

on "Corrosion," in charge of Dr. R. M. Burns, of the Bell Telephone Laboratories, New York City. In addition to technical papers presented at the various sections, one morning session was devoted to "Electrochemical Research."

At the banquet on Thursday, President Raymond R. Ridgway spoke on "Crystal Gazing with War Time Illumination." The award of the Weston fellowship to William E. Roake was announced at the dinner. Mr. Roake will work on the glass electrode under Professor Malcolm Dole at Northwestern University. There was also announced the award of the "Young Authors" prize to Dr. Edward Adler, of the College of the City of New York, who recently received the doctorate of philosophy at Columbia University, for two papers that were presented at the Cleveland convention a year ago on "Photovoltaic Effect" and "Semi-Conductor Photocells and Rectifiers."

Officers of the society elected for the coming year are: *President*, E. M. Baker, University of Michigan; *Vice-presidents*, R. B. Mears, Aluminum Company of America, New Kensington, Pa.; J. A. Lee, *Chemical and Metallurgical Engineering*, New York City; and C. L. Mantell, United Merchants and Manufacturers' Management Corporation, New York City. Dr. Colin G. Fink, of Columbia University, is secretary of the society.

The next meeting will be held in Detroit from October 7 to 10.

THE NATIONAL ACADEMY OF SCIENCES

THE National Academy of Sciences held its regular annual meeting at Washington in the building of the

academy and the National Research Council on April 27 and 28.

The meeting was devoted entirely to matters concerning the present work of the academy, consideration of possible changes in its structure and operation, and with the election of officers and new members. There were no sessions for the presentation of scientific papers and no social functions, except a smoker for members on Monday evening.

Officers and new members of the academy were elected as follows:

Foreign Secretary (to succeed L. J. Henderson, deceased): Walter B. Cannon, Harvard Medical School. *Members of the Council*: A. N. Richards to succeed himself; G. W. Corner to succeed C. A. Kraus.

Foreign associate: Robert K. S. Lim, Peiping Union Medical College.

Members of the academy:

Homer Burton Adkins, University of Wisconsin.

Lyman James Briggs, National Bureau of Standards.

Hans Thacher Clarke, Columbia University.

Ralph Erskine Cleland, Indiana University.

Charles Haskell Danforth, Stanford University.

Albert Einstein, Princeton, N. J., foreign associate of the academy since 1922.

Conrad Arnold Elvehjem, University of Wisconsin.

Michael Heidelberger, Columbia University.

John Gamble Kirkwood, Cornell University.

Paul Dyer Merica, 67 Wall Street, New York, N. Y.

Thomas Midgley, Jr., Worthington, Ohio.

Francis Dominic Murnaghan, the Johns Hopkins University.

John Torrence Tate, University of Minnesota.

Alfred Marston Tozzer, Harvard University.

Ernest Edward Tyzzer, Harvard Medical School.

Selman Abraham Waksman, Agricultural Experiment Station, New Brunswick.

SCIENTIFIC NOTES AND NEWS

THE Herty Medal of the department of chemistry of the Georgia State College for Women at Milledgeville has been awarded to Dr. Townes R. Leigh, dean of the College of Arts and Sciences of the University of Florida, in recognition of "distinguished services as a teacher and of his research in plants and soil." At the presentation of the medal Dr. Leigh will make an address, entitled "The Spirit of Science."

DR. RUDOLPH MATAS, professor of general and chemical surgery emeritus at the Tulane University of Louisiana, has been presented with the Medal of Havana, the highest distinction conferred by that city, in commemoration of the anniversary of the birth of Dr. Carlos I. Finlay, of Havana, Cuba.

AT a recent meeting of the Cleveland Medical Library Association a portrait of Dr. William E. Bruner, professor emeritus of ophthalmology at Western Reserve University, was presented to the

association, and an alcove in the library was named for him.

FORMER students of Professor Arthur S. Watts, chairman of the department of ceramic engineering of the Ohio State University, honored him at the Ohio State Ceramic Alumni dinner in Cincinnati on April 22. At the dinner, which is held each year during the annual meeting of the American Ceramic Society, the establishment of the Arthur S. Watts Fund was announced. This fund, for which \$1,400 has so far been received, will when completed be used as a scholarship or loan fund for students in the department of ceramic engineering at the Ohio State. Professor Watts was presented with a book containing letters of greetings, congratulations and appreciation from more than two hundred of his former students.

AMONG the recipients of honorary degrees conferred

on April 26 at the graduation ceremonies of the University of Pittsburgh were Forest A. Foraker, professor of mathematics since 1912, and J. LeRoy Kay, curator of paleontology at the Carnegie Museum.

DR. PAUL D. WHITE, physician at the Massachusetts General Hospital, Boston, was elected president of the American Heart Association at the recent New York meeting.

OFFICERS of the Grinnell Naturalists Society elected at the annual meeting held at the University of California on April 11 are: *President*, Seth B. Benson, Museum of Vertebrate Zoology, University of California; *First Vice-president*, Robert T. Orr, California Academy of Sciences; *Second Vice-president*, D. F. Tillotson, California Division of Fish and Game; *Recording Secretary*, D. F. Hoffmeister, University of California; *Corresponding Secretary*, Thomas L. Rodgers, University of California; *Treasurer*, Frank A. Pitelka, University of California; *Council Members* (two-year term), C. A. Reed and John Davis, University of California.

MEMBERS of the faculty of Columbia University who will retire this year include Dr. Robert S. Woodworth, professor of psychology; Dr. James H. McGregor, professor of zoology; Dr. W. Benjamin Fite, Davies professor of mathematics; Dr. Horatio B. Williams, Dalton professor of physiology; and Dr. Ernest L. Scott, associate professor of physiology.

DR. J. B. S. NORTON, professor of plant pathology at the University of Maryland, a member of the faculty since 1901, plant pathologist and botanist at the Experiment Station, retired from active duty on April 1. He has been appointed professor emeritus and will continue his work in plant breeding and taxonomy and on the botanical herbarium of the university.

DR. SAMUEL H. MARON, of the Case School of Applied Science at Cleveland, has been promoted to an associate professorship of physical chemistry.

DR. ROYSE P. MURPHY, assistant professor of plant breeding and assistant in agronomy and plant genetics at the University of Minnesota and at the Experiment Station, has been appointed associate professor of agronomy and associate agronomist at Montana College and Station. He takes the place of Dr. A. M. Schlehuber, who resigned recently.

DR. F. R. IMMER, acting vice-director of the Experiment Station of the University of Minnesota, has been made vice-director. He will continue his work as professor of agronomy and plant genetics.

DR. JOHN S. KARLING, professor of mycology at Columbia University, has been granted a Bermuda

biological fellowship for the study of chytrid parasites of marine algae.

DR. NOE HIGINBOTHAM has been appointed plant physiologist to conduct investigations with rice at the Beaumont Substation of the Texas Agricultural Experiment Station during the absence of Lieutenant C. E. Minarik. Dr. Higinbotham held a Seessel research fellowship in botany at Yale University during the past year.

DR. FRANK J. TONE, since 1895 president of the Carborundum Company, Niagara Falls, has retired from the presidency and has been elected to the newly established position of chairman of the board of directors.

DR. L. W. BASS, of the Mellon Institute of the University of Pittsburgh, has been appointed director of the New England Industrial Research Foundation, Inc. He will engage in a systematic study of the manufactures and industrial problems of the New England States. Special emphasis will be placed on wartime requirements and on the furnishing of technical information to small and medium-sized companies.

DR. FRANK P. CULLINAN, senior pomologist in the division of horticultural crops and diseases of the Bureau of Plant Industry, U. S. Department of Agriculture, has been appointed assistant chief of the bureau.

H. W. STRALEY, III, head of the department of geology at Baylor University, Waco, Texas, has resigned. At the end of the spring quarter he will become connected with the Eastern Exploration Company in the Appalachian and Interior oil and coal fields.

DR. GEORGE WILLIAM HUNTER, III, assistant professor of biology at Wesleyan University, has received a captain's commission in the Sanitary Corps, Medical Department of the Army. He is now stationed at the Army Medical School, Washington.

DR. J. S. POTTER, staff member of the department of genetics of the Carnegie Institution of Washington, Cold Spring Harbor, N. Y., has been commissioned a captain in the Army of the United States. He reported on May 5 at headquarters of the Army Air Forces in Washington. Dr. Potter has been granted leave of absence from the Carnegie Institution for the duration of the war.

DR. HARRY B. FELDMAN, of the Worcester Polytechnic Institute, is serving as captain in the Chemical Warfare Service at Edgewood Arsenal, Md.

MEMBERS of the National Patent Planning Commission set up by President Roosevelt are Charles F.

Kettering, *chairman*, Owen D. Young, Chester C. Davis, Edward F. McGrady and Frances P. Gaines.

A SPECIAL committee "to appraise the work of the American Standards Association and to propose a program of development and financing" was authorized at a meeting on December 10, 1941, of the board of directors. Members of the committee have now been appointed as follows: R. E. Zimmerman, president of the American Standards Association, *chairman*; S. Bruce Black, National Association of Mutual Casualty Companies; George S. Case, American Society of Mechanical Engineers; C. L. Collens, National Electrical Manufacturers Association; Howard Coonley, Manufacturers Standardization Society of the Valve and Fittings Industry; H. S. Osborne, of the Telephone Group of the association and *chairman* of the Standards Council; J. C. Parker, vice-president, Consolidated Edison Company, until recently a member of the board of directors and of the council of the association.

THE annual Mellon lecture of the Society for Biologic Research of the School of Medicine of the University of Pittsburgh was delivered on April 23 by Dr. Herbert M. Evans, Morris Herzstein professor of biology and director of the Institute of Experimental Biology of the Medical School of the University of California. He spoke on "Unsolved Problems in Anterior Pituitary Physiology."

DR. E. D. ADRIAN, F.R.S., professor of physiology at Cambridge, is giving a series of lectures under the auspices of the British Council in Buenos Aires.

THE Linaere Lecture of the University of Cambridge was delivered on May 6 by Sir Joseph Barcroft, emeritus professor of physiology. He spoke on "The Onset of Respiration at Birth."

A MEETING of the Optical Society of America will be held at the Massachusetts Institute of Technology, Cambridge, on July 20, 21 and 22. A special feature of this meeting will be a symposium of invited papers on fluorescence and phosphorescence. Sessions will also be held for the reading of contributed papers.

THE tenth annual Summer Conference on Spectroscopy and Its Applications, sponsored jointly by the Optical Society and the Massachusetts Institute of Technology, will also meet from July 20 to 22. Admission will be by reservation as usual. Further information and tickets to the conference can be obtained from Professor George R. Harrison, Massachusetts Institute of Technology, Cambridge. Arrangements have been made to include the program of the Conference on Spectroscopy in the program that will be issued early in July for all members of the Optical Society.

THE American Association of the History of Medicine held its eighteenth annual meeting at Atlantic City on May 3, 4 and 5. The address of the president, Dr. Jabez H. Elliott, of Toronto, was entitled "Observation and Interpretation." Dr. Hugh H. Young, of the Johns Hopkins Medical School, gave an address entitled "Crawford W. Long: the Pioneer in Ether Anesthesia," in commemoration of the one hundredth anniversary of the first application of ether anesthesia.

DISCUSSION

THE METHOD OF CONGRESSIONAL APPORTIONMENT UNDER THE LAW OF 1941

PUBLIC LAW 291 (H.R. 2665), signed by the President on November 15, 1941, directs that future apportionments of representatives in Congress shall be made by the method of equal proportions.

This method, devised in 1921, sets up the following criterion of a good apportionment. Suppose an actual apportionment bill, allotting any given number of seats (say 435) among the several states, is before Congress for consideration; and suppose an attempt is made to improve the bill by transferring a seat from one state to some other state. *Such proposed transfer of a seat from one state to another state should be made if, and only if, the percentage difference between the congressional districts in these two states would be reduced by the transfer.*

For example, Arkansas has a 1940 population of 1,949,387, and Michigan 5,256,106. Under the method

of equal proportions, Arkansas gets 7 seats and Michigan gets 17 seats, so that Michigan's district (309,183) is 11.02 per cent. larger than Arkansas's district (278,484). But if a seat were transferred from Arkansas to Michigan, giving Arkansas 6 and Michigan 18, the Arkansas district (324,898) would be 11.26 per cent. larger than the Michigan district (292,006). Since 11.26 is greater than 11.02, the transfer should not be made.

By following a short-cut process of computation, the Bureau of the Census prepares, after each decennial census, an apportionment table which is certain to satisfy the above test for every pair of states. But any dispute between two states can be settled immediately by a direct application of the test, the only data required being the populations of the two states directly concerned and the number of seats allotted to each.

An extensive Bibliography on Methods of Appor-