He was graduated from Hobart College with the bachelor of law degree in 1891. From Rutgers he received the B.S. degree in 1893 and M.S. in 1897. During the period from 1893 to 1897 he was instructor in science in Racine and in high schools in the state of Ohio. For two years, 1898 to 1900, he served as sanitary analyst for the Chicago Drainage Canal Commission. At the same time he studied in the graduate school of Chicago University, receiving the Ph.D. degree in 1900. He was then granted a traveling fellowship and spent a year studying at various European laboratories—with Strasburger at Bonn, with Klebs at Halle, and for some time occupied the Smithsonian Institution Table at Naples. Upon his return he was appointed instructor in biology at North Carolina State College.

His ability as a teacher was at once so evident that he was appointed professor of botany and vegetable pathology the following year. In this position he taught general botany, plant physiology, plant pathology and bacteriology. His lectures in all these subjects were scholarly and presented in a manner to catch and hold the interest of students without resorting to anecdotes or other subterfuges so common in college classrooms. Several years after he left the North Carolina State College Dr. D. H. Hill, its former president, remarked that Dr. Stevens was undoubtedly the best teacher with whom he had ever come in contact.

Even with this unusually heavy load of teaching he found time to do considerable research personally and to direct research in plant pathology and in soil bacteriology for the experiment station, developing original methods and making notable contributions in both fields.

It was during this period that I first came under the influence of Dr. Stevens's great enthusiasm for research. I immediately planned my course of study so as to spend all the time possible in his laboratories, and have enjoyed his helpful advice throughout the subsequent years.

In 1912 he was elected dean of the College of Agriculture, University of Porto Rico, where he served two years, returning to the States in 1914 as professor of plant pathology at the University of Illinois, where he remained until the time of his death, exactly 20 years.

While in Porto Rico he became interested in tropical fungi, especially in the Meliolineae, and some of his most notable contributions have resulted from studies in this group of fungi. He made several collecting trips to various tropical countries in furtherance of these studies and devoted much time to collection and study of fungi while serving as visiting professor at the University of the Philippines during 1930–31.

However, this specialized field was not sufficient to monopolize his interest and phenomenal energy. During the 20 years at Urbana he has continued research in mycology and general plant pathology. Among other notable contributions made during this period may be mentioned the classical works on the Helminthosporium footrot of wheat and on the effect of ultra-violet light upon fungi.

He published numerous professional papers in the fields of soil bacteriology, mycology, and plant pathology; and was author or joint author of several textbooks for elementary schools, including "Agriculture for Beginners," the Hill "Readers" and "Practical Arithmetic"; and was author of "Diseases of Economic Plants," "Plant Disease Fungi," and "Fungi Which Cause Plant Diseases." The last three are probably the most generally useful books on plant pathology yet presented in the English language.

Dr. Stevens was active in the organization of the American Phytopathological Society and was made president of the society in its second year, 1910. He was also a member of the Sigma Xi and Phi Beta Kappa honor societies and of several professional societies.

In 1925 he received the honorary Sc.D. degree from San Marcos University, Peru, and in 1931 the honorary LL.D. degree from the University of Glasgow.

Among his associates Dr. Stevens was often pointed out as an example of that rare combination of excellent teacher and unusual ability in research. His keen sense of right and his firm but calm and kindly spirit endeared him to all who worked with him.

B. B. HIGGINS

GEORGIA EXPERIMENT STATION

RECENT DEATHS

DR. ELMER ELLSWORTH BROWN, from 1911 until his retirement as chancellor emeritus in 1933 chancellor of New York University, previously U. S. Commissioner of Education and professor of education in the University of California, died on November 3 at the age of seventy-three years.

DR. JAMES CORNELIUS WILSON, professor emeritus of clinical medicine at Jefferson Medical College, Philadelphia, died on October 28. Dr. Wilson was eighty-eight years old.

DR. PHILIPP FISCHELIS, professor of histology, embryology and general pathology at the Temple University School of Dentistry, died on October 30. He was seventy-six years old.

COLONEL BAILEY KELLY ASHFORD, of the United States Medical Corps, known for his work on hookworm carried out under the auspices of the Puerto

Rico Anemia Commission, died on November 1, aged sixty-one years.

DR. LUCILE B. WHITCHER, associate professor of organic and physiological chemistry at Skidmore College, died on October 16 at the age of thirty-seven years. She had been at Skidmore College for eleven years.

SCIENTIFIC EVENTS

THE NEW BUILDING FOR ZOOLOGY AT THE UNIVERSITY OF CAMBRIDGE

A CORRESPONDENT of the London *Times* writes: "The old zoological lecture rooms and laboratories, familiar to generations of students of medicine and natural sciences at Cambridge, have ceased to function. They had served their purpose, in some cases from the days of Newton and Francis Balfour, but became no longer adaptable to current demands. If zoology was to grow with the times new buildings, extra endowment and more staff were needed. The means for fulfilling such aspirations were ultimately made available through the generosity of the Rockefeller Trustees, aided by state and private benefactions, and this afternoon the new zoology building, erected at a cost of £80,000 under a committee with the University Treasurer (Mr. T. Knox-Shaw) as chairman will be open for inspection."

The building, as described in the *Times*, is an L-shaped structure of steel and concrete, and for the most part faced with brick. With a frontage on Downing Street and Corn Exchange Street, it measures 292 feet long, with a breadth of 43 feet. The architect has designed a building of a strictly utilitarian type combined with a certain grace of line and proportion. In some ways it resembles the best type of modern factory construction, the narrow pillars in the walls being 6½ feet apart; except for these, the walls above bench level are entirely of windows, thus providing the maximum amount of natural lighting. Adaptability to possible future requirements is a special feature in the planning; the walls between adjacent rooms are easily removable, while the furniture is of uniform design, allowing the maximum interchangeability.

The building consists of a basement and four floors. In the basement are heating and service supplies, together with rooms for marine and freshwater aquaria. There are also four differentially heated constant-temperature rooms. The ground floor is given over to elementary teaching: it contains a well-designed lecture theater, with seating for over 200 students, and, close at hand, an exceptionally large and well-appointed elementary laboratory. The first floor contains an advanced laboratory and lecture room, the professor's room, and general offices, a staff room, and private rooms for 12 research workers, together with the departmental library.

The whole of the second floor is given over to experimental zoology, which has a large teaching laboratory and 14 rooms available for research. Each room is provided with water, gas, direct and alternating current, and compressed air. Complete provision is made for keeping animals under suitable environmental conditions; there are also several dark rooms, a chemical laboratory, and well-fitted workshops. The chief rooms are provided with means for maintaining them at a steady temperature, often below that of the main building. The third floor is given over to entomology, with rooms for the staff and nine other workers. A large incubator room for studying the effects of temperature and humidity on insect growth is provided. There is also a room for other types of experimental work, an aquarium room, dark room, stores and a small workshop.

The Rockefeller scheme also provided for an entomological field station, which has been erected on the University Farm. It includes laboratory accommodation for advanced students, differentially heated insect houses and out-of-door rearing houses. Adjoining these buildings is an area of about two acres of experimental ground, affording ample means for observing insects under natural conditions.

The Department of Zoology, as rebuilt and reorganized, provides full provision for all grades of teaching and complete facilities for research. There are places for 60 post-graduate workers (including the staff), and 58 have come into occupation. The reorganization planned by Professor Stanley Gardiner has been rendered possible owing to considerable allocations being made for income purposes. This has enabled provision to be made for the upkeep of the subdepartments of entomology and experimental zoology and for the necessary additional staff.

A PROFILE OF SHOAL WATER DEPTHS BY ECHO SOUNDING

CAPTAIN R. S. PATTON, director of the U. S. Coast and Geodetic Survey, has announced a recent improvement in the apparatus to obtain depths by echo sounding. The equipment, now being used in surveys off the Virginia coast, takes 20 soundings a second in depths from 6 to 120 feet, with an accuracy of about one inch. At a cruising speed of ten miles per hour, a sounding is therefore obtained every ten inches along the bottom.

This instrument, known as the "Shoal Fathometer," is a further development of the deep water fathom-