## OBITUARY

## LIVINGSTON FARRAND

IN Livingston Farrand, who died on November 8, public health lost a great leader; education, a most able administrator; science, a distinguished contributor; the underprivileged of the nation, a valiant friend.

Rarely is it given to one man to contribute so largely to so many and such diverse fields. Even more rarely is such a contribution rich in the human values which give the scientific implications force and power.

Born in Newark, N. J., on June 14, 1867, Livingston Farrand received his undergraduate education at Princeton, where he was a member of the class of '88. He received his degree in medicine at the College of Physicians and Surgeons in 1891 and afterward took postgraduate work for a year at Cambridge and the succeeding year at Berlin. He returned to this country to teach in the department of psychology of Columbia University until 1903, when he was advanced to the chair of anthropology, a position which he held until 1914. In 1901, Dr. Farrand was married to Margaret K. Carleton, of New York. Five children, three daughters and two sons, were born of this union.

Among Dr. Farrand's many unusual capacities was that of being able to carry on active creative work simultaneously in widely separated fields. He became secretary of the National Association for the Study and Prevention of Tuberculosis and devoted much time to the strengthening of its organization during the same year in which he assumed the professorship of anthropology at Columbia and interspersed both duties with expeditions to study the primitive populations of the northwest coast and in British Columbia. His conclusions were stated in several authoritative monographs on anthropology.

From 1914 until 1919 Dr. Farrand served as president of the University of Colorado. During that period, in addition to conventional academic tasks which he executed with unconventional vigor and efficiency, he devoted himself to effecting a complete reorganization of the medical school of that institution; at the same time giving generously of his time to act upon a series of conciliation boards during a period of bitter labor disputes in the great industries of Colorado.

By 1917 Europe had been at war for three long years. Health conditions had become distressing among the civilian populations behind the lines of each nation involved. In France, especially, tuberculosis was doing vast damage. Accordingly, Dr. Farrand was asked to take leave of absence from the University of Colorado in order to organize the fight against this disease among the French people; a difficult task, for they were unfamiliar with the modern methods of searching

out early and incipient cases and isolating active cases for treatment. Also, they were bitterly antagonistic to the interference in their daily lives which this involved and were distinctly suspicious of the intruding Americans. Dr. Farrand handled the problem with distinction, however. In recognition of his services, he was made an Officer in the Legion of Honor. Because of his excellent relations with the French and his familiarity with the work of the American Red Cross overseas, he was suggested by their War Council as the proper person to direct the work of the organization after the war. He had almost completed the process of transition, in which the war activities of the Red Cross were transmuted into useful labors for a nation at peace, when he was chosen for the presidency of Cornell University.

From his installation at Ithaca, N. Y., in 1921 until his retirement at the age of 70 in 1937, Dr. Farrand was not only a great university president, as measured by the growth in size, prestige and support of the institution during that period, but he found time to contribute to many causes, especially in the interest of medicine, public health and education. He was first treasurer, then president of the American Public Health Association, and an editor of the American Journal of Public Health. From 1930 to 1932 he headed the State Health Commission appointed by Governor Roosevelt which drew up a 20-year plan to conserve the vital resources of the State of New York. He was among the first to place himself publicly on record against the Prohibition Amendment. He headed the emergency committee of American educators for the assistance of German scholars exiled by Hitler. In 1932 he succeeded Dr. William Allan Neilson of Smith College as chairman of the board of trustees of the Carnegie Foundation for the Advancement of Teaching. He was a member of the board of the Milbank Fund and other foundations for the promotion of human welfare. In 1937 he was elected a member of the board of governors of New York Hospital and a trustee of the American Museum of Natural History. He devoted much time during his latter years to study of the needs and the development of sound policies for better medical care for the masses of American people.

Dr. Farrand was continually besought to assume executive responsibilities, because of his great capacity to see the best in men and get the best out of them, particularly in inducing them to work loyally alongside those with whom they differed. He was the great moderator, the composer of factions, the friend of freedom of thought and unity of action. He knew how to implement an idea without regimenting the men who marched under its aegis. A great tribute was offered him on June 9, 1937, upon the conclusion of sixteen years as president of Cornell University and becoming president emeritus. In a volume engrossed on parchment and signed by nearly 500 members of the Cornell faculty, there are among other glowing words of praise, these lines which summarize the deep significance of Dr. Farrand's life and work:

We wish to dwell upon that warm fellow-feeling which has characterized your daily association with members of the faculty.

Few there are among us who have not upon some occasion sought your advice or practical assistance. We have always left your office with gratitude for the helpfulness and sympathy which you have invariably manifested.

Coming to the headship of the university in the full maturity of your mind and with rich experience in education and in public affairs, you have not thought it necessary to seek innovation for the sake of innovation.

You have, on the other hand, missed no opportunity to reaffirm those fundamental principles of education which as members of the faculty we treasure most highly.

During your presidency there has been in this university no question involving freedom of speech, no question as to the authority of the faculty in strictly educational matters, no question as to academic security. The years of your presidency have been free from factional strife. We have enjoyed the academic peace which must prevail in an educational institution if it is to be worthy of the name.

Men come, they serve, and they move forward to their greater to-morrow. Never for the cause of humanity which he loved, have we needed so much as now the skill and strength, the human kindliness and salty wisdom of Livingston Farrand.

THOMAS PARRAN

## WALDEMAR LINDGREN 1860–1939

WALDEMAR LINDGREN died on November 3 after an illness of eleven months. His influence will long be present with those who work in his beloved geology, but they will miss his friendly greeting and counsel.

His interest in geology began in early boyhood with walks in the pleasant countryside near Kalmar in southern Sweden. Soon he was making trips farther afield to the famous mineral localities and mines of Central Sweden which have stimulated the curiosity and imagination of so many Swedish scientists. By this time he had decided to make geology his life work. Until the closing year of his life he labored in this chosen field with a sustained enthusiasm and singleness of purpose that resulted in a remarkable unity of man and vocation.

At the age of eighteen Lindgren entered the Royal Mining Academy at Freiberg, Saxony, was graduated four years later, and remained for an extra year of graduate work. While at the Academy he studied under the leading workers in geology and mineralogy of that time. Typical of Lindgren was his remark that one of the most valuable lessons he learned at Freiberg came from a reproof by one of his teachers, Weisbach, that the student should rely on himself and not on the professor. This wholesome philosophy Lindgren later passed on to generations of field assistants and students.

In 1883 he came to the United States, and a year later began work with the U. S. Geological Survey. A long succession of reports on the geology of important mining districts came from his pen during the next three decades. Among these were the classical descriptions of portions of the Mother Lode and other districts in California; Silver City and De Lamar, Idaho; Clifton-Morenci, Arizona; Cripple Creek, Colorado; National, Nevada; and Republic, Washington. The long intensive field studies of these and other ore deposits provided the data for the theories and generalizations with which he so greatly enriched the science of mineral genesis.

In 1911 he was appointed chief geologist of the Survey, a testimonial to his broad grasp of all fields in geology. He resigned this position in 1912 to become the William Barton Rogers professor of geology and head of the department of geology at the Massachusetts Institute of Technology. In 1933 he was appointed professor emeritus.

The first edition of "Mineral Deposits" appeared in 1913. It became the leading reference and text-book of this subject the world over. The later editions have maintained this position to the present time.

Lindgren was a stimulating teacher. The generations of students who came from many lands to work with him have been lavish in praise of the man and the mentor. The respect with which students came to him as a teacher soon was tempered by respect and admiration for him as a friend. Those who came to know him well treasure the memories of the man, and the friend, beyond those of the teacher. The even temperament, the ability to infuse life into a geological discussion, the disarming kindness with which he presented forceful objections to some theory were characteristic of the man.

For decades Lindgren has been recognized as the world's leading student and interpreter of ore deposits. He made important contributions to our knowledge and theory of alterations or changes in the rocks adjacent to fissure veins and igneous intrusions; the process of replacement; the influence of physical conditions on ore deposition; the rôle of igneous processes in the formation of ores; the conception of ore deposition within certain geological periods and provinces; and the importance of colloids in the formation of certain ore deposits. Transcending all these in importance, however, was his comprehensive philosophy of