

would facilitate a freer, deeper and broader attack on the problems of biologic associations and animal disease than were possible before he built.

Theobald Smith was one of nature's high priests. He believed with Pasteur that science, in obeying the law of humanity, will always labor to enlarge the frontiers of life; and with Goethe, that the first and last thing required of genius is the love of truth.

He built temples to nature and communed in them by whispering questions to her. And nature answered back to this favored son—and he understood.

CHARLES R. STOCKARD

### RECENT DEATHS

DR. WILLIAM HUBERT BURR, consulting engineer, professor of civil engineering at Columbia University from 1893 until his retirement in 1916 with the title emeritus, died on December 13. He was eighty-three years old.

DR. CHARLES FERGUS BINNS, director emeritus of

the New York State College of Ceramics at Alfred University, died on December 4 at the age of seventy-seven years.

DR. FRANK CARNEY, professor of geology and geography at Baylor University, Waco, Tex., died on December 13. He was sixty-six years old.

DR. ALLAN WINTER ROWE, director of research at Evans Memorial Hospital, Boston, formerly president of the Boston School of Physical Education, died on December 6 at the age of fifty-five years.

DRS. JOHN W. CARMACK and Arthur M. Mendenhall, professor of rhinology, otology and laryngology and professor of obstetrics, respectively, at the Indiana University School of Medicine, were killed in an airplane accident on December 5. A memorial meeting was held by the Indianapolis Medical Society on December 7.

ADRIEN DE GERLACHE, Belgium, Arctic and Antarctic explorer, died on December 4. He was sixty-eight years old.

## SCIENTIFIC EVENTS

### BIRD SANCTUARY IN NEW YORK CITY

NINE acres of natural woodland on the Bronx River, between the new Thompson Memorial Rock Garden and the large iris plantation in the New York Botanical Garden, early next spring are to be enclosed by a fence, within which birds may find shelter unmolested and wild flowers and trees of New York will be planted and protected. Birds are to be encouraged to stay over winter by being fed. Entrance to this sanctuary will be permitted only to those whose honorable interest in wild life is assured.

The idea of the sanctuary within the city limits, where birds and wild flowers are particularly precious, was inspired by the sanctuary created by Mrs. James Baird on the grounds of the Scarsdale Golf Club. This area, established only five years ago, when the club threatened to cut down a magnificent stretch of natural woods, has already become a haven for many birds, who naturally appreciate this bit of forest preserved for them. The existing growth of the area has been augmented by the planting of some of the finest of the native shrubs and flowers.

The New York Bird and Tree Club, which is now sending out pleas for new memberships and for additional funds to help in constructing the fence which will mean the establishment of the new sanctuary, hopes to make this project as outstanding a piece of work as it did when it raised \$12,000 a number of years ago for the replanting of orchards which had been devastated by the war in France.

The sanctuary at the Botanical Garden is to be made

a memorial to Mrs. Nathaniel Lord Britton, wife of the founder and former director of the institution and herself an ardent worker for the preservation of wild life. It has been suggested that sections of the fence be dedicated as memorials to others. Mrs. William Wallace Nichols, of Scarsdale, is chairman of the sanctuary.

Eventually, the club aims to establish arboretums in other states, beginning with New Jersey, where Mrs. Thomas A. Edison is to be the chairman. But the immediate endeavor of the 200 members is to raise funds for the New York City sanctuary at The New York Botanical Garden in Bronx Park. The garden itself is offering all possible support and cooperation for this project.

E. D. MERRILL,  
*Director*

### ORNITHOLOGICAL EXPEDITION FROM CORNELL UNIVERSITY

PROFESSOR ARTHUR A. ALLEN, of the Laboratory of Ornithology at Cornell University, will lead an expedition next spring to search out the haunts of rare North American birds in order to preserve for future generations their habits and calls. A. R. Brand, formerly of the American Museum of Natural History, now an associate in ornithology at Cornell, is sponsoring the expedition. P. P. Kellogg, instructor in ornithology, and Dr. George M. Sutton, curator of birds, will make up the rest of the party, which will start in two trucks for the South and West at the end of Feb-

ruary. The trucks will be equipped with cameras and blinds and modern sound-recording equipment so that the voices as well as the actions and appearance of the bird can be recorded on films and preserved for posterity.

Birds that will be studied on this expedition include the ivory-billed woodpecker, the sandhill crane, the limpkin or crying bird, the trumpeter swan, the lesser prairie chicken, the golden eagle and perhaps the whooping crane, rarest of all North American birds and also the largest.

No attempt will be made to collect or disturb in any way these rare species, while every effort and all modern equipment will be utilized in order to bring back permanent records on films of their environment, their habits, their songs, their calls and their companions, so that a habitat group can be set up in the Cornell Museum.

A. R. Brand and P. P. Kellogg are experts in sound recording, and Mr. Brand has recently published a book of bird songs illustrated with phonograph records taken from his films of birds singing in their natural habitats. Professor Allen is known not only for his research studies of birds and game and his popular bird books, but as a camera expert. George Sutton, author and explorer, and one of the leading bird artists of the country, on this expedition will make color sketches of birds from life, so that such evanescent characteristics as color of eyes and bills, which fades soon after death, will be more accurately preserved than has been hitherto possible.

The exact route of the expedition has not yet been worked out in detail, but it is expected that the start will be made in Florida and Louisiana, from which the most recent reports of ivory-billed woodpeckers have come—thence to Texas, Oklahoma, Colorado and Wyoming.

Efforts will be made to record not only the voices of the rarest birds, but also those of the commonest songsters. This has never been done, and Mr. Brand is anxious to get them all transferred to phonograph records, where they will be available to any one interested, and will be valuable adjuncts to all natural history teaching.

#### EXHIBITION AND PUBLICATIONS AT THE CARNEGIE INSTITUTION OF WASHINGTON

An exhibition representing results of the research activities of the Carnegie Institution of Washington was held on December 14, 15, 16 and 17. A list of these exhibits is given below.

##### *The Physical Basis of Heredity:*

- a. The relation between characters, genes and chromosomes: Dr. T. H. Morgan, research associate, and Dr. C. B. Bridges.

- b. The nature of the gene: Department of Genetics.
- c. Chromosome structure and chromosome behavior during the development of the embryo: Department of Embryology.

*Developmental Changes within a Single Hereditary Pattern:* Dr. Hugh H. Darby.

*Improved Embryological Methods:*  
Department of Embryology.

*The Significance of Leaf Pigments:*  
Division of Plant Biology.

*A Simplified Respiration Apparatus for the Rapid Determination of Human Basal Metabolism:*  
Nutrition Laboratory.

*Explorations in Middle America:*

- a. Pottery from Guatemala.
- b. The Maya altar from Quirigua.
- c. Newly discovered cities in Campeche.  
Division of Historical Research.

*Daily Changes in the Compass Direction:*  
Department of Terrestrial Magnetism.

*The Distances of the Stars:*

- a. Direct measurement of distance.
- b. Spectroscopic method.
- c. Stellar systems and receding nebulae.  
Mount Wilson Observatory.

*The Silicates of Ferrous Iron:*  
Geophysical Laboratory.

##### *Publications*

In addition to the exhibits a program of public lectures was given by members of the institute. These were:

December 15: "The Pigments of Leaves," H. A. Spoehr.

"The Silicates of Ferrous Iron," J. F. Schairer.

December 16: "The Physical Basis of Heredity," C. B. Bridges.

"A Simplified Respiration Apparatus for the Rapid Determination of Human Basal Metabolism," F. G. Benedict.

"Uaxactun, the Oldest Maya City," A. V. Kidder.

December 17: "The Distances of the Stars," R. F. Sanford.

"The Daily Changes in Compass Direction," A. G. McNish.

#### THE ANNUAL MEETING OF THE AMERICAN PHYSICAL SOCIETY AND THE SECTION OF PHYSICS

THE thirty-sixth annual meeting (the 196th regular meeting) of the American Physical Society will be held at Pittsburgh on December 27, 28 and 29, in affiliation with Section B—Physics—of the American Association for the Advancement of Science. The general business session will be at 2 o'clock on Thursday afternoon, December 27, at the Carnegie Institute of Technology, after which Professor R. W. Wood, vice-president of the society, will deliver an address on "Some Unusual Optical Problems."