agriculture was described by E. Weise, while H. Husmann reported on recent methods of purification of effluents adopted in Germany. L. A. Allen (Britain) described a new method of estimating the numbers of faecal bacteria in a sewage effluent and commented on their rapid decrease, which cannot be accounted for by dilution.

Problems of water supply occupied another day. E. Windle Taylor and A. T. Palin (Britain) discussed chlorination. A. Guelin (France) spoke on the role of bacteriophage in self-purification, while J. Wautier (France) reported on experiments demonstrating the importance of the biologic film in sand filters in retaining *B. coli*. E. Mercier (Switzerland) described improvements in the water of an eutrophic lake resulting from artificial subsurface aeration during the summer stagnation period. A. Ruttner-Kolisko (Austria) spoke on the use of limnological methods in the investigation of potable waters.

The final session of the Congress was held at Windermere on the evening of August 30. The present officers of the International Association of Limnology having intimated their desire to be relieved of office, Professor F. E. Fritsch (Cambridge) was elected President and Dr. T. T. Macan (Windermere) General Secretary. A proposal to send greetings to the American Society for Limnology and Oceanography was adopted with acclamation.

A small party led by Professor J. E. G. Raymont, starting from Southampton, visited the rivers Avon and Test and inspected the work carried out by the University's Department of Zoology near Brockenhurst in the New Forest, prior to the commencement of the Congress. During the days spent at Cambridge visits were arranged to the National Trust's preserve at Wicken Fen, the sewage disposal works at Luton, and the Water Pollution Research Laboratory at Garston, while August 23 was devoted to a whole-day excursion to the Norfolk Broads. The journey from Cambridge to Windermere, occupying three days, was made by coach, during which several British rivers and large sewage works were inspected. One of the two days at Windermere was spent at the laboratory (Ferry House) of the Freshwater Biological Association (Director: H. G. Gilson) and at the Association's experimental hatchery and fish ponds at Wraymires, while the other was devoted to tours in the Lake District. After the termination of the Congress, about 100 of the members spent four days in Scotland, proceeding as far north as Inverness and returning via Loch Ness and Fort William to Glasgow. This tour afforded opportunity of inspecting the Glasgow University Field Laboratory on Loch Lomond under the guidance of Dr. and Mrs. Slack, the Brown Trout Research Laboratory of the Scottish Home Department at Pitlochry at the invitation of the Director, Dr. K. A. Pyefinch, and the adjacent Tummel-Garry hydroelectric installations. A small group afterwards proceeded on a seven days' excursion into Ireland.

Although many participated in the work of preparation, the Congress owes much of its undoubted success to the labors of the Honorary Secretary, C. H. Gilson.

Cole Coolidge: 1897-1953

E. K. Bolton

IN preparing an obituary notice about the late Cole Coolidge, it is not possible to write in cold biographical terms. Our relationship over the twelve-year period in which he was assistant director of the Chemical Department, and indeed after he became director in July 1951, was that of close friendship as well as business association, and the feeling of personal loss in his tragic and untimely death following a relatively minor operation disposes me to write more in terms of his character and abilities than in mere terms of positions held and research developments to which he contributed.

Yet I remember well the astringent wit that he brought to bear on those who sought to praise him, and I know that his preference would be for a simple and factual recital of his career. This memorial will seek to steer a course that appraises the man with all possible objectivity.

A research man with a real talent for administration is likely to be marked at an early stage, as the blend of the researcher's temperament with the ability of the administrator is one not often found. Dr. Coolidge demonstrated an outstanding gift in this field early in his Du Pont career, and it is not surprising that after a very few years his feet were set upon the path that led, in 1926, to his appointment as a group leader and, a few months later, as assistant director of the Experimental Station.

Equally logical was the selection of Dr. Coolidge as assistant director of the Chemical Department in 1939, and his selection by the top management of the company to the directorship of the department. In this capacity he carried a big responsibility, as the Chemical Department serves the entire Du Pont Company through fundamental and long-range research in organic, physical, and inorganic chemistry, and physics. Its work is carried out in close cooperation with the research divisions of the ten manufacturing departments, for which it also undertakes long-range studies in many fields of applied research

including, for example, synthetic fibers, plastics, synthetic rubber, and agricultural chemicals.

Considering the dynamic nature of the chemical industry, the importance to a company such as Du Pont of an efficiently functioning and well-administered Chemical Department can hardly be overemphasized. In contributing to such a department, Dr. Coolidge set exacting standards for those reporting to him. They were, however, less exacting than the standards he set for himself. His work days as a matter of routine embraced all his waking hours, and even on days when the office was closed, his bulging brief case demanded time from his leisure hours for "home work."

The exacting standards he set for those under him were accompanied by three modifying attributes that made him well liked by his staff. The first was an ability to make clear exactly what he wanted done. The second was a very genuine liking, thoughtfulness, and respect for his associates. The third was an unusual degree of open-mindedness, and an intense desire to consider all sides of a question through complete frankness in discussion before making a decision.

Shortly before Dr. Coolidge became director of the Chemical Department, he became chairman of the Du Pont Company's Committee on Fellowships and Grants, the organization in charge of the company's program of aid to colleges and universities to promote the teaching of chemistry and an interest in research as a career. During his chairmanship the schedule of academic aid was considerably broadened.

It was a tragic thing, for Du Pont and for the chemical industry, that Dr. Coolidge survived for only so short a period as two years his designation as head of the Chemical Department. It was no less tragic for the community in which he lived, for he was active in welfare work. He was a director of the Wilmington General Hospital and the Family Society of New Castle County, and he served each as president for two terms. And he was, a few months before his death, appointed to the executive committee of the United Community Fund of Northern Delaware.

Dr. Coolidge was an enthusiastic week-end golfer; his schedule afforded time for no more. He played an occasional game of bridge, and was prone to spend his vacations in ocean travel.

He was born in East Hartford, Connecticut, but moved to Colorado in his boyhood. He was graduated from Boulder High School in 1915, studied for two years at the University of Colorado, and then moved to The Ohio State University, where he received the B.A., M.S., and Ph.D. degrees in 1920, 1921, and 1923, respectively. It was at this institution that he met Edith Hutcheson, who became his wife. When they met he was a laboratory assistant and she was taking a course in organic chemistry.

Cole Coolidge can ill be spared by those with whom he was associated, and their number is large. Those of us who claimed his friendship feel an aching sense of personal loss.

News and Notes

Resume of Fourth Alaska Science Conference

THE Fourth Alaska Science Conference, sponsored by the Alaska Division, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, was held in Juneau, Alaska, Sept. 28–Oct. 3, 1953. One hundred and fifty-nine registrants from Alaska, Canada, England, and the United States, as well as many interested Juneau residents, participated in the 21 scientific sessions of agriculture, biological sciences, engineering, mining, aviaton, fisheries, forestry, geology, medicine, public health, physical sciences, social sciences, and 3 general sessions.

Speakers and their subjects for the general evening sessions were L. R. Blinks, director of Hopkins Marine Station, Pacific Grove, California: "Photosynthesis in the Ocean"; C. T. Elvey, director of the Geophysical Institute, University of Alaska, and retiring president of the Alaska Division: "Solar Energy"; Maynard Miller, University of Cambridge, England, who showed movies of the Juneau Ice Cap Project; Sir Charles Normand, meteorologist of Oxford, England: "Ozone and Upper Air Conditions"; and Raymond F. Taylor, forester-in-charge of the Alaska Forest Research Center, Juneau: "The Role of Technical Forestry in Developing an Alaskan Resource."

One of the highlights of the Conference was a symposium on Alaskan biogeography, conducted by Robert F. Scott of the biological sciences section, which culminated in a series of papers devoted to the involved and interrelated problems of plant and animal distribution facing biologists in Alaska. In both formal and informal discussions, 4 basic points were emphasized, namely, the particular significance of distributional peculiarities in the Alaskan Region; the importance of geological history in interpreting distributional data; the mutual assistance resulting from interdisciplinary discussion; and, as one biologist put it, the fact in describing many distributional oddities such terms as "rare," and "endemic" could be applied more appropriately to the collector than to the species studied.

The variety and scope of current Alaskan research were illustrated by the biological discussions; specialists in many fields of biology found themselves comparing notes with anthropologists, paleontologists, and geologists. One of the most stimulating presentations