States and Canada for the purpose of grading and classifying them. Dean Stange was an active worker in various national professional organizations, including the United States Live Stock Sanitary Association and the American Veterinary Medical Association, the latter of which honored him with the presidency in 1924.

Scientist, educator, executive, wise councilor, he will be sorely missed by his colleagues, particularly those at Iowa State College whose purpose it will be to continue building upon the foundations which he has so securely laid in veterinary medical education and research.

H. D. B.

RECENT DEATHS

DR. GEORGE A. HOADLEY, since 1888 until his retirement with the title emeritus in 1914 professor of physics at Swarthmore College, died on May 18 at the age of eighty-seven years.

SAMUEL DICKEN CONNER, research chemist at the Purdue University Agricultural Experiment Station, died on April 19 at the age of sixty-three years.

DR. CHARLES B. GRAVES, retired physician of New London, Conn., and co-author of the "Flora of Connecticut," died on April 24 at the age of seventy-five years.

THE death occurred on May 4 of Dr. Alfred Cardew Dixon, emeritus professor of mathematics at Queen's University, Belfast. He was seventy-one years old.

THE death is announced of Josef Jadassohn, for many years professor of dermatology at the University of Breslau at the age of seventy-two years.

PROFESSOR VLADIMIR G. BOGORAZ, head of the department of ethnography of the University of Leningrad, died on May 12. He was seventy-one years old.

Nature reports the death of L. W. Hinxman, from 1905 to 1919 district geologist in the Geological Survey, Scotland, on April 29, aged eighty-one years, and of Professor D. Morrison, professor of moral philosophy in the University of St. Andrews, who was associated with Professor G. F. Stout in the editorship of *Mind*, on April 8, aged sixty-nine years.

SCIENTIFIC EVENTS

REPORT OF THE BRITISH NATIONAL PHYSICAL LABORATORY

THE report of the British National Physical Laboratory for 1935, published on May 5, is summarized by the London *Times*. The *Times* calls attention to work carried out in the department of physics on the absorption of the radiation from radium by such building materials as brick walls and breeze blocks, the results having direct application in the design of radium departments for hospitals. The department also devoted much time to the study of noise in buildings. In modern flats, it is pointed out, the floor is more important than the walls, because sounds caused by direct impact to the structure are transmitted much more readily than those which have to pass through the air before reaching the structure. The value of a subsidiary floor resting on, and insulated from, the structural floor has been recognized and recent work has been in the direction of improving the design of such floors.

In the tanks of the William Froude laboratory the record number of 73 ships were tested, involving the making of 160 models. Effective improvements were made in 64 of the ships as a result of the tests, and in 13 cases the improvements represented more than 10 per cent. on the fuel consumption and in four cases more than 20 per cent. Research work on small craft was begun in 1934 and has already resulted in a reduction of 30 per cent. in the power required to propel a series of ferry steamers.

In the aerodynamics department recent tests in the compressed air tunnel at the laboratory have proved that the speed of aeroplanes can be considerably increased by insuring that the surface of the wings and other parts is as smooth as possible.

In the electricity department experiments were carried out at the request of the Government of Northern Ireland on the practicability of installing an electric barrage in connection with an important eel fishery. The object is to guide the eels into the part of the river where the traps are installed, by electrifying the water where it is desired to prevent them from passing. These experiments have been extended to more natural surroundings at the Fisheries Experimental Station at Alresford, and it is hoped that full-scale experiments in the eel fisheries of an Irish river will be carried out this year. Experiments in testing colors of electric lights for street lighting were also carried out by the department.

The radio department used for the investigation of atmospherics a base line 300 miles long, one end being at Slough and the other at Leuchars, in Fifeshire. Synchronized automatic drum-recording at each station has been so developed that it is possible to record the results of 30-minutes' observation at 10 yards a second (*i.e.*, 12 miles of track) on a single sheet of paper about one yard long and 4 inches wide. These methods are being used to record the wave-form, intensity and direction of arrival of all the atmospherics occurring in selected intervals of time.

The laboratory is also studying on behalf of the Air Ministry the problem of improving methods of locating the position of an aeroplane by determining the direction of arrival of signals from radio beacons whose situation is known, with particular attention to the elimination of errors in the apparent direction of a transmitter arising from the effects of waves reflected from the upper atmosphere.

In the metallurgy department research on dental fillings was carried out, and in the engineering department research on the fatigue of metals under service conditions has afforded much new and useful information.

A PROPOSED CLOSED SEASON FOR FUR ANIMALS

A FIVE-YEAR closed season for the marten, fisher, wolverine and otter to save them from joining the list of extinct wild animals is urged by Ira N. Gabrielson, chief of the U. S. Bureau of Biological Survey. He states that these fur animals may share the fate of the passenger pigeon, the heath hen, the Maine giant mink and other extinct species unless the hunting and trapping season on them is closed for five years.

Mr. Gabrielson points out that several states have laws providing closed seasons for these animals, but broader protection is needed. They were never very abundant and their pelts always have sold at prices high enough to cause close trapping. They have disappeared entirely from much of their former range.

Resolutions recommending shorter open seasons for taking wild fur animals, and a closed season of at least five years on marten, fisher and wolverine were adopted at the North American Wildlife Conference in Washington, D. C., last February. The otter should also receive special protection as its number is diminishing. However, it still lives in most states largely because trappers find it difficult to locate its haunts.

Trapping female marten and fisher before they bear their young late in March and early April has to a large extent kept these two species from multiplying. The female marten requires about 9½ months to develop its young, and the fisher 11 months. Before this was known it was generally believed to range from 60 to 102 days. This animal lives in the pine forest regions of California, Oregon, Washington, Idaho, Wyoming, Utah, Nevada, Montana, New Mexico, Colorado, Wisconsin, Michigan, New York, New Hampshire, Vermont and Maine.

Fishers may be found in California, Oregon, Washington, Nevada, Wyoming, Montana, Minnesota, Wisconsin, Michigan, Pennsylvania, New York, New Hampshire, Vermont and Maine. Wolverines live in California, Oregon, Washington, Idaho, Montana and Wyoming.

MEETINGS OF THE CHAPTERS OF SIGMA XI

AT the annual meeting and dinner of the District of Columbia Chapter of the Society of Sigma Xi, held at the University Club on May 15, the following were elected to alumni membership and delivered initiatory addresses: Dr. Ralph Edward Gibson, of the Carnegie Institution of Washington, Dr. Paul Renno Heyl, of the National Bureau of Standards, and Dr. Edward Oscar Ulrich, of the U. S. National Museum.

The annual dinner of the Western Reserve University Chapter was held on May 15. Three members from the faculty and eleven from the student body were initiated. The following officers for 1936–37 were installed: *President,* Dr. C. J. Wiggers; *Vice-president,* Dr. J. E. Hyde; *Secretary,* Dr. Edward Muntwyler, and *Treasurer,* Dr. Frank Hvorka. The address was given by Dr. Arthur H. Compton, of the University of Chicago, who spoke on "Cosmic Rays."

The spring initiation and banquet of the Ohio State Chapter will be held at the Faculty Club on the evening of May 29. The address on this occasion is to be given by Professor Griffith Taylor, chairman of the department of geography at the University of Toronto. Professor Taylor's subject will be "Forecasting Settlement in Australia and Canada." Preceding the address 27 members and 31 associates will be initiated into the chapter.

The following officers were elected at the installation ceremonies of the University of Buffalo Chapter, which were held on April 25: *President,* Dr. Wayne J. Atwell, professor of anatomy; *Vice-president,* Dr. Albert R. Shadle, professor of biology; *Corresponding secretary,* Dr. Rufus R. Humphrey, associate professor of anatomy; *Recording secretary,* Dr. Wilson D. Langley, associate professor of biochemistry; *Treasurer,* Dr. Carleton F. Scofield, associate professor of psychology.

Dr. George Howard Parker, professor of zoology, emeritus, at Harvard University, addressed the annual joint meeting of the Washington University Chapters of Phi Beta Kappa and Sigma Xi at St. Louis, Mo., on April 28. He spoke on "The Color Changes of Fishes and the Relation of these Changes to the Action of the Nervous System."

Dr. Robert M. Yerkes, professor of psychobiology at Yale University and director of the Yale Laboratories of Primate Biology, at Orange Park, Fla., gave an address before the Sigma Xi Club of the University of Florida on May 20 on "Anthropoid Apes as the Servants of Man."

The Ohio State Chapter is sponsoring a series of lectures on the general subject of "Hormones." The series was initiated in February with two lectures on "Plant Hormones," the first given by Professor George S. Avery, of Connecticut College, and the second by