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

Dr. P. W. Zimmerman, of the Boyce Thompson Institute. On April 17 Professor Leon Asher, of Berne, Switzerland, lectured on "Integration by Internal Secretions"; on April 30 Professor C. H. Best, of the University of Toronto, lectured on "Insulin," and on May 6 Dr. W. O. Nelson, of Yale University, lectured on the "Male Sex Hormones." It is planned to continue the series next autumn with lectures by outstanding authorities on other hormones. The series will eventually be published and distributed at cost by the chapter.

THE AWARD OF THE WILLARD GIBBS MEDAL TO ROGER ADAMS

DR. ROGER ADAMS, head of the department of chemistry of the University of Illinois and past president of the American Chemical Society, was presented with the Willard Gibbs Medal for 1936 of the Chicago Section at a dinner on May 22 at the Stevens Hotel, Chicago, in celebration of the twenty-fifth anniversary of the founding of the award by William A. Converse.

President Arthur Cutts Willard, of the University of Illinois, spoke on "The Medalist." Professor Edward Bartow, of the State University of Iowa, president of the American Chemical Society, made the presentation, and Thomas Midgley, Jr., vice-president of the Ethyl Gasoline Corporation, delivered the epilogue. Professor Adams discussed "Organic Chemistry." The history of the Willard Gibbs medal was outlined by Dr. Arthur Guillaudeu, chairman of the Chicago Section. Professor Adams won the medal, one of the highest scientific honors bestowed in the United States, "for outstanding and fundamental contributions to synthetic organic chemistry and for conspicuous achievements as a teacher of chemistry." An account of his work appears in the issue of SCIENCE for January 10. The following statement in regard to his life has been sent us by a correspondent:

Professor Adams was born in Boston on January 2, 1889. He attended the Cambridge, Mass., public schools and entered Harvard College at sixteen, receiving the bachelor of arts degree in 1909 and the master of arts a year later. He took the doctor's degree at Harvard in 1912, having been in charge of all laboratory work in chemistry at Radcliffe College during the first two years of his graduate work. Recipient of a traveling fellowship, he studied under Diels in the University of Berlin and under Willstätter at the Kaiser Wilhelm Institute in Dahlem. He also traveled in Denmark, Sweden, Finland, Russia, Switzerland and England.

From 1913 to 1916 he was instructor in organic chemistry at Harvard University and Radcliffe College. He went to Illinois as assistant professor in 1916, and has been consulting chemist of the Abbott Laboratories, North Chicago, since 1917.

During the war he served as major in charge of an Offense Chemical Research Division in Washington, D. C., where he worked with poison gases. Returning to Illinois as full professor in 1919, he became head of the department of chemistry in 1926.

Professor Adams was a member of the National Research Council Chemical Committee from 1923 to 1928 and a member of its Fellowship Board during the last eight years. He was appointed by President Roosevelt to represent chemistry on the Science Advisory Board and also on the new Government Relations Committee of the National Academy. He holds the honorary degree of doctor of science from the Polytechnic Institute of Brooklyn, and the William H. Nichols Medal of the New York Section of the American Chemical Society. He is a member of many scientific organizations.

AWARD OF THE NATIONAL INSTITUTE OF IMMIGRANT WELFARE TO DR. CARREL

THE first annual National Institute of Immigrant Welfare awards of merit, given to "distinguished citizens of foreign birth who have made significant contributions to American life," were presented on May 13 to Dr. Alexis Carrel, Jonas Lie and Walter Damrosch at a dinner of the institute at Hotel Biltmore. Dr. Harry Woodburn Chase, chancellor of New York University and chairman of the committee on awards, presented to each of the winners a hand-lettered scroll bearing the title "An American Roll of Honor."

Eighteen different countries of origin were represented in the panel of thirty names from which the final selections were made. Dr. Carrel, who was born in France, came to the United States in 1905; Mr. Lie, a Norwegian, came in 1893, and Dr. Damrosch, who was born in Germany, near the Polish border, came in 1871.

In the absence of Dr. Carrel, Dr. Simon Flexner received the award and made the following remarks:

We can all imagine Dr. Carrel's great disappointment in being prevented by illness from accepting in person the distinguished honor you have conferred on him. In his absence, it may be a slight compensation to be told briefly of his eminent scientific career. Dr. Carrel came to America fully thirty years ago, and soon after graduation in medicine at the University of Lyons. He is a splendid example of the French educational system working through a gifted mind. Dr. Carrel's writing even in a foreign tongue such as English is strong, clear and concise, and the scientific problems he selected for experimental study were equally sharply conceived. Dr. Carrel must, as a medical student, have been impressed with the backward state of the surgery of the blood vessels and the serious consequences of this glaring defect. Before his discoveries, to incise or otherwise severely injure a blood vessel was to destroy it: it had either to be ligatured or tied, or allowed to fill with clot to prevent hemorrhage, and was lost.