

American Society of Civil Engineers—Alonzo J. Hammond, George S. Davison, Arthur S. Tuttle, Daniel W. Mead.

American Institute of Mining and Metallurgical Engineers—Frederick M. Becket, Howard N. Eavenson, Henry A. Buehler, John M. Lovejoy.

American Society of Mechanical Engineers—A. A. Potter, Paul Doty, Ralph E. Flanders, William L. Batt.

American Institute of Electrical Engineers—John B. Whitehead, Arthur W. Berresford, A. M. MacCutecheon.

RECENT DEATHS AND MEMORIALS

DR. WILL SCOTT, professor of zoology at Indiana University, died on October 17 at the age of sixty years. Dr. Scott is known for his work in Indiana caves and lakes. He was a past president of the Indiana Academy of Science.

DR. LOUIS GROSS, director of the laboratories of Mount Sinai Hospital, New York City, was killed in the United Air Lines plane disaster in northeastern Utah on October 17. He was forty-two years old.

COLONEL DAVID ALEXANDER LYLE, retired engineer

and inventor, died on October 12 at the age of ninety-two years.

DR. HAROLD BENJAMIN FANTHAM, Strathcona professor of zoology at McGill University, died on October 26 in his sixty-second year.

SIR JOHN THOMSON-WALKER, British surgeon, a specialist on urological diseases, died on October 6 at the age of sixty years.

A MEMORIAL service was held at Cornell University on October 18 in honor of the late Professors Cyrus R. Crosby and Peter W. Claassen. The speakers included Professor James G. Needham, emeritus, and Professor Liberty Hyde Bailey, emeritus.

Nature states that J. W. O. Hamilton, who has offered sums to found prizes for radio research at the Universities of Cambridge, Melbourne, Sydney and Tasmania, has written to the vice-chancellor of the University of Cambridge, offering the sum of £500 for this purpose. Mr. Hamilton has expressed a desire that the names of James Clerk Maxwell and Sir Ambrose Fleming, both Cambridge men, should be associated with the prize.

SCIENTIFIC NOTES AND NEWS

AN Associated Press dispatch dated from Stockholm on October 28 reports that Dr. Albert von Szent-Györgyi, professor of medicine at Szeged University, Hungary, has been awarded the Nobel Prize for Physiology and Medicine for 1937, in recognition of "his discoveries on the biological process of combustion, especially in relation to vitamins A and C."

DR. SIMON FLEXNER, George Eastman visiting professor at the University of Oxford, has been elected to a professorial fellowship at Balliol College. Others elected were Professor J. A. Gunn, director of the Nuffield Institute of Medical Research, and Professor J. H. Burn, who succeeded Professor Gunn in the chair of pharmacology.

DR. LOUIS ALAN HAZELTINE, professor of mathematics at the Stevens Institute of Technology, at the annual dinner in New York City of the Radio Club of America on October 29 was presented with the Armstrong Medal and citation for 1937 "in recognition of his outstanding contributions to the art and science of radio communication." He is the first to receive the award, which was established by the Radio Club in 1935 in honor of the achievements of Major Edwin H. Armstrong, professor of electrical engineering at Columbia University.

THE Cuban Order of Carlos Manuel de Cespedes has been conferred on Van Campen Heilner, field representative of the department of ichthyology of

the American Museum of Natural History, in recognition of his friendship for the Cuban people and for the work that he has done to promote game fishing in that country.

HENRY R. LUCE, president of Time, Inc., was presented with the first Clement Cleveland Medal of the New York City Cancer Committee of the American Society for the Control of Cancer at a dinner given on October 21 at the Town Hall Club. The medal, awarded for "outstanding work during the year in the campaign to control cancer," was in recognition of the "March of Time" sequence on "Conquering Cancer," and for articles on the subject in *Time*, *Life* and *Fortune*.

THE gold medal of the Medical Association of South Africa (affiliated with the British Medical Association), awarded for "meritorious services rendered to the profession," has been given to Dr. William Thomas Frederick Davies, of Natal, president of the South African Medical Council.

AT the thirty-third annual meeting of the directors of the National Association of Audubon Societies, held in New York City on October 26, Dr. Robert Cushman Murphy, of the American Museum of Natural History, was elected president, to succeed Kermit Roosevelt. At the annual meeting of the Long Island Biological Association, held at Cold Spring Harbor on Septem-

ber 17, Dr. Murphy was elected a member of the board of directors for a four-year period.

At the Chicago meeting of the American College of Surgeons Dr. Howard C. Naffziger, professor of surgery at the Medical School of the University of California, was elected president for 1938-39; Dr. Vernon C. David, of Chicago, was elected vice-president, and Dr. Fraser B. Gurd, of Montreal, second vice-president.

D. ROBERT YARNALL, chief engineer of the Yarnall-Waring Company of Philadelphia, has been elected president of United Engineering Trustees, joint agency of the four founder societies of civil, mining and metallurgical, mechanical and electrical engineers. Mr. Yarnall succeeds George L. Knight, vice-president of the Brooklyn Edison Company.

At the meeting of the Section of Psychology of the New York Academy of Sciences on October 18, Dr. Irving Lorge, of Teachers College, Columbia University, was elected chairman to succeed Dr. Jack Dunlap, of the University of Rochester, and Dr. Anne Anastasi, of Barnard College, was elected secretary. Dr. George Hartmann, of Teachers College, Columbia University, addressed the section on "The Organization of Attitudes." Dr. Karl Lashley, of Harvard University, will deliver a lecture on "The Neurology of Vision" at the meeting to be held on November 15 at 8:15 P. M., at the American Museum of Natural History. Immediately following the lecture, there will be a reception in honor of Dr. Lashley.

DR. CHARLES H. TOWNSEND, director of the New York Aquarium, retired on November 1, the thirty-fifth anniversary of his appointment in 1902. Dr. Charles M. Breder, Jr., research associate, has been appointed acting director of the aquarium.

DR. CARL LUCAS ALSBERG, formerly director of the Food Research Institute of Stanford University and previously chief of the U. S. Bureau of Chemistry, has been appointed director of the Giannini Foundation of the University of California in succession to Professor H. R. Tolley, now administrator of the Agricultural Adjustment Administration. Dr. Alsberg will without remuneration act as adviser to the Food Research Institute of Stanford University, in order that the parallel studies being made of agricultural economics in the state by the two institutions may be given the greatest possible impetus. Dr. Alsberg took up his new work on October 19.

PROFESSOR P. J. PARROTT has been made director of the New York State Experiment Station at Geneva, effective on January 15 upon the retirement of Dr. U. P. Hedrick, present director. Professor Parrott has been vice-director of the station since 1928.

FACULTY changes at the University of Pennsylvania, as reported in the *Journal* of the American Medical Association, include: Dr. Earl D. Bond, professor of psychiatry in the Graduate School of Medicine, has been appointed vice dean, and Dr. Detlev W. Bronk, professor of neurology and Eldridge Reeves Johnson professor of biophysics, has been appointed vice dean in neurology. Dr. Leon Herman has been appointed professor of urology in the Graduate School. Dr. John H. Jopson retires with the rank of emeritus professor of surgery.

DR. HOWARD J. SHAUGHNESSY, formerly director of laboratories of the Illinois State Board of Health at Springfield, has resigned to become associate professor of bacteriology and public health at the School of Medicine and Hospitals of the University of Colorado at Denver.

TEMPORARY reorganization of the administration of the College of Engineering of Cornell University, made necessary by the death of Dean Herman Diederichs, has been made as follows: Professor S. C. Hollister, acting dean of the college; Professor Paul M. Lincoln, acting director of electrical engineering, and Professor William N. Barnard, acting director of mechanical engineering; Professor Paul H. Underwood, acting director of civil engineering.

THE Philadelphia College of Pharmacy and Science has appointed Dr. Howard S. Kaltenborn, of the University of Michigan, assistant professor of mathematics, and Dr. Donald P. Le Galley, of the University of California, assistant professor of physics.

DR. GEORGE M. SAUNDERS, for the past five years head of the Yaws Commission in the British West Indies of the Rockefeller Foundation, has been appointed by the Leonard Wood Memorial director of a newly established department to make a study of the environmental factors affecting lepers.

DR. A. BAIRD HASTINGS, Hamilton Kuhn professor of biochemistry in the Harvard Medical School, has been appointed a member of the Medical Fellowship Board of the National Research Council for the period ending June 30, 1941, to complete the unexpired term of membership of Dr. Walter B. Cannon, who has resigned.

PROFESSOR J. H. GADDUM, professor of pharmacology at University College, has been appointed director of the pharmacological laboratories of the College of the Pharmaceutical Society in succession to Dr. J. H. Burn, who was recently appointed professor of pharmacology at the University of Oxford.

PROFESSOR ELIOT BLACKWELDER, of Stanford University, returned recently from a sabbatical year in

Europe and Egypt and will resume his work at the university about the end of November.

DR. PHILIP S. SMITH has returned to the United States after the completion of his work as chairman of the American delegation to the Seventeenth International Geological Congress at Moscow, in the course of which he participated in geologic excursions organized by the congress into the Caucasus region and the western part of Siberia. He returned *via* eastern Siberia, Japan and Hawaii.

DR. WILLIAM BEEBE is setting out on the twenty-sixth expedition for the department of tropical research of the New York Zoological Society. With three of his staff he will be met at San Diego by Templeton Crocker on board the yacht *Zaca*. This vessel has again been placed at the disposal of Dr. Beebe for the winter. Two years ago the first *Zaca* expedition resulted in interesting discoveries in the Gulf of California. Now, the study of the shallow-water and deep fishes down to a mile or more will be begun at Manzanillo and will be continued slowly southward along the coasts of Mexico, Guatemala, El Salvador, Nicaragua and Costa Rica to Panama. Particular attention will be paid to whale sharks, which are abundant in certain places, and in the specific relationship between Atlantic and Pacific fish. As before, concentrated work will be carried on in a few rich places.

DR. EINAR LUNDSGAARD, of the Institute of Medical Physiology, University of Copenhagen, will deliver the second Harvey Society Lecture of the current series at the New York Academy of Medicine on November 18. He will speak on "The Pasteur-Meyerhof Reaction in Muscle Metabolism."

DR. MARSTON TAYLOR BOGERT, professor of organic chemistry at Columbia University, was the guest of honor of the Smith College Chapter of Sigma Xi at a dinner given on October 22. Following the dinner he delivered an illustrated lecture entitled "Perfumes—Natural, Synthetic and Artificial."

DR. KARL T. COMPTON, president of the Massachusetts Institute of Technology, was one of the principal speakers at the twenty-second annual conference in Boston of the Associated Industries of Massachusetts.

PROFESSOR ONDESS L. INMAN, director of the C. F. Kettering Foundation for the Study of Chlorophyll and Photosynthesis, lectured on "Photosynthesis Research" on October 18, under the auspices of the Midland Michigan Section of the American Chemical Company, before the staff of the Dow Chemical Company at Midland.

APPLICATION blanks and a circular of information

concerning the tenth International Congress of Chemistry, to be held at Rome from May 15 to 21, may be obtained by writing to the Division of Chemistry and Chemical Technology, National Research Council, 2101 Constitution Avenue, Washington, D. C.

FELLOWSHIPS in the Medical Sciences, administered by the Medical Fellowship Board of the National Research Council, of which Dr. Francis G. Blake, of Yale University, is chairman, will be available for the year beginning on July 1, 1938. These fellowships are open to citizens of the United States and Canada who possess an M.D. or a Ph.D. degree. They are intended for recent graduates and not for those already professionally established. Fellows will be appointed at a meeting of the Medical Fellowship Board about March 1. Applications to receive consideration at this meeting must be filed on or before January 1. Appointments may begin on any date determined by the board. Further particulars may be obtained by addressing the Secretary of the Medical Fellowship Board, National Research Council, 2101 Constitution Avenue, Washington, D. C.

SECTION E of the American Association for the Advancement of Science will meet in Indianapolis on December 31 and January 1. A symposium on the petroleum geology of the Illinois-Indiana-Kentucky basin has been arranged for December 31. Papers dealing chiefly with the stratigraphy, physiography and geography of the Till Plains, Eastern Lake Section, and Interior Low Plateaus will be presented at the other sectional meetings. The secretary of the section is Howard A. Meyerhoff, 88 Crescent Street, Northampton, Mass.

THE autumn meeting of the New England Conference of the American Association of Museums will be held at Boston and Cambridge, Mass., on November 18 and 19. On the first day sessions on art will be held at the Museum of Fine Arts, Boston, and on science at the New England Museum of Natural History. On the second day, both art and science groups will meet at Harvard University. Conference headquarters will be at the Museum of Fine Arts.

THE thirteenth annual meeting of the Cotton States Branch of the American Association of Economic Entomologists will be held in the Jung Hotel at New Orleans, from February 3 to 5. Titles of papers for the program should be mailed to Oliver I. Snapp, secretary of the branch.

THE second conference on methods in philosophy and the sciences will be held under the auspices of the New School for Social Research, New York City, on Sunday, November 28. The first session will be opened at 12:30, when Dr. John Dewey will present a me-

morial to F. C. S. Schiller (1864-1937). Following there will be a symposium on the Concept of Law in the Mathematical and Natural Sciences, in which Morris R. Cohen, of the College of the City of New York, will speak on philosophy; D. J. Struik, of the Massachusetts Institute of Technology, on mathematics and physics, and Otto Glaser, of Amherst College, on biology. In the afternoon there will be a symposium on the Concept of Law in the Social Sciences, in which R. H. Lowie, of the University of California, and Alexander Lesser, of Columbia University, will represent anthropology, and George A. Lundberg, of Bennington College, sociology.

A MEETING of the New York Geographical Association at the State Normal School, Cortland, N. Y., will be held on Saturday, November 13. During the morning session a series of papers will be presented, and a land use field trip will be conducted during the afternoon. Dr. George B. Cressey, of Syracuse University, will give an account at the annual banquet of his work in Siberia during the past summer.

THE annual meeting and dinner of the U. S. Institute for Textile Research has been postponed from November 4 to Friday, November 12, at the Hotel Commodore, New York City. Textile Research Progress will be the subject of papers and addresses at an open research conference in the afternoon and at the dinner, and results of researches of the Textile Foundation, the Chemical Foundation, the American Association of Textile Chemists and Colorists, and the U. S. Institute will be described. The study of Organization of Production and Distribution in the Textile Industries, now nearing completion at the Wharton School of Finance and Commerce, Philadelphia, Pa.,

will be described at the dinner on Friday evening by Dean Joseph H. Willits and his associates, Messrs. Balderston, Taylor and Davis, and Dr. Wanda K. Farr, of the Chemical Foundation, will report progress on research on the chemistry of cellulose. The Hon. Francis P. Garvan, president of the U. S. Institute for Textile Research and of the Chemical Foundation, will preside at the dinner, and the first vice-president, Dr. E. H. Killheffer, will act as toastmaster. W. E. Emley, chairman of the Research Council, will preside at the afternoon conference.

At the recent meeting of the annual clinical congress of the American College of Surgeons in Chicago, Dr. Max Cutler, director of the Tumor Clinic of Michael Reese Hospital, announced the establishment of the Chicago Tumor Institute "to conduct research on the causes, diagnosis and treatment of cancer, and to instruct and assist physicians, surgeons, clinics and hospitals in the diagnosis and treatment of cancer." Associated with Dr. Cutler in the direction of the institute will be: Dr. Ludvig Hektoen, director of the McCormick Memorial Institute for Infectious Diseases of the University of Chicago, *president*; Dr. Arthur H. Compton, professor of physics, University of Chicago, *vice-president*; Dr. Henri Contard, of the Curie Institute, Paris, and Sir Lenthal Cheatle, of London. Plans have been completed for the remodeling of the building at the southeast corner of Dearborn and Elm Streets, which will house the activities of the institute. It will be ready for occupancy and the institute will begin to function about March 1. Dr. Contard plans to arrive on November 10 and to spend three months in research at the California Institute of Technology.

DISCUSSION

THE PERENNIAL FLYING FISH CONTROVERSY

THE method of operation of the mechanism involved in the aerial travels of the oceanic flying fishes (*Exocoetidae*) would seem to be beyond solution if one were to judge from the perennial blooming of the controversy concerning the alleged possibility of a wing-flapping flight. Those of us who, on a basis of aerodynamics, observation and anatomy, have long been satisfied that the flight of these fishes is in the nature of that of a motorless glider, are sometimes at a loss to understand the point of view of those who continue to believe that simple observation alone can be used to establish a flapping flight without any reference to the limitations of the motor mechanism necessarily involved or to the principles of modern aerodynamics. As long ago as 1930¹ the writer decided

to make no further attempt to answer such comments as appear on the subject from time to time. However, the most recent attempt² to establish wing-flapping for flying fish has caused a reconsideration of that decision for reasons that should be sufficiently obvious in the following discussion.

In this most recent case, there is a list of seven items in support of the wing-flapping belief. These are here repeated and each is subtended by such comments as the individual items require.

"The course was not a trajectory, but flat." No one has thought to consider these fish as simple projectiles. The feats of modern gliders to which these fish, on the other hand, have been compared are certainly not trajectories and may be just as "flat" as those of any flying fish. Many birds, *e.g.*, the albatross, although

¹ C. M. Breder, Jr., *Copeia*, 4: 114-121, 1930.

² E. L. Troxell, *SCIENCE*, 86: 177-178, 1937.