

extraordinary range of his reading and observation. Although the analogy of social systems to Gibbs's systems did not escape him, he realized that the time for quantitative treatment was not yet at hand. Without it, he was able to explain many phenomena observed in everyday relations between two or more persons, or between groups of individuals, in terms of the persistent uniformities which are the manifestations of sentiments. He increasingly stressed the study of man through concrete cases, and in 1941 appropriately emphasized this point of view in a course given to first-year students at the Harvard Medical School.

Next to his intellectual pursuits, his relations to Harvard University were his most important interest for three quarters of his life. Eight years a student, he served it devotedly in the usual sequence of academic posts for thirty-nine years. He gave formal instruction in three subjects: biological chemistry, 1904-1939; history of science, 1911-1942; and sociology, from 1932-1942. All his courses had one common characteristic—they reflected the progress of his thinking. For example, in 1912 he read a large part of "The Fitness" to his class in Chemistry 15 before he had finished the book. Thus he managed to preserve vigor and freshness in each of these courses over extended periods, and because of the unusual breadth of his learning, students gained not only special knowledge, but also were given an insight into the cultural meaning of science.

With graduate students he practiced a policy that amounted almost to *laissez-faire*. An enrichment of their ideas was inescapable, as informally he generously and sympathetically applied the "eager clarity of his mind" to the innumerable intellectual and personal problems presented by curious young men. And he ever strove to induce them to develop the best in themselves.

His leadership was recognized in that he was enabled to establish the Laboratory of Physical Chemistry at the Medical School in 1920 and the Fatigue Laboratory at the Business School in 1927. Convinced that investigators should ordinarily master their own destinies, he gradually withdrew from the active direction of both laboratories. He did, however, continue his direct association with the Fatigue Laboratory to the end.

For a number of years President Lowell and Henderson had discussed means of aiding the development of original scholars. Consequently, the Society of Fellows was founded in 1933 with Henderson as its first chairman. It came to reflect many of his beliefs. Here a group of most promising young men, stimulated by interaction with each other and with a few of the university's most distinguished professors, learned of dignity and breadth in scholarship, became

aware that human relationships were important, and were given a period of freedom from academic and financial pressure so that some might, through reflective thought, experiment or writing, fulfil the promise of productive scholarship.

It was inevitable that his contributions to knowledge and his own increasing wisdom should receive recognition; the former by honorary degrees, lectureships, and memberships in learned societies, and the latter by appointment to important committees. The latter responsibilities he undertook with energy and with characteristic persistence, if at all. As Foreign Secretary of the National Academy of Sciences, he had, with the Foreign Secretary of the Royal Society, arranged the Pilgrim Trust Lectureship before war broke out; recently he was actively concerned with Inter-American relations.

But it was at his camp in Morgan Center, Vermont, that the many facets of his personality shone most clearly. His love of symmetry appeared in the buildings he had designed; his love of beauty in nature as he sat on the porch gazing at the gentle scene before him. Here his essential kindness and human interest were manifest not only to invited friends but to neighbors of the countryside. This place he loved. Here he thought, worked and contemplated the world in serene inquiry.

Altogether, his life, which he had made so rich, satisfactory and stimulating, exemplifies the concept of the complex interactions of organism and environment to which his experimental studies, continued observations, unusually wide reading and contemplation had led him. Although he undoubtedly would have minimized the magnitude of his influence on the environment, it is apparent in the importance of his publications, through his formal teaching, and less apparent, but probably even more important, in his human relations, especially with young men, his leadership in institutions and the deep and abiding affection of those who had come to know him well.

RONALD M. FERRY

RECENT DEATHS

DR. C. HART MERRIAM, founder in 1885 and until 1910 chief of the United States Bureau of Biological Survey, now known as the Fish and Wild Life Service, until three years ago research associate of the Smithsonian Institution, died on March 19 at the age of eighty-six years.

PROFESSOR ADAM C. DAVIS, JR., head of the department of experimental engineering at Sibley College, Cornell University, died on March 17 at the age of fifty-two years.

FRANCIS IRENEE DU PONT, research chemist, died on March 16 at the age of sixty-eight years. He was known for his discoveries in the field of smokeless powder and for his development of the minerals separation process.

ISABEL BEVIER, until her retirement with the title emeritus in 1922 professor of home economics and

head of the department at the University of Illinois, died on March 17 in her eighty-second year.

WHARTON HUBER, curator of mammals in the Academy of Natural Sciences of Philadelphia, died on March 12. He had been a member of the staff of the academy since 1921.

SCIENTIFIC EVENTS

THE COMING HARVEST IN THE UNITED KINGDOM

A WIRELESS dispatch from Raymond Daniell to the *New York Times* reports that the British Minister of Agriculture, Robert S. Hudson, stated on March 18 in the House of Commons that the future history of Britain and perhaps of the world might depend on this year's harvest in the United Kingdom. He pointed out that meat supplies are dwindling and the shortage of merchant tonnage is becoming more acute; the nation is depending more and more on vegetables, and he made it clear that the advice of the Minister of Foods, Lord Woolton, to make up deficiencies in diet with vegetables could not be followed unless larger harvests from land already cultivated could be obtained.

Experts from the United States will go to England for consultation in an effort to increase production. Mr. Hudson stated that nearly all arable land is already in use, but that there is a shortage of manpower. There are more than 25,000 women enrolled in the agricultural army and it is still growing, but use will have to be made of school children and Italian war prisoners.

More than 80 per cent. of the farms consist of less than 150 acres. Many farmers earn little more than the laborers they hire to work in their fields. At the close of this ploughing season the tilled fields will amount to 6,000,000 acres more than before the war. The 1938 potato acreage of 700,000 acres already had been increased by more than 1,000,000 acres and will be further increased this year. Vegetable production generally had been increased from 2,500,000 to 4,000,000 tons. Oat and sugar-beet production also had been greatly increased. Germany had 70,000 tractors working on 4,000,000 farms in 1939, while Great Britain had 50,000 on 500,000 holdings. Mr. Hudson stated, however, that Germany was making poor progress in increasing the farm output of the occupied countries. Meats in Great Britain are now scarce, and the ration probably will have to be cut even further. Fuel and light soon will be rationed, and it is expected that for part of the time there will be no hot water.

REPORT OF THE TREASURER OF YALE UNIVERSITY

THE expenditures of Yale University for the fiscal year ended June 30 were \$9,517,376, according to the annual report of George Parmly Day, treasurer of the university. Of this amount, \$7,890,088 was for educational purposes, and the balance of \$1,627,288, for the operation of the dining halls, the Athletic Association and maintenance of plant. The total income available was \$9,492,005, leaving a deficit of \$25,371.

Included in the income mentioned were gifts to the university from the Alumni Fund of \$323,472 to meet current expenses, an increase of \$2,062 over last year. Since its founding, the Alumni Fund, which was organized to raise endowment and provide funds for current expenses for the university, has made available \$7,954,255 for income and has accumulated a principal of \$5,664,568.

Yale paid out \$6,312,249 in salaries to about 3,300 persons in and around New Haven—faculty and administrative and service employees—who constitute the university payroll, and to local firms for materials and services, \$1,973,558, bringing the total expenditures made in New Haven to \$8,285,807.

Statistics included in other parts of the report show that the twelve dining halls operated by the university served 1,665,978 meals during the year, and the weekly board rate, unchanged since 1933, is \$8 for 21 meals; the University Library, with expenses of \$494,007, added 106,000 volumes to its collections, bringing the total number of books to more than 3,000,000; the Athletic Association had expenses of \$438,033 and income of \$397,693, which left a deficit of \$40,340.

The report listed gifts and bequests for endowment, exclusive of contributions to building funds, aggregating \$1,994,019, bringing the total endowment to \$112,096,810. Income derived from productive assets amounted to \$3,932,964—an average return of 4.34 per cent. (The average was 4.32 per cent. in 1940, 3.97 per cent. in 1939 and 4.31 per cent. in 1938.)

Among the principal items of income listed in the