

JOHN KUNKEL SMALL

**T**HIS Manual replaces the author's Flora of the Southeastern United States, published in 1903 (second edition 1913), for the Southern States east of the Mississippi River. It embodies the results of continued exploration and study, thus bringing up to date our knowledge of this floral region.

The Manual is the only complete illustrated work on the flora of the Southeast by a recognized authority.

In addition to analytical keys to the various plant groups, and descriptions of the orders, families, genera and species, regional or altitudinal and geographic distribution, there are xxii + 1554 pages and over 1500 illustrations, one illustration of a species of each genus.

Price \$10.50 Postpaid

**THE SCIENCE PRESS PRINTING COMPANY**  
LANCASTER, PENNSYLVANIA