

scholar of Oxford, said recently, in connection with the celebration of his seventieth birthday, "A society without history can not understand what it is doing; and history without scholarship can not understand itself."

With equal truth it may be said that horticulture, without scholarship, without knowledge of the history of its development, can not understand itself.

My plea is for the organization of studies in all professional schools in such a way as to give education and scholarship and culture, as well as technical skill and information.

THE PURPOSE OF ANNIVERSARIES

But what is the point and purpose of recognizing an anniversary? As I have recently stated elsewhere, it is not so much to celebrate past achievement, but to reveal to the world the nature of the institution; for

those in charge of it to clarify and possibly to restate their ideals in the light of the wisdom gained by past experience, and with a clear vision of future and larger accomplishments, made possible by new conceptions, new needs, new methods and techniques, new resources and new enthusiasm.

Like every institution, Ambler is the point of apparent convergence of four parallel lines—two coming down from the past, approaching, but not quite reaching the goal set twenty-five years ago; two spreading out to the future. May the School of Horticulture for Women realize a full measure of the success which is possible only by facing always forward, along the lines that diverge into a beckoning future of greater usefulness. This is what I mean by "The School of Horticulture in perspective." "Allons, mes amis, il faut cultiver nos jardins" (Come along, my friends, let us cultivate our gardens).

OBITUARY

KURT WALTER FRANKE, 1889-1936

KURT WALTER FRANKE was born in St. Paul, Minnesota, on November 17, 1889, and died at Rochester, Minnesota, on September 15, 1936. His early education was in the St. Paul public schools. Following graduation from high school he entered the University of Virginia and specialized in chemistry, receiving a diploma in analytical chemistry from that institution in June, 1912. The following four years he spent as a chemist in a company manufacturing paper and paper products.

In the fall of 1916 he reentered the University of Virginia. During 1917-18 he was an assistant in the chemistry department and held the first du Pont fellowship in chemistry at the University of Virginia during 1918-19. During 1919-20 he held an assistantship in biology. In June, 1920, the University of Virginia awarded him both the degrees of B.S. and M.S. in chemistry.

The period 1920 to 1924 he spent in industrial work, being employed as chief chemist by a large textile manufacturing company. In January, 1925, he was appointed to a Cloquet wood products research fellowship in agricultural biochemistry at the University of Minnesota, which position he held until the fall of 1926, when he was appointed instructor in the same department. In June, 1927, he received the Ph.D. degree from the University of Minnesota with a thesis entitled, "The Measurement of Hydrogen Ion Concentration in the Control of Pulp and Paper Manufacture." Immediately following the receipt of the doctorate degree he was appointed head of the department of agricultural chemistry at the South Dakota Agricultural Experiment Station at Brookings, S. D.

Upon entering into his new duties he carefully surveyed the field in order to select a line of investigation which would be of the most importance to the agricultural constituency of the state. The selected point of attack fell upon the so-called "alkali disease," an obscure malady which had seriously affected large areas of the state from time to time. This disease, which affects horses, cattle, swine and even chickens, is characterized by a decreased rate of growth, the loss of hair and an abnormal overgrowth of hoofs and nails, followed by the sloughing off of the old hoofs, leaving raw and bleeding stumps. While the disease had been known since 1860 when it was reported as a fatal disease affecting cavalry horses, Indian ponies and mules, the etiology of the disease was unknown, although commonly ascribed to the drinking of "alkali water." Relatively little careful scientific work on the disease had been published prior to Dr. Franke's attack on the problem.

Dr. Franke's training in biology and biological chemistry promptly bore fruit. He first showed that the alkali salts of the drinking water were not the causal agents. He then demonstrated that the grains and even the forages grown in the affected region were highly toxic and that feeding such grains and forages brought on the typical symptoms. He then demonstrated that in the case of the cereal grains the toxic properties were concentrated in the protein fraction and that the starch portion was non-toxic.

At about this time Dr. Franke called the attention of representatives of the United States Department of Agriculture to the extent and importance of this problem, with the result that early in 1931 a cooperative attack began upon the problem with scientists in the

Bureaus of Chemistry and Soils, Animal Industry, Plant Industry and Home Economics of the Department of Agriculture joining with Dr. Franke in the investigations. In the spring of 1931 Dr. W. O. Robison, of the Bureau of Chemistry and Soils, found in toxic wheat 10–12 p.p.m. of selenium, and he also found selenium to be present in the soils of the affected areas. Franke, by feeding selenates and selenites, was able to produce the typical symptoms of the disease so that the etiological factor was thoroughly demonstrated. His studies, however, indicated that the selenium complex in the grain was, in some instances at least, definitely more toxic than the inorganic selenates or selenites, and he accordingly turned a part of his attention to an attempt to isolate an organic selenium compound which was responsible for the toxicity. Unfortunately this work is left uncompleted, but he did adduce evidence that indicates strongly the presence of such a compound, probably one in which the sulphur of a normally occurring compound has been replaced by selenium.

In the nine years that Dr. Franke directed the chemical work in the South Dakota Agricultural Experiment Station he made a major contribution to agricultural science and accomplished far more than many men accomplish in a lifetime of endeavor. Twenty-two papers under his authorship had already appeared in print, and the experimental work on several more had been completed and manuscripts were in the process of preparation. In spite of these evidences of scientific productivity there remains considerable unpublished data and many problems which were only begun or projected.

Not only has agricultural science lost one of its most promising research workers, but those of us who knew Dr. Franke intimately feel the additional loss of a sincere and cooperative friend. He had a forceful per-

sonality, but he was always ready to contribute as much as or more than he received. His friendships were the sort that grow with time. He is survived by his wife, Louise, and a son, Royden, now a student of aeronautical engineering at the University of Virginia.

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RECENT DEATHS AND MEMORIALS

CHARLES A. WILLSON, dean of the College of Agriculture at the University of Tennessee since 1923, died on October 9 at the age of fifty-eight years.

DR. JOHN PEASE BABCOCK, formerly deputy commissioner of fisheries for British Columbia, died on October 12 at the age of eighty years.

THE death at the age of forty-nine years is announced of A. E. Clarence Smith, senior lecturer in physical chemistry at University College, Southampton, England, known for his work in photomicrography.

THE fiftieth anniversary of the beginning of the work of Dr. Charles Henry Fernald, one of the founders of economic entomology in this country and an authority in economic entomology, was celebrated at Massachusetts State College on October 16. Dr. Fernald founded the department of entomology at Massachusetts State College in 1886. He died at Amherst in 1921. Dr. W. E. Britton, state entomologist of Connecticut, presided at the formal exercises. The speakers were President Hugh P. Baker, of the Massachusetts State College; A. F. Burgess, of Greenfield, entomologist with the Federal Moth Control Laboratory, who has carried on the work of gipsy moth control begun by Dr. Fernald in 1886, and Dr. E. Porter Felt, director of the Bartlett Tree Research Laboratory, Stamford, Conn.

SCIENTIFIC EVENTS

THE MEDICAL CURRICULUM IN GREAT BRITAIN

It is reported in *Nature* that the British General Medical Council has adopted certain resolutions in regard to professional education. These will come into operation on January 1, 1938, and include the following:

In the pre-registration requirements, it is laid down that every applicant for registration as a student by the council or for admission to the medical curriculum proper should have passed (a) a recognized preliminary examination in general education as laid down in the regulations of the council; and in addition (b) an examination or examinations conducted or recognized by one of the licensing bodies.

The subjects to be included under (b) are:

(1) One or two subjects of general education, other than chemistry, physics or biology, at a standard higher than that of the preliminary examination, for those who have received their instruction in these subjects before entering universities, university colleges or medical schools.

(2) Chemistry (theoretical and practical), the elementary principles of general and physical chemistry, and of the chemical combination of elements, including carbon.

(3) Physics (theoretical and practical), the elementary mechanics of solids and fluids, the elements of heat, light, sound, electricity and magnetism.

The examination in biology (theoretical and practical) may be taken either before or after registration as a student.

About a year ago a conference of representatives