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MEMORIAL OF LOUIS WADE CURRIER

May 4, 1890–June 23, 1970

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The death of Louis Wade Currier in Pitman, New Jersey, on June 23, 1970, ended the long and varied career of a remarkable man. As a geologist, teacher, private consultant, and warmly responsive human being, he devoted much of his life to helping others. Even during his extended terminal illness, his keen mind was directed outward and his prime regret was that he had been unable to do more for those about him.

Born in Middletown Springs, Vermont, on May 4, 1890, young Louis Currier soon assimilated the ethics of a distinguished New England ancestry. His lively spirit of inquiry revealed itself early and often in his youth, and he also developed an intimate acquaintance with hard work. Much of his formal education was in Massachusetts, and he graduated from the Massachusetts Institute of Technology in 1914 with a degree in Mining Engineering and Mining Geology. He then moved west to the University of Idaho as Instructor of Metallurgy and Geology, but returned to M.I.T. the following year. In 1916 he became an Instructor of Geology at Northwestern University, and in 1918 he took an interim leave for statistical work with the Council of National Defense, War Industries Board. Later in that year he enlisted in the U. S. Army, and was assigned to the Aviation Photographic Section of the Air Service. He returned to university life at Northwestern in 1919, and his receipt of an M.A. degree there in the following year bespeaks considerable perseverance in graduate work! But there were additional academic peregrinations still to come.

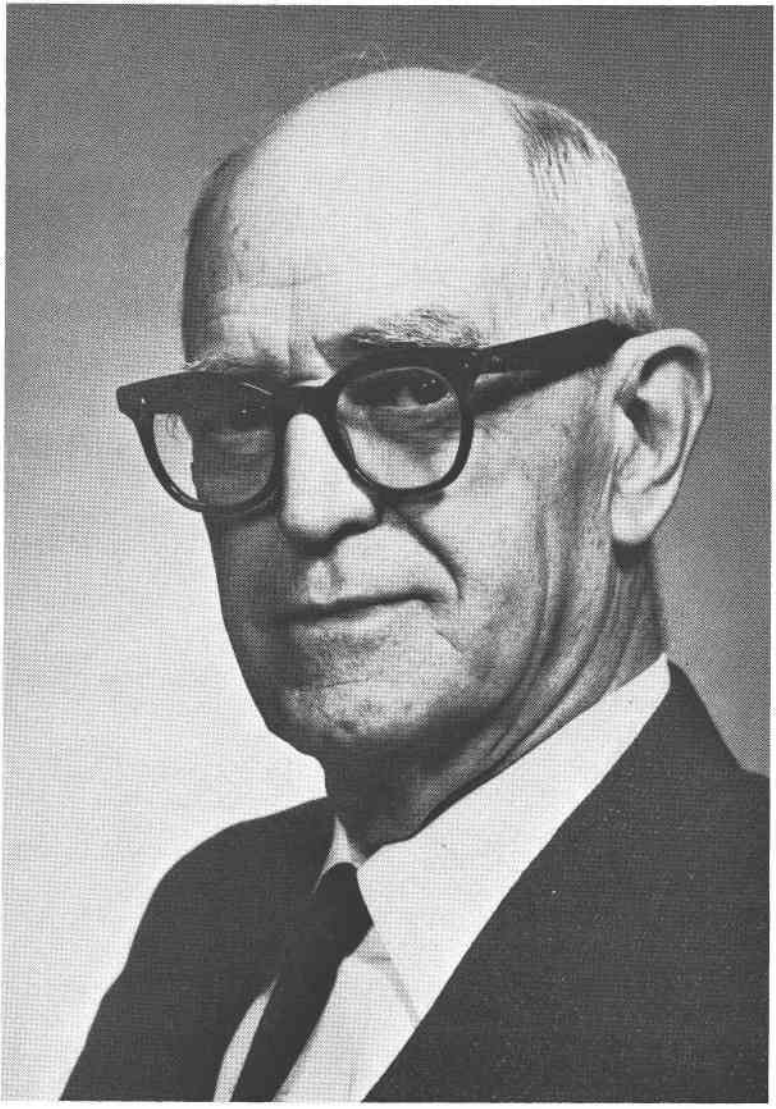
Finances were low after a third session at M.I.T., and Louis Currier was happy to accept, in 1921, an appointment at Syracuse University as Assistant Professor of Mineralogy. During that same year he married Evelyn Richardson, daughter of a well-known professor in the Syracuse Geology Department. In 1925 a more attractive position opened up at Missouri School of Mines, and the Curriers went west. This also marked the end of summertime field work that Lou had been doing for the Illinois and Kentucky Geological Surveys since 1917, but he did continue with the difficult task of pursuing his graduate research while teaching others. After he left Rolla as an Associate Professor in 1928, he finished off his own studies and received the Ph.D. from Syracuse University in 1930.

He promptly joined the U. S. Geological Survey as an Assistant Geologist, beginning a long association that ended with his retirement as a Principal Geologist in June 1960.

The earliest Currier publications, stemming from his state survey work, dealt mainly with igneous rocks and with lead, zinc, and fluorspar deposits in Illinois and Kentucky. A later bulletin on lead and zinc deposits in Virginia and a preliminary report on the Yellow Pine district of Idaho represent his first efforts as a member of the Geological Survey. But the Survey soon made it possible for Lou to embrace the region he loved best, New England. There he renewed his long-recessed tramping over the metamorphic terranes of Vermont, after which he shifted to detailed studies of commercial granites in several northeastern districts. The quarry operators tended initially to look upon this "scientific character" with amused tolerance as he recorded his observations of structural features on what one of them characterized as "his queer maps of our holes in the ground," but they quickly learned to respect the practical suggestions that he began to offer, quietly and with some diffidence, toward improvement of their operations. Unfortunately, he was able to give little more than two years of full-time work to this assignment, and no major report appeared until more than two decades later, yet his reputation for being on target with problems and practicable solutions spread widely through the granite-producing industry. His technical advice was repeatedly sought from this quarter throughout the remainder of his career.

In 1938 the Geological Survey joined the Commonwealth of Massachusetts in an experimental cooperative project of geologic studies, and Louis Currier was chosen to organize and operate this project. It was regarded as "hopelessly visionary" by more than a few observers, to whom its potential benefits, however exciting, seemed both elusive and distant. Indeed, there was no detailed plan of operations, no established working model to draw upon, no carefully assembled staff, and certainly there was no assurance that the values of geologic studies could be confirmed soon enough and convincingly enough to elicit continued financial support. But the right man had been assigned to the job, and he was able to develop the "Mass. Coop. Project" into what a colleague later termed "one of the Survey's strongest undertakings" and "a unique venture in American geology."

Currier quickly developed a master plan, stayed with it, and proved that it was wholly sound. It was based upon quadrangle mapping of bedrock and surficial geology according to a schedule reflecting priority needs and the availability of good base maps, with the ultimate objective of state-wide coverage. He had no more than a tiny staff of young geolo-



Louis Wade Currier

gists to make the first moves, and to these he added university students for summertime work. He gave most of his personal attention to those men with little or no pertinent experience, whereas those making good progress received minimal supervision; he seemed to be everywhere and nowhere at once, as he moved in a system that worked because of his special knack for recognizing where he was needed most. Early in the game he began to supply Massachusetts highway engineers with geologic information they needed, ranging from data on distribution of construction materials to prediction of subsurface relationships in areas of intended excavation. He later added geophysical surveys that sharpened up subsurface appraisals and were highly successful in exploration for groundwater reserves. He demonstrated to skeptical engineers that their work could be improved if they learned to ask the right questions of geologists, and that geologists could respond effectively to such questions even while engaged in long-term studies. In all, he made the project a viable enterprise that paid off handsomely on the initial gamble. It has served as a model for many others during the past three decades.

Currier necessarily sacrificed many of his own scientific studies during his 22-year leadership of the cooperative work, but he did manage to do a bit of mapping and he retained a very strong interest in commercial granites and glacial geology. At a time when there was widespread disagreement between those geologists who believed that the last ice sheet disappeared from New England by wholesale stagnation and those who held that the wastage was confined to exposed surfaces of moving ice, he ovolved the concept of "stagnation zone retreat." This amounted to so reasonable a compromise, and was so well fortified by the results of the ongoing, detailed mapping of surficial deposits in Massachusetts that it put most of the arguments to rest. Even though publication did not extend beyond a 1951 abstract, the concept was highly influential and even led to fundamental changes in the presentation of data on maps of surficial geology. It stands as one of his principal scientific contributions.

During World War II Currier updated earlier work on fluorspar in Illinois and Kentucky, and on lead and zinc in Virginia. Guidance of a cooperative project with Rhode Island was added to his duties in 1946, so that in effect he became State Geologist for two constituencies. After his retirement from Federal service in 1960, he served a year on the editorial staff of the American Geophysical Union, thence moving to the University of Maryland where as a Lecturer in Geology he built up student interest to a level requiring the organization of a more formal program in the field. He then served as a consultant to the Earth Science Curriculum Project of the American Geological Institute, followed by a year as Visiting Professor of Geology at the University of North Caro-

lina. He also found time to assemble and edit a handsome geologic map portfolio, comprising selected colored maps and sections along with text and exercises. Published by Williams and Heintz Map Corporation, this collection has been widely used as a teaching aid. After 1966 he was engaged mainly in private consulting, to the extent that his failing health permitted.

Louis Currier was a long-time Fellow of the Mineralogical Society of America and the Geological Society of America, and also was a member of the American Association for the Advancement of Science, Society of Economic Geologists, Sigma Xi, The Washington Academy of Sciences (past Vice-President), the Geological Society of Washington (past President), and the Cosmos Club of Washington, D. C. For 24 years he represented the U.S.G.S. on the Committee on Natural Building Stones, American Society for Testing and Materials, and he was its Chairman from 1948 to 1960. He was later elected the first Honorary Member of this committee, and was serving as Chairman of its Subcommittee on Nomenclature and Definitions at the time of his death.

Many of Lou Currier's emotional roots lay in New England, but he also was irrevocably wedded to dramatics. During his earlier years he was a participant, director, and one-time president of the Syracuse Drama League and Little Theatre. Later on he became active in the Washington Drama Guild and the Washington Civic Theatre, but it was as chief impresario of the Geological Survey's famous Pick and Hammer Shows that he made his greatest contributions to the enjoyment of others. Here his appreciation of Gilbert and Sullivan, his keen wit, and his innate sense of the appropriate combined to make his applications of the figurative needle a pleasure for victim and observer alike. Who could properly appraise his firm, yet gentle influence in those periodic uplifts of Survey morale over a span of so many years?

Lou was an extraordinarily kind man, with a sensitivity to others that he often tried unsuccessfully to conceal beneath a stern visage. His undeviating devotion to his family and friends was all but incredible, and it left its mark on everyone who really knew him. He derived much happiness from observing the progress and well-being of others, and he was generous in lending a hand whenever he sensed that it was needed. The Currier home and the Currier heart were always open, especially to the young geologist who might be ready for a meal, a bed, or perhaps some sympathetic counsel. Lou rarely mentioned his own troubles, of which he had more than his share. His health, for example, was less than good for many years, yet he never allowed this to blight his efforts or his humor. He was a man of quiet purpose and courage that were fully evident to only a few people; even some of his closest friends were un-

aware, for example, of the tortures he endured during his work in granite quarries—he suffered terribly from acrophobia. He could be recognized as a master of the put-on, and in retrospect one must conclude that his resilience somehow stemmed from his ability to kid his own way out of many depressing situations.

Whether one best remembers Lou as a delightfully posturing thespian, a connoisseur of cigars and New England seafood, a perforator of stuffed shirts, a slyly skillful writer who repeatedly attempted to sneak florid phraseology past sharp-eyed Survey editors (glance through the Gassetts paper for one of his successes!), a penetrating and humorous critic of someone else's manuscript, a potent advocate in a geologic argument, or a sensitive and understanding friend, the image reveals a top-quality human being. Lou's creed was "to so live that no one would ever be the worse for having known him," and he made it stand up for the full term.

Dr. Currier is survived by his wife, Evelyn Richardson Currier; a daughter, Mrs. Warren Preisser of Annapolis, Maryland; a son, Wade R. Currier of Pitman, New Jersey; two brothers, seven grandchildren, and four great-grandchildren.

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MEMORIAL OF CLAES WALTHER HARRY VON ECKERMANN

November 5, 1886–May 20, 1969

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An unusual life ended when Harry Von Eckermann passed away on May 20, 1969, at the age of 82. He belonged to a wealthy family with extensive interests in the lumber, pulp, and steel industries of Sweden. His grandmother on his mother's side was a lady of great originality who