on critics of our status, who are failing in the call for agitation and education of the public to a realization of the relative fitness of things. This is a personal and group matter to achieve, and it can not be achieved by partisanship or foul play.

Much has been accomplished in the long-time development of civilization. Much is yet to be accomplished. The accomplishment can not be secured in any nation by legislation alone. The solution can be obtained by joint use of two paths. One of these leads to continued emphasis on sympathetic negotiations between man and man, or group and group, before going to extremes. Much progress for our country has been made in this path during the past half century. Such progress has been notable in our engineering industries, but nevertheless it is yet insufficient, and more sympathetic relations must be fostered. However perfect a coin may appear on one face, if it is suffering from corrosion on the other face it is defective and needs reminting. Social reminting in an engineering world with its democratic qualities, however, requires a depth of consideration and range of cautious adjustments which immeasurably transcend the requirements for the machine-reminting of coins.

The other path leads to the joint problem of education in engineering and political economy which is now crying for solution in order that the social problems may be smoothed and society may be aided to make progress in the best sense. Our national needs are, on the one side, a moratorium on loosely drawn legislation, careful simplification of laws which we have, and primarily emphasized efforts to make ethical principles a guide in both the observation and the administration of statute-law. Abstract justice is an ideal, but enforcement of law according to ethical principles can be made a very practical thing.

On the other side, our national needs include a careful nurturing of the results of scientific research and discovery in the fields of natural science and of so-called social science, which may stimulate engineering invention and engineering practice out of which still further improved living conditions may arise. Many endowments for research in natural science and in economics and sociology exist, and our need is for an endowment to promote the study (including research and exposition) of the joint relations of engineering and political economy, having for its purpose to establish an understanding of the most helpful relations which may be built up for a prosperous social welfare. This is a need indeed, and a donor can make the nation his never-ending debtor by establishing an endowment to this end.

OBITUARY

EDWARD SAPIR

THE death of Edward Sapir on February 4, 1939, when in mid-career, marks a loss of leadership in anthropology and linguistics. It will be difficult to find another who possesses his distinctive assets of originality, profundity and insight.

Born in Lauenburg, Pomerania (January 26, 1884), he was brought to the United States as a little child. His formal training was at Columbia University: A.B., 1904; A.M., 1905; Ph.D. in 1909 under Franz Boas. His initial professional appointments were as research assistant, University of California (1907–08) and instructor in anthropology, University of Pennsylvania (1909–10). During this period, he was concerned with analysis of several western Indian languages (Yana, Wishram, Takelma, Southern Paiute).

As chief of the division of anthropology, Geological Survey of Canada (1910–25), his own research was primarily with the language and culture of several northern Indian groups: Nootka and Athapascan. These remained preoccupations through his life, the latter especially giving rise to an extended comparative study of the far-flung Athapascan stock and its Sinitic connections. It was at this time that he developed an interest in psychological and psychoanalytic insights into linguistic and cultural behavior.

In 1925 Dr. Sapir began a systematic teaching career: assistant professor of anthropology (1925–27), professor of anthropology and general linguistics (1927–31) at the University of Chicago; Sterling professor of anthropology and linguistics at Yale University (1931–39). His enthusiasms fired a group of highly competent linguistic students who will, without question, give continuity to his views in the next generation.

He received manifestly deserved academic recognition: honorary Sc.D. from Columbia, 1929; membership in National Academy of Sciences, American Academy of Arts and Sciences, American Philosophical Society, Société des Américanistes de Paris, Reale Accademia della Scienze (Bologna); and was elected president of the Linguistic Society of America (1933) and the American Anthropological Association (1938).

His ethnographic studies were, for the most part, incidental products of his linguistic work. But this gave them a distinctive quality, namely, a constant illumination from linguistic insights. This approach marks his principal contribution to ethnological method, "Time Perspective in Aboriginal American Culture" (1916). His published ethnographic reports are few and brief, but a deftness and incisiveness make them models of description. His two little papers on

the Takelma of Oregon, for example, are marvels of succinct presentation and put to shame many a more pretentious monograph. It is therefore regrettable that he left incomplete his magnificent collection of materials on Nootka, Yana and Hupa.

Dr. Sapir's major published contribution, however, lies in the field of language. His control of the perfected techniques of Indo-European and Semitic philology was extended into the realm of primitive languages. Lexical and grammatical contributions, ranging from Hebrew and Tocharian to American Indian Uto-Aztecan, Hokan, Athapascan and Wakashan, attest his extraordinary fertility. The soundness of these analyses can not be challenged. Beyond this, though fully recognizing independent developments, his emphasis on "drift"—the idea that languages differentiated from a common base will show parallel modifications—led him to suggest genetic connection in families previously regarded as distinct.

The more unique contribution lay, not in structural nor historical phases, but in language as a psychologic-symbolic phenomenon. In the first place, he offered in "Language" (1921) a new approach of broad philosophic sweep. Pointing out that the traditional classification of languages relates properly only to their techniques, he emphasized the more fundamental characterizations of conceptual types and degrees of synthesis. The primary concern is with basic concepts, their radical or relational, pure or concrete nature, and the mechanisms for their expression. Essentially, this is emphasis on language as thought rather than as form.

His studies of the interrelations of psychiatry and culture are closely allied to this. Here he was concerned that psychiatry and psychoanalysis should profit from a study of variant cultural matrices and that cultural behavior as mechanism for thought and living should be understood in terms of psychological experience. When chairman of the Division of Anthropology and Psychology, National Research Council (1934–35), he had opportunity to lay the groundwork for coordinated studies along these lines, which may be expected to bear future fruit.

His most striking personal characteristics were a crystalline quality of thought and speech and an ever-present kindliness. The artistry of his effortless verbal performances, his articulateness, was a delight. It is no accident that half his writings are groups of poems, literary and musical criticism, showing the same heightened sensibility to nuances of sound and meaning, the same intuitions, that fertilized his linguistic and psychiatric work.

No life can be long enough to accomplish the program he set for himself, but we can only regret that his proved so brief.

LESLIE SPIER

NEW HAVEN, CONN.

EDMUND CECIL SHOREY
1865–1939

DR. EDMUND C. SHOREY, retired senior biochemist of the Bureau of Plant Industry, U. S. Department of Agriculture, died on January 30 at Emergency Hospital, Washington, D. C., after a protracted illness. He served, since retiring in 1935, as a collaborator with the Division of Soil Fertility Investigations, where formerly he was in charge of biochemical investigations of soils and fertilizers.

Dr. Shorey, born on March 5, 1865, in Lanark County, Ontario, Canada, was graduated from Queens University, Kingston, Ontario, with a B.A. degree in 1886, an M.A. degree in 1887, a D.Sc. degree in 1896 and gold and silver medals in chemistry and natural science, respectively.

His professional career began as chemist for the Kohala Sugar Company of Hawaii in 1893. Upon annexation of Hawaii in 1899, he became food commissioner for the territory and served for four years. In 1903, Dr. Shorey entered the field that later held his major attention, when he joined the Hawaii Agricultural Experiment Station as chemist. In 1907 he was transferred to the Bureau of Soils in Washington, D. C., and was associated with the Division of Fertility Investigations until 1915, when he was placed in charge of the Division of Chemical Investigations. He left the government service in 1918 to engage in industrial chemical research, but returned to the Division of Soil Fertility Investigations in 1922 as biochemist, becoming senior biochemist in 1928.

Dr. Shorey's major interest was in the organic constituents of soils and the nature of humus. His outstanding research in this field gained him an international reputation. His intense interest in this research was maintained until the last, as evidenced by the publication last March of his work upon the presence of allantoin in several soils. He was actively engaged in similar work up to his final illness.

Dr. Shorey was a fellow of the American Association for the Advancement of Science, a member of the American Chemical Society for more than forty years, a member of the Society of Biological Chemists, a member of the Washington Academy of Sciences and a fellow of the American Institute of Chemists. His home at the time of his death was in Falls Church, Va.

OSWALD SCHREINER

BUREAU OF PLANT INDUSTRY

RECENT DEATHS

WILLIAM H. COLLINS, director of the Observatory of Haverford College from 1892 to 1904 and prefect of the college from 1897 to 1919, died on March 11, aged seventy-nine years.

WILLARD DELL BIGELOW, since 1913 director of the research laboratory of the National Canners Association, died on March 6 at the age of seventy-two years.