in the nervous system under all the experimental conditions named constituted a large section of his work.

Altogether he personally published nearly one hundred papers and monographs, and his students and associates published more than three hundred and sixty. His method of directing research work was well described in his published report in 1925 to the Scientific Advisory Board of the Wistar Institute: "No investigator is ever asked to do anything which is not for his individual and scientific welfare. . . . In every case the investigators receive full personal credit for their work. This is as it should be for it is the virtue of academic laboratories that the emphasis is put on the individual rather than on the institution." Among those who published work from his laboratory were some thirty Americans, twenty Japanese and a smaller number of other nationalities. Many of these persons are leaders in their professions and all of them revere his memory.

He received the honorary degree of Sc.D. from Yale in 1906 and from Clark in 1937. He was president of the Association of American Anatomists (1916–18), of the American Society of Naturalists (1927) and of the American Neurological Association (1937). He was a councilor of the American Philosophical Society for four terms of three years each between 1911 and 1936, chairman of its Publication Committee from 1932 and vice-president from 1935 until his death. He was a member of the Corporation of the Marine Biological Laboratory from its organization in 1888 and a trustee from 1912 until his death. He was elected to the National Academy of Sciences in 1914 and was a member of its council in 1919. He was also an honored member of ten other American and foreign scientific societies.

On his eightieth birthday (1937), a bronze portrait medallion of him, made by Dr. R. Tait McKenzie, was placed with suitable ceremonies in the Lenape Club at the University of Pennsylvania, of which he had been president for twenty years. A replica of this medallion hangs in the hall of the American Philosophical Society. On the seventy-fifth anniversary of his birth, May 12, 1932, a special anniversary volume of the *Journal of Comparative Neurology* was dedicated to him. It was preceded by an admirable portrait and contained a brief sketch of his distinguished career, followed by twenty scientific contributions from associates and friends and the following affectionate testimonial: "He has won esteem and affection of the Editorial Board by unfailing courtesy, loyal friendship and generous support of all worthy enterprises. For his cordial and invaluable cooperation and wise counsel during nearly thirty-five years the *Journal of Comparative Neurology* owes him much."

Perhaps his most distinctive personal trait was that quality which Sir William Osler celebrates in his essay, *"Equinimitas."* With this were naturally associated orderliness, persistence, serenity. His laboratory and library were always in perfect order, his comings and goings were as timely as the clock, he never seemed hurried and yet he worked *"Ohne Hast, ohne Rast."* His sympathies were broad and deep and even his closest friends never learned from him of his generous contributions and acts of kindness to those who were in need. His students and colleagues knew him as a man of infinite patience, even temper and great nobility of character, and they loved and honored him.

In 1884, he married Julia Desboro Vaux, of New York, who died in 1904. Two children were born to them, John C. Donaldson, now professor of anatomy in the Medical School of the University of Pittsburgh, and Norman V. Donaldson, sales manager of the Yale University Press. In 1907, Dr. Donaldson married Emma Brace, of New York, and their hospitable homes in Philadelphia and Woods Hole are known to a host of loving friends.

After his long illness in the middle nineties of the last century, he was never in robust health but was almost never incapacitated for work. Until a few days before his death he was at work as usual in his laboratory at the institute. His end came as a result of pneumonia and heart failure. With characteristic foresight, he and Mrs. Donaldson had planned the simple and appropriate funeral service which should be held in the event of the death of either. His pallbearers were selected from among his scientific associates and the officers of the institute, the University of Pennsylvania and the American Philosophical Society. His brain was preserved and added to the notable collection of the Wistar Institute and his body was cremated. His work, influence and memory remain to make the world richer for his having lived in it.

EDWIN G. CONKLIN

RECENT DEATHS

DR. RAYMOND L. BARNEY, professor of biology at Middlebury College, Vermont, died on July 9 at the age of forty-six years. Dr. Barney had been a member of the department of biology at the college since 1924. He served as acting dean in 1936.

DR. EDWARD FULLER BIGELOW, president of the Agassiz Association, editor of the monthly magazine *A Guide to Nature* and curator of the Bruce Museum at Greenwich, Conn., died on July 13 at the age of seventy-eight years.

PROFESSOR FERNANDO NEVERMANN, since 1909 professor of entomology at the National Agricultural School at San Jose, Costa Rica, was recently accidentally killed while searching for ants that had been damaging banana plants.

DR. CHARLES EDOUARD GUILLAUME, since 1915 director of the International Bureau of Weights and Measures in Paris, has died.

THE death is announced of Dr. Hugo Hergesell, professor of geophysics and meteorology; of Dr. Walther Vogel, professor of historical geology, and of Dr. Konrad Theodor Preuss, director of the Museum of Folk Lore, all of Berlin.

SCIENTIFIC EVENTS

THE POULTRY RESEARCH LABORATORY AT EAST LANSING, MICHIGAN

CONSTRUCTION of the regional poultry research laboratory at East Lansing, Mich., is expected to be under way by August 1, according to a report issued by Dr. J. R. Mohler, chief of the Bureau of Animal Industry, of the U. S. Department of Agriculture.

The contract calls for the construction of a central laboratory building, two large brooder houses and two smaller buildings for special disease studies. The buildings should be completed by January 1, 1939. The unit will be located on a site of 50 acres recently deeded to the government by Michigan State College for this purpose. The site is one mile south of the college.

Twenty-five north central and northeastern states will cooperate with the department in the laboratory work. The states are Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Wisconsin, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and West Virginia.

Selection of a director and other staff members will be made through a regularly announced Civil Service examination. As soon as the buildings are completed, work will begin on the development of effective control methods for fowl paralysis, a disease that is prevalent on both commercial poultry farms and diversified farms. It is estimated that losses from poultry diseases cost producers nearly a hundred million dollars annually in the states cooperating in the research. Approximately half this amount, it is estimated, is due to fowl paralysis.

Dr. Mohler points out that there is no adequate knowledge concerning fowl paralysis, and no effective means are known for its control. Laboratory workers will concentrate on a search for the causative agent and will attempt to determine to what extent breeding for resistance to the disease can be successful. Related projects dealing with the effects of parasitism nutrition practices and different management practices on the spread of disease will be undertaken as rapidly as possible.

THE AVERY EXPEDITIONS OF THE FIELD MUSEUM

THROUGH the generosity of Sewell Avery, a trustee of Field Museum, funds have been provided for sending four expeditions into the field during 1938.

The first of these left Chicago on June 18 to collect specimens for use in physical geology exhibits. Work is under way in northern Colorado, and later activities will be transferred to New York, Connecticut, Massachusetts, Rhode Island and possibly other eastern states. This expedition is being conducted by Sharat K. Roy, curator of geology, and is a continuance of the field work of this type in which he was engaged last year.

On July 15, John R. Millar, curator of the N. W. Harris Public School Extension, left for Nova Scotia, where he will make studies and collect material for the department of botany (of whose staff he was formerly a member). The prime object is material for an exhibit representing the submerged vegetation of the northern Atlantic waters. Owing to the extreme tidal conditions prevailing in the Bay of Fundy, where the difference between high and low water levels reaches as much as fifty feet, it is expected that this will prove to be an exceptionally favorable locality for collecting kelps and other marine plants.

Early in September, Emmet R. Blake, assistant curator of birds, will sail for British Guiana. At Georgetown he will charter an airplane to take him and two native assistants 600 miles inland to the headwaters of the Corentyne River, on the southernmost boundary of the country, close to the frontiers of Dutch Guiana and northern Brazil. This region, entirely uninhabited by human beings, is almost totally inaccessible except by air. At certain seasons it may be reached by river travel with special boats manned by large crews. The water trip, however, requires about five weeks, whereas by airplane it may be made in four hours. The area has never been worked before from a biological standpoint, and Mr. Blake will seek a representative collection of its vertebrates, including birds, mammals, reptiles and fishes. The airplane will return to its coastal base leaving Mr. Blake entirely out of contact with the outside world for about four