

if she realized during her illness that her most recent group of more than fifty gifted children, gathered exclusively from financially poor homes and now averaging about twelve years of age, must carry on without her. This intense interest in and devotion to the living individual, undistorted by sentimentality, and coupled with the clear-eyed vision of the scientist, of whose tools she was a master, account for the unique scientific validity and practical value of Professor Hollingworth's work.

Professor Hollingworth cherished a deep faith in the power of honest scientific work to promote human welfare. Her faith was well expressed in an address given before an audience of educators and laymen a year ago under the title, "What We Know About the Early Selection and Training of Leaders," from which a paragraph is quoted.

"All this knowledge has been gleaned since 1900, and it is a goodly amount. It is enough to modify education and social-economic procedure radically, if it becomes generally disseminated and accepted. These facts would be epoch-making, if applied to the limit of their power to apply. For a long time people will not believe them, will be afraid of them, will not know what to do with them, but in the end the truth will be admitted and utilized, as everything is finally utilized that has power to bring order to human life."<sup>1</sup>

ARTHUR I. GATES

TEACHERS COLLEGE,  
COLUMBIA UNIVERSITY

## RECENT DEATHS

DR. WILLIAM SNOW MILLER, professor emeritus of anatomy at the University of Wisconsin, died on December 26. He was eighty-one years old.

DR. CHARLES DAVID MARX, professor emeritus of civil engineering at Stanford University, died on December 31. He was eighty-two years old.

DR. GEORGE EMERSON BREWER, professor emeritus of surgery at the College of Physicians and Surgeons of Columbia University and surgical director of the Presbyterian Hospital, New York City, died on December 24. He was seventy-eight years old. In recent years he had been research associate in somatic anthropology at the American Museum of Natural History.

*Nature* records the death of Sir William Prout, authority in tropical medicine, at the age of seventy-seven years; of P. H. Grimshaw, keeper of the department of natural history in the Royal Scottish Museum; of Professor Anton Freiherr von Eiselsberg, the Vienna surgeon, at the age of seventy-nine years; of Dr. Richard I. Meyer, professor of inorganic chemistry at Berlin, at the age of seventy-four years; of Dr. F. Y. Loewinson-Lessing, director of the Petrographical Institute of Moscow, at the age of seventy-eight years, and of Sir Ernest Scott, emeritus professor of history in the University of Melbourne and president in 1939 of the Australian and New Zealand Association for the Advancement of Science, aged seventy-one years.

## SCIENTIFIC EVENTS

### OCCURRENCE OF A DEPOSIT OF TRONA

OCCURRENCE of a thick deposit of trona at a depth of about 1,600 feet on government land in Sweet-water County, Wyoming, is announced by the Geological Survey, Department of the Interior. The mineral, which is composed of sodium carbonate, sodium bicarbonate and water and which contains when pure the equivalent of 70.35 per cent. sodium carbonate, was found in the core of the John Hay, Jr., oil and gas well drilled by the Mountain Fuel Supply Company.

The drill log of the well indicated that a deposit of a crystalline sodium salt streaked with greenish gray clay extended from a depth of 1,590 feet to a depth of 1,612 feet, and that a dark oil shale containing sodium salt crystals extended from a depth of 1,612 feet to a depth of 1,620 feet.

Sections of the core obtained between the depths of 1,590 feet 3 inches and 1,619 feet 9 inches and between 1,653 feet 2 inches and 1,659 feet 3 inches were subsequently identified as trona and analyzed in the

chemical laboratory of the Geological Survey with the following results:

| Depth |                      | Equivalent sodium carbonate<br>per cent. |
|-------|----------------------|------------------------------------------|
| Ft.   | inches to ft. inches |                                          |
| 1590  | 3 1591 6             | 69.27                                    |
| 1592  | 6 1600 4             | 67.38                                    |
| 1617  | 6 1619 9             | 69.05                                    |
| 1653  | 2 1654 8             | 64.45                                    |
| 1654  | 10 1659 3            | 68.64                                    |

The analytical results indicate the presence of relatively pure trona, which is soluble in water. The insoluble material associated with the trona included clay, 3.9 per cent.; shortite, 1.4 per cent., and one fourth of 1 per cent. of pyrite.

The core obtained between the depths of 1,185 feet and 1,820 feet is estimated by the survey to contain about 15 per cent. of the mineral shortite, a double salt of sodium carbonate and calcium carbonate, which mineral was discovered in this well. Pure shortite contains 34.6 per cent. of sodium carbonate.

Two other rare minerals, northupite and pirssonite, have been identified in the core in small quantities. This is the second known occurrence of northupite, a

<sup>1</sup> *The Teachers College Record*, 40: 579, April, 1939.

triple salt of sodium carbonate, magnesium carbonate and sodium chloride, and the third known occurrence of pirssonite, which is a double salt of sodium carbonate, calcium carbonate and water.

The samples were supplied by the company to H. I. Smith; the trona was identified by R. C. Wells, and the shortite, northupite and pirssonite by J. J. Fahey, all of whom are members of the U. S. Geological Survey.

W. C. MENDENHALL,  
*Director*

#### THE FINANCES OF THE AMERICAN CHEMICAL SOCIETY

At the recent meeting of the Board of Directors of the American Chemical Society, according to *Industrial and Engineering Chemistry*, the secretary of the society, Dr. Charles L. Parsons, gave a detailed report covering membership, subscriptions and the income of the society up to November 30, 1939, showing a definite increase in subscriptions to all journals, an increase in membership from 22,187 to 23,505; the election of 2,537 new members in 1939; an increase in student members and corporation members and in student affiliates. He also reported increased subscriptions to the industrial and analytical editions of *Industrial and Engineering Chemistry* and an especially large increase in the *News Edition* from 25,770 to 27,837.

The estimated income and expenditures of the society for 1940 are given as follows:

| ESTIMATED INCOME, 1940             |                 |
|------------------------------------|-----------------|
| Dues .....                         | \$200,000       |
| Subscriptions .....                | 190,000         |
| Back Numbers .....                 | 6,000           |
| Postage .....                      | 17,500          |
| Interest .....                     | 21,000          |
| Interest from Endowment Fund ..... | 3,000           |
| Directory .....                    | 3,000           |
| Royalties .....                    | 3,000           |
| Advertising .....                  | 182,000         |
| Total .....                        | \$625,500       |
| From Reserve .....                 | 45,057          |
|                                    | <hr/> \$670,557 |

| ESTIMATED EXPENDITURES, 1940                                                      |           |
|-----------------------------------------------------------------------------------|-----------|
| <i>Journal of American Chemical Society</i> .....                                 | \$ 68,300 |
| <i>Chemical Abstracts</i> .....                                                   | 195,900   |
| <i>Industrial and Engineering Chemistry</i> including<br>Analytical Edition ..... | 162,336   |
| News Edition .....                                                                | 52,850    |
| News Service .....                                                                | 9,266     |
| Secretary and Business Manager's Office:                                          |           |
| Secretarial .....                                                                 | 19,472    |
| Business Management .....                                                         | 29,208    |
| Treasurer's Office .....                                                          | 9,500     |
| President's Office .....                                                          | 1,500     |

|                               |                 |
|-------------------------------|-----------------|
| Printing Advertising .....    | 57,650          |
| Advertising Development ..... | 13,050          |
| Technologic Monographs .....  | 1,025           |
| Scientific Monographs .....   | 1,000           |
| Back Numbers .....            | 4,000           |
| Local Sections .....          | 24,000          |
| Incidentals .....             | 15,000          |
| General Meetings .....        | 2,000           |
| Directory .....               | 4,500           |
| Total .....                   | <hr/> \$670,557 |

#### THE PERMANENT SCIENCE FUND OF THE AMERICAN ACADEMY OF ARTS AND SCIENCES

INCOME from the Permanent Science Fund, according to agreement and declaration of trust, shall be applied by the American Academy of Arts and Sciences to such scientific research as shall be selected ". . . in such sciences as mathematics, physics, chemistry, astronomy, geology and geography, zoology, botany, anthropology, psychology, sociology and economics, history and philology, engineering, medicine and surgery, agriculture, manufacturing and commerce, education and any other science of any nature or description, whether or not now known or now recognized as scientific, and may be applied to or through public or private associations, societies, or institutions, whether incorporated or not, or through one or more individuals."

Applications for grants under this indenture are considered by a committee of this academy on stated dates only. The next meeting to consider applications will be held on March 1. Applications should be made on special forms furnished by the committee. Correspondence, including requests for application blanks, should be addressed to the chairman of the Committee on the Permanent Science Fund, Professor John W. M. Bunker, Massachusetts Institute of Technology, Cambridge, Mass.

Grants-in-aid from this fund were voted by the academy on October 11, 1939, as follows:

Professor Orlin Biddulph, Department of Botany, State College of Washington, for further studies with radioactive phosphorus in plants, \$200.

Professor Hyman Y. Chase, Department of Zoology, Howard University, for further studies on the effect of ultra-violet upon cell division in marine eggs, \$300.

William G. Clark, instructor, Department of Zoology, University of Minnesota, for assistance, animals and expendable materials in his investigation of the relations between adrenal cortex and membrane functions, \$400.

Dr. Rudolf Hoeber, visiting professor of physiology, University of Pennsylvania Medical School, for compensation of an assistant in a study of the relation between molecular configuration of dye-stuffs and their secretion by the kidney, \$600.

Lewis H. Kleinholz, instructor in biology, Cambridge