## PRESENTATION OF THE ROEBLING MEDAL OF THE MINERALOGICAL SOCIETY OF AMERICA TO WILLIAM FREDERICK FOSHAG\*

## EDWARD H. KRAUS, University of Michigan, Ann Arbor, Michigan.

Our medalist today has a special relationship with and responsibility to the Roebling family. It is, therefore, fitting that we recall that Colonel Washington A. Roebling, in whose honor the medal is named, gave \$45,000 to our endowment fund on February 15, 1926. This gift permitted the Society to expand materially *The American Mineralogist*. It is also well to remember that Colonel Roebling was a connoisseur and ardent collector of minerals. In fact, he had assembled one of the world's finest private collections. He took especial pride in having, as far as possible, typical representatives of all minerals which had been described.

Following the Colonel's death on July 28, 1926, his collection of 16,000 carefully selected specimens was presented to the National Museum of the Smithsonian Institution in Washington. An endowment fund of \$150,000 was generously established by the Colonel's son, John A. Roebling, the income to be used for the acquisition of new material and the preservation of the collection in the high position it had attained. The recipient of the Roebling medal today was requested by Mrs. Roebling to supervise the packing and transporting of the collection from the Roebling residence in Trenton, New Jersey, to the National Museum. Since then it has been his and his associates' responsibility to maintain the collection in the front rank to which Colonel Roebling had brought it.

William Frederick Foshag was born at Sag Harbor, New York, March 17, 1894. He attended the University of California, where as an undergraduate he specialized in chemistry. Before receiving his bachelor's degree in 1919, he served for a short period as control chemist for the Riverside Portland Cement Company at the famous limestone and mineral locality at Riverside, California. Graduate studies were also pursued at the University of California. The degree of doctor of philosophy was awarded in 1923.

Professor Walter C. Blasdale was one of Foshag's instructors in chemistry. Professor Blasdale was much interested in minerals and is remembered by mineralogists for his analysis of the new mineral benitoite, which was described by George D. Louderback in 1907. It was, however, the University's distinguished mineralogist, Professor Arthur S. Eakle,

\* Presented at the annual luncheon meeting of the Society which was held on November 10, 1953, at Toronto, Canada.

who aroused in Foshag an intense and abiding interest in minerals. It should be mentioned that Professor Eakle was active in our Society and served as its president in 1925. In geology Dr. Foshag came under the stimulating influence not only of Professor Louderback, but also of Andrew C. Lawson and of John C. Merriam, who later became president of the Carnegie Institution in Washington.

In 1919 Dr. Foshag began his long career at the United States National Museum when he was appointed as assistant curator. In 1929 his rank was advanced to curator, and in 1948 he was promoted to the head curatorship of the department of geology, as a worthy successor to his eminent predecessors George P. Merrill and Ray S. Bassler.

During this period of thirty-four years Dr. Foshag has been an extremely active and efficient investigator. He has made many significant contributions to the advancement of our science for he has published nearly one hundred papers. They reveal his comprehensive knowledge of the various branches of the earth sciences. Thirteen new minerals, which are now recognized as independent species, have been described by him or in association with others. This is no mean accomplishment. Moreover, much time has been spent by him in the field studying famous mineral and mining localities in the United States and Mexico. On these expeditions great quantities of valuable material were collected, which have greatly enriched the mineral and geological resources of the museum. The results of these numerous field studies and of the subsequent laboratory investigations of the collected specimens are given in many important papers. The activities of the Mexican volcano Paricutin were also studied and photographed by him.

For years the excellent collections of cut and uncut gemstones in the National Museum have been greatly admired. To add new and unusual material has been Dr. Foshag's constant endeavor. Today he is recognized as a leading authority on gems. He has long been closely identified with the activities of the Gemological Institute of America. He is a member of its Educational Advisory Board and of the Editorial Board of *Gems and Gemology*, the Institute's quarterly journal. He also participates regularly in the annual programs of the American Gem Society.

Since 1949, with his associates George Switzer, G. W. Josephson, and H. T. Chandler, he has prepared the important annual Review of the Diamond Industry for the *Jeweler's Circular-Keystone*, and the chapter on Gemstones for the *Minerals Yearbook* published by the United States Bureau of Mines. His comprehensive and beautifully illustrated article Exploring the World of Gems, which appeared in the *National Geographic Magazine* in 1950, won world-wide commendation.

In 1946 Dr. Foshag and his associate Edward P. Henderson spent over

four months in Japan supervising the grading, classifying, and evaluating the diamonds, worth \$25,000,000, which had been cached by the Japanese and subsequently uncovered by the occupation forces. Also, while in Japan the production of cultured pearls was carefully studied by him. It must be added that Dr. Foshag has devoted much time to the study and classification of meteorites.

Dr. Foshag is a fellow of the Mineralogical and Geological Societies of America, the Geophysical Union, and the Society of Economic Geology, and a member of the Society for Research on Meteorites, and the Washington Academy of Science. He is also an honorary member of the Geological Society of Mexico. The following tribute from the Geological Institute of Mexico was received a few days ago by our secretary, Professor C. S. Hurlbut, Jr.:

"Dr. Foshag has studied numerous aspects of the mineralogy of Mexico through a third of a century. He has visited the country many times to make collections and to study the geology of outstanding mineral localities. He has acquired an unsurpassed—and probably unequalled—knowledge of the minerals of Mexico. This vast store of information he has transmitted freely and in particular has Dr. Foshag contributed to the training of Mexican mineralogists—frequently going to great pains on their behalf and always giving his valuable time with unstinting cheerfulness."

This tribute is signed by the director of the Institute, Teodoro Flores, and by nine Mexican associates and friends of Dr. Foshag.<sup>1</sup>

Dr. Foshag is a charter fellow of our Society and has served as a councilor from 1925 to 1928, as vice-president in 1931, and as president in 1940.

## Mr. President:

I have the high honor to present William Frederick Foshag as the twelfth recipient of the Washington A. Roebling Medal for meritorious achievement in the mineralogical sciences.

<sup>1</sup> Enrique M. Gonzalez, Amadeo Larralde, Luis Flores Covarrubias, Clara Flores Covarrubias, Jenaro Gonzalez R., Eduardo Schmitter, Ariel Hernandez V., J. Martinez Portillo, and A. R. V. Arellano.