justified, should be abandoned for a policy of positive assistance to those in public office who are capable and sincere. It is commonplace that under our system politicians must have "causes," and other things being equal, it is ridiculous to suppose they wilfully prefer false ones. It seems clear that it is the people with insight and intelligence who should provide the causes and support the politicians who demonstrate their sincerity by doing effective work for them in the form of providing and disseminating accurate data and information relevant in the promotion of all causes which will insure the preservation and growth of a free, just and liberal society.

We belong to a group which has been selected by the so-called higher educational system of our country. Favored by natural endowment we have been enabled to utilize magnificent advantages provided by our free institutions. Advantages, facilities and an environment of freedom which can exist on the present level only as long as the good will, the generosity, the tolerance and the unique public spirit which created them are preserved.

Many of you will join with me in confessing, however, that while passively grateful for our advantages, we have scarcely done anything actively to insure that the advantages we enjoy will be passed on undiminished and enhanced, to our successors. I am convinced that the greater part of the men in public office do not realize the nature or value of that which is so commonplace in our country. It is our duty to take action without delay, perhaps through our scientific societies in a concerted effort to preserve our heritage of financially free institutions, and save from perishing the priceless spirit of public generosity which brought them to their present flowering.

The message I bring has a somber cast; perhaps too serious a tone at the hour of rejoicing. But we have come upon evil times and see the finest fruit of our labors being misused increasingly to blight the spirit of mankind and to blacken his soul. Alas, no one wishes more than I do that the poisons distilled into the world by addled brains since I trod this campus thirty years ago could be spontaneously neutralized. We, however, more than any one else, have the imagination to envisage the evils and the power to neutralize the poisons by uniting and exerting ourselves promptly and courageously. In doing so, we will give tangible evidence of gratitude for gifts received, and which is more important, save from perishing the divine civilizing spirit that gave Brown University the Metcalf Research Laboratory.

FREDERICK G. KEYES

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

OBITUARY

SAMUEL PRENTISS BALDWIN

SAMUEL PRENTISS BALDWIN, widely known for his pioneer work in the trapping-and-banding of wild birds and for his Research Bird Laboratory, was born at Cleveland, Ohio, on October 26, 1868, and died of coronary thrombosis in that city on December 31, 1938. He was the son of Charles Candee and Sophia (Prentiss) Baldwin.

His father, a judge of the circuit court of appeals, was one of the founders and principal supporters of the Western Reserve Historical Society and was deeply interested in archeology and geology. The son inherited his father's tastes, and was a trustee of the Historical Society from 1907 until the end of his life.

After graduation from Dartmouth College in 1892, Prentiss studied in the Law School of Western Reserve University and was the first to receive its degree of LL.B. in his class of 1894. For six years he was a member of law firms in Cleveland, but withdrew in 1900, and for a considerable time thereafter was engaged more or less continuously in business.

At intervals in this early period the law had to give way to geology, when Mr. Baldwin took part in geological expeditions to the Muir Glacier and to New Mexico; but after 1900 he returned to his first love, natural history, and devoted himself more or less completely to ornithology.

In 1914 Prentiss Baldwin became interested in the newly devised method of banding wild birds—encircling one of their legs with a numbered, aluminum ring—so that, if later recovered and reported, incontrovertible data upon their wanderings and longevity could be secured. In the course of these practises, which were systematically conducted at his Gates Mills farm in Ohio, in summer, and at Thomasville, Ga., in winter, Dr. Baldwin devised traps for securing large numbers of living birds, and originated the method of trapping-and-banding adult birds, which by 1920 had become so successful that it was approved by the Biological Survey. This governmental agency, which took over the work of the American Bird-Banding Society in 1920, soon became the "clearing house" for the registration of the recovered aluminum bands, that began to flow in from all parts of the country. As a result of this movement four Bird-Banding Associations, The Inland, Eastern, Northeastern and Western, were established, thus covering a large part of the continent of North America, and affording all necessary assistance to their

thousands of volunteer workers. It is estimated that Dr. Baldwin, who became the honorary president of all these organizations, and his assistants alone have banded between 50,000 and 60,000 individuals.

Since 1914 Prentiss Baldwin was devoted to the intensive study of ornithology at what became known as "The Baldwin Bird Research Laboratory" at his Gates Mills farm, from which have issued upwards of thirty more or less elaborate papers, relating to the physiology, development and life-history of birds, and based upon his own work and that of his associates. The elaborate treatises on "The Physiology of the Temperature of Birds," which involved more than fifty thousand determinations, and "The Measurements of Birds" appeared in the Scientific Publications of the Cleveland Museum of Natural History.

Dr. Baldwin soon fixed upon the little house wren as the one species that was best suited for the study of many avian problems, touching distribution, migration, anatomy, physiology, development, behavior and, more specifically, body-temperature and sexual relations in domestic life, to mention some of the subjects which had engaged his attention. In short, the house wren, through studies at the Baldwin Laboratory, became in some measure for ornithology what the diminutive fruit-fly, *Drosophila,* is for the science of heredity or genetics. The wren, like *Drosophila,* is easily handled and controlled; it nests readily in artificial boxes, wherever placed, and can be trapped in its nestbox and quickly caught in a hand-net for examination. If it does not submit complacently to interference, it seldom or never deserts its young. Through the testimony of the numbered bands it was shown that house wrens do not mate for life, but that on the contrary they often change mates between seasons, and even between broods of the same year. It was also proved that not more than one third of all marked individuals return to their nest or to the locality in which the young were hatched in two successive years.

Many ingenious electrical recording devices, originating in the Baldwin Laboratory, were used in determining the temperature changes which the growing young undergo from an early egg-stage to adolescence and in recording visits of the parent birds to their nest when tending their young. Experimenters in this laboratory also perfected an instrument for taking motion pictures of the living embryo *in ovo,* thus showing successive stages in embryonic development by use of a microscope with a camera-attachment, the wren's egg making a suitable subject because of its small size and hardihood.

Dr. Baldwin was a trustee of the Cleveland Museum of Natural History for nearly sixteen years, or from 1923 until his death, and in many ways gave it his generous support. He received the degree of D.Sc. from Dartmouth College in 1932, was a fellow in the American Association for the Advancement of Science, the Geological Society of America, the American Ornithologists' Union and the Ohio Academy of Science, and was a member of the American Society of Naturalists, the American Society of Zoologists, the British Ornithologists' Union, Deutsche Ornithologische Gesellschaft and the Australasian Ornithological Union.

Through his efforts and those of his assistants Dr. Baldwin had gathered through the years a rich store of scientific data upon birdlife, which, if properly edited, should make a most outstanding monograph. On this achievement Prentiss Baldwin's mind and heart were fixed, and he had worked on it with great singleness of purpose for many years. It is to be hoped that this work, for which he had labored so industriously, but which, unfortunately, he did not live to complete himself, may yet be given to the world.

Dr. Baldwin was married on February 15, 1898, to Miss Lilian Converse, daughter of Leonard Hanna, of Cleveland.

In his personal relations Prentiss Baldwin will be remembered as a loyal friend, who was ever ready to extend a helping hand, especially to young men who were devoted to science, and was determined that all should receive their just dues. He took a broad view of his opportunities, and freely gave his time, his effort and his means for the protection and preservation of the wild life of the countryside. The many friends of Dr. and Mrs. Baldwin, and particularly the members of Western Reserve University, of which he was a research associate in biology, can never forget the generous hospitality which they have enjoyed in their beautiful home.

FRANCIS H. HERRICK

RECENT DEATHS

DR. EDMUND B. WILSON, Da Costa professor emeritus of zoology at Columbia University, died on March 3 at the age of eighty-two years.

DR. CHARLES SUMNER PLUMB, professor emeritus of animal husbandry at the Ohio State University, died on March 4 in his eighty-ninth year.

DR. ARTHUR ALFRED BRYAN, agronomist of the Iowa State College, died on February 22. Since 1934 Dr. Bryan had been in charge of the corn improvement program carried on by the Iowa Agricultural Experiment Station in cooperation with the U. S. Department of Agriculture.

DR. ARTHUR PHILEMON COLEMAN, professor emeritus of geology and formerly dean of the Faculty of Arts of the University of Toronto, died on February 26 in his eighty-seventh year.

HOWARD CARTER, known for his discovery and exploration, in association with the fifth Earl of Carnarvon, of the tomb of Tut-ankh-Amen, died on March 2 at the age of sixty-six years.