cal and (4) educational. To a remarkable degree he possessed the diverse attributes that made him successful in each. That these successes were somewhat notable is perhaps best indicated by the opinions of competent contemporaries, who so often designated the field of their own specialty as that in which Stone had excelled. There is a wide-spread agreement among ornithologists concerning the importance of his contributions under 2 and 3. His book reviews in the *Auk,* of which he wrote about 1,500, are famous and widely read. Except for his "Bird Studies at Old Cape May," his papers on moult, plumages and migration and his "Plants of Southern New Jersey," his research publication seems to be less read, but its good quality is unquestioned. Concerning the value of his informal but effective educational influence, there is almost universal agreement. It was effected chiefly through direct personal contact. One prominent ornithologist writes, "I have never heard him open his mouth, either in private conversation or public speech without saying something significant and worthy of attention."

In each of his several activities Dr. Stone became by sheer ability and industry a recognized leader. He was a founder or a constructive member of several important biological societies. He became president or vice-president or both of the American Ornithologists' Union, the Delaware Valley Ornithological Club, the American Society of Mammalogists, the Philadelphia Botanical Club and the Pennsylvania Audubon Society. He was a vice-president of the Academy of Natural Sciences of Philadelphia and could have become president, following the death of Dr. Samuel G. Dixon, had he not declined. He was secretary of the Ludwick Institute since 1920 and a manager of the Philadelphia Zoological Society. Of the famous University of Pennsylvania Class of '87 he was secretary from undergraduate days to the time of his death. Many other unsought honors came to him. The University of Pennsylvania conferred upon him the Sc.D. and the Alumni Award of Merit. The National Committee of Audubon Societies established the Witmer Stone Wild Life Sanctuary at Cape May. The Hungarian Ornithological Society awarded him its Otto Hermann Medal and the American Ornithologists' Union its Brewster Medal posthumously. No other person received so many honors from the latter society as did he. Dr. Stone was elected to honorary or equivalent membership in many important foreign ornithological societies. After twenty years as editor of the *Auk* some 130 fellows and members of the American Ornithologists' Union presented him with a volume of testimonial letters, and on his seventieth birthday he was presented with a similar tribute from friends. The letters express the esteem in which he is widely held. When our front-rank ornithologists apply to him such terms as "dean of American ornithologists," "master workman in ornithology" and the like, it means that we have lived in the presence of a man of exceptional merit.

It may be permissible to venture a description of the historical niche in American ornithology which Witmer Stone occupies. Briefly, North American ornithology may be divided roughly into four periods. First was the pioneer period when the birds of the eastern United States were discovered and described. Second was the period of exploration and government surveys of the West, extending our knowledge of birds to the Pacific. Third was a period of consolidation and systematization, of organized effort, largely through the American Ornithologists' Union, to eliminate confusion by the adoption of exact concepts of species and subspecies and the attainment of a stable nomenclature. Dr. Stone was a dominant figure during much of this period, and its close may be placed in 1931 with the publication of the fourth edition of the A. O. U. Check List. One ornithologist has designated it as the "Stone Age" of American ornithology. Due to the arduous labors of Stone and his contemporaries it forms a solid foundation for the precise studies of the fourth or present period.

Of Dr. Stone it may be said that the seed within him on fertile soil grew into a sturdy tree of many branches, bearing fragrant flowers and nourishing fruit. Naturalist, scientist, faithful custodian of collections, biographer and historian of scientists and their science, interpreter of the rules of zoological nomenclature, protector of birds, writer of exceptional beauty and vigor, sometimes poetical, lecturer and teacher, helpful adviser, delightful companion and valued friend, Witmer Stone gave the best of his life and labor to this historic academy and of the riches of his personality to colleagues and associates.

His works and our memories are a fitting memorial, and may his spirit long abide in the lives of those on whom he spent it.

RECENT DEATHS

DR. FLOYD KARKER RICHTMYER, professor of physics and dean of the graduate school of Cornell University, died on November 7 at the age of fifty-eight years.

DR. WALDEMAR LINDGREN, from 1912 until his retirement with the title emeritus in 1933 Rogers professor of economic geology at the Massachusetts Institute of Technology, died on November 4 at the age of seventy-nine years.

DR. FRANK ANGELL, emeritus professor of psychology at Stanford University, died on November 2 at the age of eighty-two years.

DR. ROBERT MACDOUGALL, emeritus professor of analytical psychology at New York University, died on October 31 at the age of seventy-three years.

DR. JOSEPH B. LINDSEY, from 1911 to 1927 head of the department of chemistry at the Massachusetts State College and from 1911 to 1932 Goessmann professor of agricultural chemistry, died on October 27 at the age of seventy-seven years.

DR. WILLARD BURR SOPER, associate professor of medicine at Yale University and medical director of the William Wirt Winchester Hospital, the tuberculosis unit of the New Haven Hospital, died on October 30 at the age of fifty-six years.

COLONEL GUSTAV J. FIEBEGER, Corps of Engineers, who for twenty-six years was head of the department of civil and military engineering of the United States Military Academy at West Point, died on October 18 at the age of eighty-one years.

SCIENTIFIC EVENTS

THE GALTON LABORATORY

DR. R. A. FISHER, Galton professor of eugenics at University College, London, writes under date of September 29 the following letter to the editor of the London *Times*:

The evacuation of London University has been represented as carefully planned and smoothly carried out in accordance with prior arrangements, and I am sure that the central officials of this loose federation have done what they can in difficult circumstances. The position in which the Galton Laboratory finds itself may be typical of other research departments in the university, or it may be, as I hope, exceptional, but it is scarcely what could have been intended by the careful planners.

The laboratory was founded on a generous bequest of the benefactor whose name it bears, and has, I presume, an unquestioned right to the provision of facilities for the prosecution of its researches. Nevertheless it has been ordered to evacuate the accommodation it now occupies at University College without alternative accommodation being provided. Worse than this, when in my difficulty I approached my former chief, Sir John Russell, Director of the Rothamsted Experimental Station, and he had helpfully and generously offered to provide alternative accommodation for my department and equipment rent free, I was informed that my assistants, while still in receipt of their salaries, are forbidden to continue their duties.

As the head of this department, therefore, the only determined policy which I can recognize on the part of the College Committee is that of suppressing research work and dispersing the research units such as that which it has been my work and, as I understood it, my duty to build up.

During the last war our administrators learned, though perhaps with some reluctance, that men trained in research were essential for the success of the national effort. The remaining nucleus of my department, if I may speak in its praise, constitutes a unit for heavy mathematical computations as efficient, both in machines and men, as the country can command. Obviously no work of first-class national importance can be found for such a unit at a few days' notice. I submit that it is almost equally obvious that in certain contingencies its continued existence might be of the greatest value, so long as the machines and the expert knowledge had been kept together. Can not a little patience be exercised before completing its demolition?

THE PRIVATELY ENDOWED COLLEGE OF ENGINEERING

A BROADCAST sponsored by the alumni of the Case School of Applied Science was made on October 28 for consideration of the question, "What's Ahead for the Privately Endowed College of Engineering?" The program, which was given at a luncheon of the alumni in Cleveland, was carried nationally over the Mutual Broadcasting Company's system.

The consensus of opinion of the six participants in the radio discussion was that engineering colleges which depend on endowment and gifts need additional funds to overcome the decline in earnings from investments and to provide for new educational services. These funds should be sought from those benefited, directly or indirectly, from the work of the colleges, These comprise the alumni, industry, which depends on these colleges for their trained personnel, and society, which profits from the earnings of industry. The reasons why so few large gifts have been made to colleges of technology is due, the conferees believed, because of the inactivity of these institutions in placing their needs before persons of wealth.

Participants in the radio discussion were leaders in industry and scientific men, all residents of Cleveland. The speakers were: George S. Case, chairman of the board, Lamson and Sessions Company; Lee M. Clegg, executive vice-president, Thompson Products Company; David Dietz, science editor, Scripps-Howard Newspapers; Randolph Eide, president of the Ohio Bell Telephone Company; Sam W. Emerson, president of the S. W. Emerson Company, contractors, and Dr. Zay Jeffries, technical director, Lamp Department, General Electric Company.

In summing up the problem of getting funds for technological education, Dr. William E. Wickenden, president of the Case School of Applied Science, said:

Traditional motive makes it much easier to get money for religion, for hospitals, for medical research and for the fine arts, than for science and engineering. Our graduates are giving splendidly, out of loyalty, but I wonder if our big job is not to implant new motives in the minds of wealthy men.