at the Johns Hopkins University, director of the Laboratory of Endocrine Research, died on May 26 at the age of eighty-one years.

DR. ELMER PETER KOHLER, Sheldon Emery professor of organic chemistry at Harvard University, died on May 24 at the age of seventy-two years.

Dr. A. E. Aldous, professor in the department of agronomy of the Kansas State College of Agriculture and Applied Science, died suddenly on May 5 at the age of fifty-one years.

MERRITT W. HARPER, professor of animal husbandry in the New York State College of Agriculture at Cornell University, died on May 10 at the age of sixty years.

Dr. Sinclair Smith, physicist at the Mount Wilson Observatory, died on May 18, at the age of thirty-nine years.

Dr. Fred Baker, the conchologist, died in San Diego on May 16 in his eighty-fourth year. His collection of shells, said to be the largest privately owned collection in the West, will go to the San Diego Society of Natural History, of which he was vice-president.

Dr. WILLIAM EAGLE CLARKE, a leading British ornithologist, formerly keeper of the natural history department of the Royal Scottish Museum in Edinburgh, died on May 12 at the age of eighty-five years.

Dr. Max Neisser, professor of hygiene and bacteriology at Frankfort-on-Main, has died at the age of sixty-nine years.

SCIENTIFIC NOTES AND NEWS

AT a meeting of the Royal Society on May 19 Dr. Niels Nørlund, professor of mathematics at the University of Copenhagen and director of the Danish Geodetic Institute, was elected a foreign member. The election of Professor John Jacob Abel, director of the Laboratory of Endocrine Research at the Johns Hopkins Medical School, was announced last week. Dr. Abel has since died at the age of eighty-one years.

Dr. Wendell Meredith Stanley, of the Rocke-feller Institute, Princeton, N. J., in recognition of his achievement in isolating crystalline forms of the filterable viruses, has been awarded the Rosenberger Medal of the University of Chicago, founded by Mr. and Mrs. Jesse L. Rosenberger, "for distinguished achievement in the advancement of learning or for notably great service in the promotion of human welfare."

The Lamme Medal "for meritorious achievement in engineering" will be presented at the commencement exercises of the Ohio State University to Professor Emeritus James E. Boyd, for twenty-eight years chairman of the department of mechanics.

Dr. H. H. Rusby, emeritus dean of the New York College of Pharmacy, Columbia University, has been awarded the Flückinger gold medal for 1937 by the National German Apothecary Association.

DR. JOHN W. TURRENTINE, president of the American Potash Institute, Washington, D. C., has been awarded the gold medal of the Académie d'Agriculture de France. Dr. Turrentine was an official delegate of the United States at the tenth International Congress of Chemistry recently held in Rome.

Dr. CHARLES E. COATES, dean emeritus of the State University of Louisiana, was presented on May 14 with the Herty Medal in recognition of his research work with sugar. The medal is presented annually by the Chemistry Club of the Georgia State College for Women "to the southern scientist selected for outstanding accomplishments in science." It was established in honor of Dr. Charles H. Herty, who was one of the speakers at the presentation.

THE Council of the Physical Society, London, has awarded the fifteenth Duddell Medal to Professor Hans Geiger, of the University of Tübingen. The medal is awarded to "persons who have contributed to the advancement of knowledge by the invention or design of scientific instruments, or by the discovery of materials used in their construction."

Industrial and Engineering Chemistry reports that in recognition of their public services the following chemists have been elected to the National Institute of Social Sciences: Jerome Alexander, Charles H. Herty, H. E. Howe, James L. Howe, D. D. Jackson and E. R. Weidlein.

THE University of Montreal has conferred the doctorate of science on Dr. M. L. Fernald, Fisher professor of natural history at Harvard University. The presentation was made preceding a course in botany given at the university by Dr. Fernald.

Hamline University, St. Paul, Minn., will confer on June 6 the honorary degree of doctor of science on Dr. Mary B. Stark, professor and head of the department of histology and embryology at the New York Medical College and Flower Hospital.

Dr. H. W. Wade, medical director of the Leonard Wood Memorial in the Philippine Islands, was the guest of honor on May 1 at a dinner given by the Medical Advisory Board of the memorial at the Union

League Club. The speakers included General Frank R. McCoy, Surgeon-General Thomas Parran, Dr. Wilbur A. Sawyer, Perry Burgess and Dr. Wade.

THE staff of Mount Sinai Hospital, New York City, gave a dinner on June 2 to Dr. Israel Strauss in celebration of his sixty-fifth birthday and "in honor of his many years of distinguished service in the hospital and the profession."

Professor Edwin F. Stimpson, member of the department of physics at the University of Kansas since 1901, is retiring at the end of this academic year on account of ill health.

Dr. William Jepson, now in his fifty-second year of medical practice in Sioux City, Iowa, has been named professor emeritus of surgery in the Medical College of the University of Iowa. Dr. Jepson was head of the department of surgery from 1902 to 1912.

Professor John C. Graham, organizer and for twenty-seven years head of the department of poultry husbandry at the Massachusetts State College, will retire from active service on June 30.

Dr. Arthur N. Alling, since 1902 clinical professor of ophthalmology at the Yale School of Medicine, with which he has been associated for forty-five years, will retire this year. Dr. Alling has served as attending surgeon and ophthalmologist-in-chief at the New Haven Hospital and the New Haven Dispensary since 1914. As consultant in ophthalmology he will continue his connections with these institutions.

Dr. Harry Miles Johnson has been appointed professor and head of the department of psychology in the College of Arts and Sciences of Tulane University. He will succeed Dr. John M. Fletcher, who will retire at the close of the current session.

DEAN GEORGE D. STODDARD, of the Graduate College of the State University of Iowa, has been made head of the department of psychology. He also is director of the Iowa Child Welfare Research Station.

Promotions in the science departments at the University of New Hampshire have been announced as follows: Dr. Clark L. Stevens, professor of forestry, and Dr. George W. White, professor of geology. Dr. O. T. Zimmerman has been appointed associate professor of chemical engineering; Dr. Lloyd C. Fogg, associate professor of zoology; Dr. James A. Funkhouser and Dr. Charles M. Mason, associate professors of chemistry, and Dr. Edward B. Atkinson, assistant professor of chemistry.

Professor N. F. Mott, of the University of Bristol, England, will teach a special course in the physics of metals in the summer session of the University of Pittsburgh from July 5 to August 12. Associated with him will be Dr. F. Seitz, of the General Electric Company; Dr. John Bardeen, of Harvard University; Dr. Francis Bitter, of the Massachusetts Institute of Technology, and Dr. Foster C. Nix, of the Bell Telephone Laboratories, New York.

Dr. W. L. Bragg, Cavendish professor of experimental physics in the University of Cambridge, has been elected professor of natural philosophy in the Royal Institution, London, in succession to the late Lord Rutherford. Professor Bragg is the son of Sir William Bragg, Fullerian professor of chemistry and director of the Royal Institution.

THE Board of Regents of the University of the State of New York has appointed Malcolm B. Galbreath, assistant in agricultural education at Cornell University, to be director of the New York State School of Agriculture at Morrisville, effective on July 1. Mr. Galbreath will succeed I. M. Charlton.

Walter J. Moxom, formerly first assistant, has been made chief of the St. Louis Office of the Weather Bureau. He succeeds Roscoe Nunn, who has been connected with the bureau for forty-seven years.

RONALD F. LEE, acting assistant director of the Branch of Historic Sites of the National Park Service, has been appointed chief of the branch.

Dr. Pierre Lecomte du Noüy, director of advanced studies at the Sorbonne, Paris, formerly associate member of the Rockefeller Institute for Medical Research, arrived in New York City on May 24. He plans a study of the organization of scientific research in the United States.

Dr. T. G. Yuncker, professor of botany at DePauw University, assisted by some of his students, is spending the months of July and August making collections in the mountainous regions of northern Honduras.

GERALD FITZGERALD, of the U.S. Geological Survey, sailed from Seattle on May 14 to make aerial cartographic photographs of a tract in the Tanana Valley, Alaska, from Fairbanks to the international boundary. He was accompanied by J. M. Haynie, detailed from the Hydrographic Office of the Navy Department to assist in the Tanana project, and by J. Mark Holmes, detailed from the Topographic Branch to make topographic surveys of the western part of Chichagof Island and adjacent islands. Fred H. Moffit left Washington on May 18 to make geologic and mineral resources investigations in a portion of the Alaska Range at the head of Copper River, Alaska—an area that recently has been mapped topographically by the survey. T. W. Ranta left on May 20 to make topographic surveys near Nabesna in the Copper River region, Alaska.

Official delegates from the United States to the second International Congress of Anthropological and Ethnological Sciences which opens on August 1 in Copenhagen are: Frans Blom, director of the Middle American Research Institute at Tulane University; Henry B. Collins, Jr., U. S. National Museum; Dr. Henry Field, Field Museum of Natural History; Dr. Aleš Hrdlička, U. S. National Museum, and Dr. Sylvanus G. Morley, Carnegie Institution of Washington.

DR. FRANCIS E. LLOYD, professor of botany, emeritus, McGill University, delivered on May 21 the annual Phi Beta Kappa—Sigma Xi lecture at the University of Oregon. His subject was "The Carnivorous Plants of the World."

The eighth International Congress of Industrial Accidents and Occupational Diseases is to be held at Frankfort-on-Main from September 26 to 30. The president of the congress is Professor Martineck, of the Prussian Ministry of Labor. The secretary-general is M. Bauer, adviser of the same ministry. It is expected that a group of members of the Permanent Committee for America will attend the congress. Dr. R. R. Sayers, of the U. S. Public Health Service, is president of this group.

Nature states that the third International Congress of Tropical Medicine, which was to have been held at Amsterdam, and the third International Malaria Congress, which was to have been held at Madrid, had both been postponed, but that a joint congress will be held at Amsterdam from September 24 to October 1 under the presidency of Dr. G. Gryns. Further information can be obtained from the Secretary, Mauritskade 57, Amsterdam.

The twenty-first annual meeting of the American Society of Ichthyologists and Herpetologists will be held from July 20 to 23. Sessions will be held on Wednesday and Thursday under the auspices of the Museum of Vertebrate Zoology, in the Life Sciences Building of the University of California. A trip to Stanford University is planned for Friday, and a visit to the Fleishhacker Zoological Garden and to the California Academy of Sciences, including the Steinhart Aquarium, will be made on Saturday. Titles and abstracts of papers to be presented should be sent to Dr. Jean M. Linsdale, Museum of Vertebrate Zoology, Berkeley, California, before June 20. The American Society of Mammalogists will meet in Berkeley at the same time.

WITH appropriate ceremonies planned and supervised by a committee of undergraduates, the cornerstone of the new physical science building at Kansas State College was laid on April 20. Speakers included Governor Walter A. Huxman, of Kansas; Dr. J. T. Willard, formerly head of the department of

chemistry, now college historian; Dr. H. H. King, head of the department of chemistry, and Professor J. O. Hamilton, of the department of physics.

THE Marine Laboratory of the University of Maine at Lamoine will hold its sixth session under the direction of the department of zoology, from July 6 to August 12, offering a course in marine invertebrate zoology to graduate and undergraduate students. The facilities of the laboratory have been greatly improved during the past year. Dr. Edward G. Reinhard, professor of biology at the University of Scranton, and Dr. B. R. Speicher, assistant professor of zoology, University of Maine, will have charge of instruction. Six academic credits, graduate and undergraduate, are given for satisfactory completion of the course.

At the fourteenth scientific sessions of the American Heart Association, to be held at the Sir Francis Drake Hotel, San Francisco, on June 10 and 11, Dr. William J. Kerr, of San Francisco, will deliver the presidential address on "Relief of Pain in Angina Pectoris." Dr. Carl J. Wiggers, of Western Reserve University, will give the annual address, his subject being, "The Dynamics of Hypertension," and Dr. Eliot R. Clark, of the University of Pennsylvania, will give the George Brown Memorial Lecture on "Certain Aspects of the Behavior of Peripheral Blood Vessels as Observed Microscopically in the Living Mammal."

THE Buffalo Museum of Science was this year's host to the New York State Geological Association at their fourteenth annual meeting on May 13 and 14. The program consisted of a field trip on May 13 to Eighteen Mile Creek to study the Devonian section and to observe the shores of glacial Lakes Warren and Whittlesey; the annual dinner at the Buffalo Trap and Field Club on Friday evening, and a field trip to the Niagara Gorge on Saturday, May 14, to study the Silurian stratigraphy and the Gorge's history. Saturday evening the exhibits and work rooms of the museum were open for the inspection of the geologists. The program was in the charge of the president, Irving G. Reimann, curator of geology at the Buffalo Museum of Science. Speakers at the dinner were Chauncey J. Hamlin, president, the Buffalo Society of Natural Sciences; Professor George B. Cressey, chairman of the department of geology, Syracuse University; Dr. Harold L. Alling, professor of geology, the University of Rochester; Irving G. Reimann, association president, and Dr. Robert Wesley Brown, professor of geology, St. Lawrence University, presidentelect. Dr. Richard F. Morgan, of the University of Buffalo, was toastmaster. It was voted to hold next year's meeting in the Adirondack area. Dr. Robert Wesley Brown was elected president, and Dr. J. S. Brown, geologist of the St. Joseph Lead Company, Edwards, N. Y., was chosen as secretary. In addition to the members from New York State, there were delegates from Pennsylvania, New Jersey, Massachusetts, New Mexico and Ontario.

THE Massachusetts Institute of Technology has received a gift of \$647,700 from Dr. Godfrey L. Cabot, of Boston. The income from the gift, which will be known as the Solar Energy Fund, will be devoted specifically to a search for direct methods of converting the sun's radiant energy into useful power or storing such energy for future use. These investigations will be continued for at least fifty years, after which the fund may be used for such other purposes as the corporation of the institute may select. To assist in the direction of these investigations, the following committee has been appointed: Professors Hoyt C. Hottel, department of chemical engineering; Arthur C. Hardy, department of physics; Ernest H. Huntress, department of chemistry; Arthur R. von Hippel, department of electrical engineering, and George W. Swett, department of mechanical engineering.

On March 25 and 26 the new Building for Biological Sciences at the University of Oklahoma was dedicated. This building was made possible through a gift of \$204,000 from the PWA authorities, and was

equipped by a special appropriation of approximately \$47,000 made by the Legislature of Oklahoma. Dr. Lorande Loss Woodruff, protozoologist of Yale University, was a special guest for the occasion, delivering two lectures, "Paramecium, Past and Present" and "Philosophers in Little Things." The building was officially dedicated by President William Bennett Bizzell, of the university, who spoke on "The University, Biology and the State." At the luncheon which was given for guests of the university, representing twenty-four institutions of higher learning, the following short addresses were given: "A Biologist Views Teachers and Teaching," by Dr. Roy W. Jones, of the Central State Teachers College at Edmond: "A Biologist's Land of Opportunity," by Dr. J. Clifford Shirley, of Phillips University, Enid, and "An Economic Entomologist Afield in Oklahoma," by Dr. F. A. Fenton, Oklahoma A. and M. College, Stillwater.

A SEPARATE department for the study of chemical engineering has been established by the trustees of Lafayette College and will probably open next September. The department will be centered in the mechanical engineering building. Alterations made there will provide for laboratory and classroom facilities. It is expected that apparatus will be constructed during the summer months, \$4,000 having been granted by the trustees for this purpose.

DISCUSSION

SCIENCE AND GENERAL EDUCATION

In establishing a Committee on the Improvement of Science in General Education, the American Association for the Advancement of Science has given substantial evidence of its interest in a problem of the most serious importance to the general public. A brief account of the organization of this committee has already appeared (Science, May 20), and a statement from the officers of the committee may be expected shortly; meanwhile some additional discussion seems justified by the hope that it may lead to more widespread interest. As one of the members of the committee, I am venturing some remarks.

The task which confronts this committee is that of doing what it can to improve the science instruction of the great mass of people who do not go into science as a profession. To accomplish anything towards this end will require cooperation on the part of the whole scientific fraternity and in particular the teachers of science.

It should be made clear at the outset that the committee has no warrant for thinking that it will discover any panacea. The problem is too complex and involved for that. There is, nevertheless, good reason to believe that much can be accomplished through

arousing interest in the problem, providing a center for the collection and comparison of information and making known to teachers the results of such work. The experimental study on which this assumption rests will be referred to below.

There is increasing evidence that the problem of adequate science instruction for the bulk of our population is not confined to the upper levels of the educational system. Nevertheless, it seems most practical at this time for the committee to proceed with the problem as it exists in colleges and universities offering "Liberal Arts" courses in the sciences. The difficulty has been that, even in this type of course, the interests of future specialists usually dictate the selection of subject-matter and the mode of its presentation, even though there may be few if any such students present. This is in part simply a natural but regrettable consequence of the type of training which college and university teachers uniformly receive.

A number of attempts have been made to remedy this situation by providing an entirely different sort of course for the general student. These courses have frequently been launched under the lukewarm approval of the scientists themselves. We need very much to know whether the first scientific training of future specialists and non-specialists in the same