

the removal of excess residues before the products are shipped, and these are in very general use, particularly in the apple industry. The present tolerances were adopted on the basis of advice given by a committee of toxicologists called together for consultation about ten years ago. That committee, in recommending the tentative tolerances which are essentially those now in effect, recommended further researches to fill out some of the gaps in scientific knowledge of the subject and determine more conclusively than has heretofore been possible at what figure permanent tolerances for lead and arsenic should be set to guarantee public health protection.

With an increase in appropriation for the enforcement of the Food and Drugs Act granted to the department two years ago by Congress, the Food and Drug Administration organized a Division of Pharmacology under the leadership of Dr. Edwin E. Nelson, who was furloughed by the University of Michigan, for the purpose of selecting competent personnel and formulating a comprehensive program of research on the toxicity of lead and arsenic as well as on other problems. Having completed the organization of the division, Dr. Nelson returned to the University of Michigan on October 1, where he is now professor of pharmacology. He continues to assist the division, however, in a consulting capacity. Dr. Nelson was succeeded as chief of the division by Dr. Herbert O. Calvery, biochemist. The division consists of twelve technically trained men, including eight biochemists and nutritionists, three pharmacologists and one pathologist.

As the first and most important subject for consideration by the new division, Dr. Nelson and Dr. Calvery outlined the research project for the study of the toxicity of lead and arsenic, which will be continued over a period of some years, with the objective of giving a scientific answer to the question as to what are safe tolerances for these poisonous substances.

#### THE ANNUAL MEETING OF THE GEOLOGICAL SOCIETY OF AMERICA

The forty-ninth annual meeting of the Geological Society of America was held at the Netherland Plaza Hotel, Cincinnati, from December 29 to 31.

Nearly six hundred persons registered for the meeting. The scientific program carried one hundred and fifteen titles, and the programs of the associated societies, the Paleontological Society and the Mineralogical Society of America, were also crowded.

The address of the retiring president, Dr. Walter C. Mendenhall, entitled "Outline of the Evolution and Present Status of Geology in North America," was delivered on the evening of December 29.

The annual dinner was held on the evening of the thirtieth. The ninth award of the Penrose Medal of

the Geological Society of America was made at this time, the recipient being Professor Arthur Philemon Coleman, professor emeritus of the University of Toronto. The presentation address was made by Professor George D. Louderback, chairman of the Medal Award Committee.

On the afternoon of December 30, Dr. Isaiah Bowman made a radio address over Station WLW, entitled "Geology in the Evolution of Culture."

The officers of the society for the year 1937, elected at the annual meeting, are as follows:

*President*, Charles Palache  
*Past-President*, Walter C. Mendenhall  
*Vice-Presidents*, W. O. Hotchkiss, Charles Camsell, G. D. Harris, W. S. Bayley  
*Secretary*, Charles P. Berkey  
*Treasurer*, Edward B. Mathews  
*Councilors*, Hoyt S. Gale, Chester R. Longwell, M. M. Leighton, Joseph T. Singewald, Jr., Walter H. Bucher, Russell S. Knappen, E. L. Bruce, Joseph Stanley-Brown, G. F. Loughlin

The following geologists were elected foreign correspondents:

Lucien Cayeux, Paris, France  
 Arthur Holmes, Durham, England  
 Louis de Launay, Paris, France

The following is the list of newly elected fellows:

John Emery Adams, Midland, Texas  
 John Hodgdon Bradley, Jr., Los Angeles, California  
 Carl Colton Branson, Providence, Rhode Island  
 Roland Wilbur Brown, Washington, D. C.  
 Edwin Harris Colbert, New York, N. Y.  
 George Vibert Douglas, Halifax, Nova Scotia  
 Lloyd Wellington Fisher, Lewiston, Maine  
 Paul Pavel Goudkoff, Los Angeles, California  
 Philip Krieger, New York, N. Y.  
 William Christian Krumbein, Chicago, Illinois  
 Ralph Maxwell Leggette, Jamaica, New York  
 Evans Blackmore Mayo, Bishop, California  
 Simeon William Muller, Stanford University, California  
 William Thomas Nightingale, Rock Springs, Wyoming  
 Henry Staats Sharp, New York, N. Y.  
 Victor Timothy Stringfield, Washington, D. C.  
 Charles Vernon Theis, Albuquerque, New Mexico  
 Norman Edward Weisbord, Sumatra, Netherland East Indies  
 Alice Evelyn Wilson, Ottawa, Canada

#### THE AWARD OF THE PERKIN MEDAL OF THE SOCIETY OF CHEMICAL INDUSTRY

The William H. Perkin Medal of the American Section of the Society of Chemical Industry was presented to Thomas Midgley, Jr., vice-president of the Ethyl Gasoline Corporation, at a meeting on January 8 at the New York Chemical Club.

The medal was presented to Mr. Midgley "for dis-

tinguished work in applied chemistry, including the development of antiknock motor fuels and safe refrigerants." The presentation speech was made by Professor Marston T. Bogert, of Columbia University, past president of the American Chemical Society, of which Mr. Midgley is now chairman of the board of directors. Dr. Robert E. Wilson, vice-chairman of the Pan-American Petroleum and Transport Company, spoke on "The Life and Accomplishments of the Medallist." Mr. Midgley gave an account of his work in his address of acceptance, which was entitled: "From the Periodic Table to Production," in the course of which he paid the following tribute to his associates:

Charles F. Kettering was a primary factor in solving the two problems for which I am rewarded. Without his guiding genius, faith, patience and financial support it is quite likely that neither Ethyl gasoline nor the Freon refrigerants would be in existence to-day. The assistance of T. A. Boyd and Carroll A. Hochwalt in the development which led to the discovery of the utility of tetraethyl lead in motor fuels can not be overemphasized. Albert A. Henne deserves fully as much credit as I do for developing the organic fluorides as refrigerants.

After graduating from the Sibley College of Mechanical Engineering of Cornell University, Mr. Midgley engaged in private research in tires until 1914, when he became superintendent of the Midgley Tire and Rubber Company, Lancaster, Ohio. Since 1920 he has worked in the General Motors laboratories in association with Mr. Kettering. He is vice-president

of Kinetic Chemicals, Inc., and has contributed widely to the knowledge of the properties of natural and synthetic rubbers and methods of making better synthetic rubbers.

He is a fellow of the American Association for the Advancement of Science and a member of the American Institute of Chemical Engineers, the Society of Automotive Engineers, the Society of Military Engineers, the American Public Health Association, the Association of Cornell Engineers, and Sigma Xi, Phi Kappa Phi and Atmos. He has received both the Longstreth and Nichols Medals in recognition of his scientific work, and is the author of nearly fifty technical papers and the holder of more than forty patents.

Former Perkin medalists besides Sir William Perkin were: J. B. F. Herreshoff, Arno Behr, E. G. Acheson, Charles M. Hall, Herman Frasch, James Gailey, John W. Hyatt, Edward Weston, L. H. Baekeland, Ernest Twitchell, A. J. Rossi, F. G. Cottrell, Charles F. Chandler, Willis R. Whitney, William M. Burton, Milton C. Whitaker, Frederick M. Becket, Hugh K. Moore, R. B. Moore, John E. Teeple, Irving Langmuir, E. C. Sullivan, Herbert H. Dow, Arthur D. Little, C. F. Burgess, George Oenslager, G. O. Curme, Jr., Colin G. Fink, Warren K. Lewis.

Dr. Vail, chairman of the American Section of the Society of Chemical Industry, presided at the meeting, in which the New York Section of the American Chemical Society participated. The event was preceded by a dinner in honor of Mr. Midgley.

## SCIENTIFIC NOTES AND NEWS

DR. RICHARD P. STRONG, professor of tropical medicine, Harvard Medical School, has been elected an honorary fellow of the Royal Society of Tropical Medicine and Hygiene, and has been invited to give the first Chadwick lecture in London during the present month.

DR. WILDER DWIGHT BANCROFT, professor of physical chemistry at Cornell University, has been appointed visiting professor of chemistry at Bowdoin College on the Tallman Foundation.

PROFESSOR G. A. MILLER, of the University of Illinois, was made an honorary life member of the Mathematical Association of America during its recent meeting at Duke University.

PRESIDENT ISAIAH BOWMAN, of the Johns Hopkins University, was granted the Distinguished Service Award of the National Council of Geography Teachers at the Syracuse meeting on December 30, in recognition of his contributions to geographic education.

DR. EDGAR ANDERSON, professor of botany at Wash-

ington University, St. Louis, and geneticist at the Missouri Botanical Garden, has been awarded the Order of the Yugoslavian Crown in recognition of his study of Balkan plants.

At a ceremony at the University of Michigan, presided over by President Alexander G. Ruthven, on September 28, a portrait of Dr. Albert M. Barrett, director of the Psychopathic Hospital, was presented to the university by friends, alumni and associates of Dr. Barrett. It is the work of John Koch, of Ann Arbor.

THE twenty-fifth anniversary of the appointment of Professor S. O. Mast to the faculty of the Johns Hopkins University was celebrated at a dinner given in his honor at the Morton Hotel in Atlantic City on December 29. About forty of his present and former students and several of his colleagues and old college friends were present, as well as Mrs. Mast and two of their daughters. An oil portrait of Dr. Mast done by Hans Schlereth, of Washington, was unveiled. In addition, a bound volume of testimonial letters and a