

# SCIENCE

Vol. 92

FRIDAY, NOVEMBER 8, 1940

No. 2393

## *The National Academy of Sciences:*

<i>Address of Welcome by the President of the University of Pennsylvania:</i> DR. THOMAS S. GATES	411
<i>Remarks at the Dinner by the President of the Academy:</i> DR. FRANK B. JEWETT	412
<i>Abstracts of Papers</i>	415

## *Obituary:*

<i>Henry McElderry Knowler:</i> PROFESSOR ROSS G. HARRISON. <i>Recent Deaths and Memorials</i>	419
--	-----

## *Scientific Events:*

<i>The U. S. Weather Unit at Harvard University; The Canal Zone Biological Area; The Lalor Foundation; The Administration of the E. R. Squibb and Sons Award; The Permanent Science Fund of the American Academy of Arts and Sciences; The Chemical Exposition</i>	422
--	-----

<i>Scientific Notes and News</i>	424
----------------------------------	-----

## *Discussion:*

<i>On the Theory of the Separation of Isotopes by Thermal or Centrifugal Methods:</i> DR. ARTHUR BRAMLEY. <i>The Standardization of Osmotic Pressure as a Term:</i> PROFESSOR S. C. BROOKS. <i>Equinoxes and Solstices:</i> DR. W. J. HUMPHREYS. <i>Reference Citations and Microfilm:</i> MARTIN D. YOUNG and DR. G. ROBERT COATNEY	427
--	-----

## *Scientific Books:*

<i>Progress by Cooperation:</i> DR. FRANS VERDOORN	430
--	-----

## *Special Articles:*

<i>A Cancerogenic Tissue Extract from Human Sources:</i> DR. PAUL E. STEINER. <i>Radioactive Carbon as a Tracer in the Synthesis of Propionic Acid from CO<sub>2</sub> by the Propionic Acid Bacteria:</i> DR. S. RUBEN and OTHERS. <i>Massive "Acute" Precipitation of Free Sulfathiazole in the Urinary Tract:</i> DR. WILLIAM ANTOPOL, DR. DAVID LEHR and DR. JACOB CHURG	431
--	-----

## *Scientific Apparatus and Laboratory Methods:*

<i>A Modification of Riddle's Method of Prolactin Assay:</i> NAO UYEI and OTHERS. <i>Cellophane Cover Slips and a Method for Mounting:</i> IRENE BUCHOLTZ	435
---	-----

<i>Science News</i>	8
---------------------	---

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. MCKEEN CATTELL and published every Friday by

## THE SCIENCE PRESS

Lancaster, Pa. Garrison, N. Y.

New York City: Grand Central Terminal

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 NATIONAL ACADEMY OF SCIENCES<sup>1</sup>

### ADDRESS OF WELCOME BY THE PRESIDENT OF THE UNIVERSITY OF PENNSYLVANIA

THE University of Pennsylvania has special gratification in extending a hearty welcome to the members of your distinguished body in the annual meeting which you are holding this week within our halls. You bring to our campus a group of scientists and educators who feel a certain definite obligation to the state in the several fields in which they are involved. Your association is one of creative possibilities. As your president pointed out in his remarks at the dinner of the academy a year ago your organization traces its origin into Colonial times, but there is a certain significance to the impetus which the movement gained through its incorporation under the approval of Abraham Lincoln at the time of our Civil War. And one reads with new inspiration these words from

<sup>1</sup> Autumn meeting held at the University of Pennsylvania, Philadelphia, October 28, 29 and 30, 1940.

the first annual report of the academy submitted to Congress a year later:

It is a remarkable fact in our annals that, just in the midst of difficulties which would have overwhelmed less resolute men, the 37th Congress of the United States, with an elevated policy worthy of the great nation which they represented, took occasion to bring the scientific men around them in council on scientific matters, by creating the National Academy of Sciences. Such has been the way in which the public mind has been stirred before in the annals of other countries, leading to the organization of great systems of education, science, art and literature, to be encouraged and perfected when more peaceful and prosperous times recurred.

This historic association augments the significance of the academy by the tradition of a great man, the mere mention of whose name makes us search our hearts with a view of doubling the earnestness of our efforts.

Now that the progress of civilization is imperiled by the unbridled and destructive forces of evil which