Foa, Gley, Cohnheim, Percy and others on digestive ferments. A plan for the classification and nomenclature of proteic matters, sponsored by the Physiological Society of London, was discussed.

The eighth congress was held at Vienna, September 27–30, 1910, presided over by Sigmund Exner. Professor Charles Richet lectured on "Ancient and Modern Humoralism." The one hundredth anniversary of the birth of Théodore Schwann, the immortal author of the cellular theory, was celebrated.

The ninth congress, the last before the war, took place at Groningen, September 2–5, 1913, presided over by Hamburger in the fine institute just inaugurated. Pavlov gave a lecture on "Experimental Study of the Superior Nervous Functions."

There was much admiration of the beautiful cinematographic views of Comandon and Bull on cardiac pulsation, capillary circulation and movements of protoplasm. Mines showed the continued circular movement in a ring of cardiac tissue, and attached thereto a tentative explanation of fibrillation, etc.

If we look backward to consider the results achieved by these nine Physiological Congresses, spreading over a period of 25 years, we may say that they give a faithful picture of the development and progress of physiology during that quarter of a century. These meetings witnessed the first fruit of nearly all the great forward steps made in our science. Thus they formed a precious means of mutual instruction for physiologists: with a minimum of time and effort they were initiated into all the new problems of the science of life, and became familiar with the most varied techniques. They afforded also an opportunity to know one another better, and to make friends with learned men of foreign lands. Alas! the war interrupted this fine tradition; fortunately we have resumed it and it is continued now in Boston, after Paris, Edinburgh and Stockholm. Let us wish good fortune to this work of progress and peace. It is in excellent hands, as the great success of the present meeting proves.

OBITUARY

RECENT DEATHS

DR. ROBERT HALL BOWEN, professor of zoology at Columbia University, died on August 19, after an operation for appendicitis. He was thirty-seven years of age.

DR. EDWARD F. BUCHNER, since 1908 professor of education at the Johns Hopkins University and director of the college for teachers, died unexpectedly of heart disease in Munich on August 23 in his sixty-first year. Dr. Buchner was professor of analytical psychology in New York University from 1896 to 1901.

WALDRON DEWITT MILLER, associate curator of ornithology of the American Museum of Natural History, has died as the result of injuries sustained in a motorcycle accident on August 4. Mr. Miller was fifty years old.

DR. JAMES DITMARS VOORHEES, a specialist in obstetrical surgery and professor of that subject at the College of Physicians and Surgeons of Columbia University, died on July 29 at the age of sixty years.

THE death is reported of Dr. Etienne Bieler, the deputy director of the Imperial Geophysical Experimental Survey of West Australia. Dr. Bieler died while awaiting the arrival of Professor A. O. Rankine, director of the department of technical optics in the Imperial College of Science and Technology, London, who had reached Perth and who intended to cooperate with him in his work.

Nature reports the deaths of M. Léon Lindet, member of the section of rural economy of the Paris Academy of Sciences, known for his work on the physiology of plant and animal foodstuffs, on June 16, aged seventy-two years; of Professor Wilhelm Ellenberger, formerly rector and director of the physiological and histological institute and of the physiological chemistry research station of the Veterinary High School, Dresden, and of Lieutenant-Colonel George Henderson, formerly of the Indian Medical Service and for a time director of the Royal Botanical Gardens and professor of botany in the University of Calcutta, on June 24, aged ninety-two years.

THE death is announced of Karl Auer, Ritter von Welsbach, the inventor of the incandescent gas light, the electric metal thread lamp and other important technical advances. He was president of the Auergesellschaft, which has large chemical works at Treibach, and member of the Academies of Sciences of Vienna, Berlin and Stockholm. The London *Times* writes: "Karl von Welsbach, who was seventy years of age, was the son of Aloys Auer, Ritter von Welsbach, for many years head of the state printing works in Vienna and himself known as an inventor of many devices in printing and paper-making. He studied in Heidelberg under Bunsen, and his researches in the chemistry of rare minerals produced several results of scientific and technical importance. His invention of the incandescent mantle was made in 1885, and five years later the company, the Auergesellschaft, which

now has 4,000 employees, was formed to manufacture the Welsbach patents. The invention by Karl von Welsbach of the osmium filament lamp followed in 1897, and six years later he invented the ferro-cerium compound used in pocket lighters. Many scientific bodies in his own country and abroad conferred their honors upon him, and he himself endowed a number of social and scientific institutions."

SCIENTIFIC EVENTS

THE BOTANIC GARDEN OF THE UNIVERSITY OF CAMBRIDGE

THE syndicate appointed last January to consider the organization and finance of the Botanic Garden and the relations between the garden and the department of botany and other scientific departments have made a report to the university. The appointment of the present syndicate was a consequence of the urgent need of the Botanic Garden for increased financial support. In response to the report on the situation made by the regular Botanic Garden syndicate, doubts were expressed in some quarters, not only as to the need for some of the existing expenditure associated with the garden, but also as to whether the garden itself was worth what it cost to the university. Such a point of view, if seriously held, demanded a very full treatment. The syndicate have held five meetings, and have interviewed both the director and the superintendent of the garden. In the result, the syndicate make the following recommendations:

(1) That the Botanic Garden should become an integral part of the department of botany.

(2) That the responsible head of the garden should be the professor of botany and that the actual director of the garden should be either the professor himself or a member of his staff, nominated by and responsible to him.

(3) That the duties of the director should be general responsibility for the management of the garden and particular care for its development as an aid to the study of botany, this work being regarded as a part-time occupation only.

(4) That the stipend attaching to the office of director should be reduced from its present value of £500 per annum in addition to a house and allowances to a value not less than £200 nor more than £300 per annum, inclusive of a house and allowances.

(5) That the stipend attaching to the office of the director should be variable according to the nature of the other offices held simultaneously by the director.

(6) That a new university lectureship should be created for the teaching of systematic botany and that the duties of the new lecturer should include as a part all teaching work hitherto performed by the director of the garden.

(7) That the office, duties and emoluments of the present superintendent of the garden should continue unchanged.

(8) That a permanent sinking-fund should be established into which an annual amount should be paid to meet normal depreciation in the glasshouses and heating services of the garden.

(9) That in addition to the annual amount referred to in the last preceding recommendation, steps should be taken to provide a capital sum of £2,000 within six years, and a further £2,000 within twelve years, to meet the cost of urgent reconstructional work.

(10) That consideration should be given by the university to the fact that a part of the land adjoining the garden could be sold under suitable restrictive conditions without detriment to the present or probable future needs of the garden.

(11) That, until appeals for benefactions for the garden can be launched and their results ascertained, the costs of the garden, beyond those which can be met by the present grant, should be met by an additional non-recurrent grant from the university chest.

(12) That consideration should be given by the university to the suggestion that the Town of Cambridge be invited to contribute to the cost of the garden, so long as it is made accessible to the general public.

(13) That the executive functions of the permanent Botanic Garden Syndicate should cease, that their duty should be periodically to inspect the garden from the point of view of amenities, and to report to the university, and that their constitution should provide for the representation of the interests of the Town of Cambridge.

DEMONSTRATIONS OF BIOLOGICAL WORK AT WOODS HOLE

FOREIGN members of the Thirteenth International Physiological Congress visited Woods Hole on Saturday after the adjournment of the Boston meeting. They were entertained at luncheon and at a clam bake in the evening. In the laboratories of the Marine Biological Laboratory and the Bureau of Fisheries the following demonstrations were arranged:

MARINE BIOLOGICAL LABORATORY

RUTH B. HOWLAND, Micro-injection of the Vacuolated Problem of the Digestion of Fats.

Cytoplasm of Actinosphaerium with Reference to the

JEAN T. HENDERSON, Micro-injection of Indicator Dyes into Fibers from the Sartorius Muscle of the Frog.

CHARLES W. METZ, Microscopic Preparations and Cultures of *Sciara* (Fungus Gnats). Slides Showing Chromosomes and Monocentric Spermatocyte Division with Selective Segregation of Chromosomes.

DOUGLAS A. MARSLAND, Micro-injection of Lipoid Solvents into *Amoeba dubia*.

FRANK FREMONT-SMITH, Charts Illustrating the Com-