

ACCEPTANCE OF THE ROEBLING MEDAL OF THE
MINERALOGICAL SOCIETY OF AMERICA

WILLIAM F. FOSHAG, *U. S. National Museum, Washington, D. C.*

This is an award that I deeply appreciate, and I sincerely thank the Mineralogical Society of America for so signal an honor. I can be quite frank in telling you that, had I been consulted, I believe I could have suggested more worthy candidates, a situation which can only intensify my gratitude to you.

Professor Kraus mentions that I enjoyed a somewhat favored relationship with Washington Roebling. Indeed, as a young mineralogist, I had the happy opportunities of friendly intercourse with him, both through correspondence and as an invited guest at his home. I can, perhaps, do no better on this occasion than to recall some little-known facets of this remarkable man, particularly since a new generation of mineralogists has come forward since Roebling's death in 1926.



WILLIAM FREDERICK FOSHAG

Recipient of the Roebling medal of The Mineralogical Society of America.

Washington A. Roebling's reputation as an engineer is well known. Several biographies, and numerous newspaper and magazine articles have described his career in this field, and its culmination in the epic achievement of the Brooklyn Bridge. A portrait bust of him on the bronze doors designed for the U. S. Capitol by the sculptor, Louis Amateis, upon which geology is represented by Dana, chemistry by Gibbs, and physics by Henry, symbolizes his place in the cultural development of America.

In addition to being a great engineer, one could class him as a great captain of industry. For many years he was president of the vast Roebling Wire Works. The most spectacular achievement of his company, other than their stupendous suspension bridges, was the fantastic North Sea Mine Net of World War I, 27 million feet of wire cable, equipped to carry 100,000 mines, intended to seal the North Sea against the German sea marauders.

Something, too, has been written about his military exploits during the Civil War. He enlisted as a private and by gallant action and bravery upon the battlefields of many campaigns he rose to the rank of colonel. Few men had a more venturesome battle career and his exploits gained him a considerable reputation. In reply to a letter I once wrote to him about a visit to the diabase quarry at Goose Creek, he replied that he knew the place well, for in the battle of Ball's Bluff nearby, he almost lost his life. If we can believe some of the Southern chroniclers, the Yanks were completely extirpated, with the only Southern casualty that of a soldier who shot himself in the foot while hunting rabbits for the pot, after the battle was over. Roebling remarked in his letter that the only specimen he brought back from there was a bullet in the pommel of his saddle, but he escaped being one of the casualties in this disastrous affair.

It was about this time that the use of balloons in military reconnaissance was introduced and Roebling became one of the first military aviators. On one such ascent he spotted the advance of Lee's Armies toward Pennsylvania, a maneuver that culminated in the Battle of Gettysburg. His most famous exploit was his defense of Little Round Top, when he detected Hooker's advance upon that unguarded flank of the Union Army's lines, and with a few of his men wheeled a cannon into position, delaying the Confederate charge until this critical position could be adequately occupied. Military tacticians credit this action with winning this decisive victory, the turning point of the War.

Roebling's military career reads like a Hollywood scenario, and like a cinema hero, he reaped his reward—he married his general's sister.

But what interests us most here is Roebling's career as a mineralogist. His interest in this science was first aroused when he took a course in

mineralogy at Rensselaer Polytechnic Institute. Just when he decided to make a collection of minerals I neglected to ascertain. Having embarked on this project he pursued it with all the enthusiasm and thoroughness that he applied to being a soldier or to building his famous bridge. His goal was a collection as complete as possible, to include not only all species and subspecies, but also representative specimens of all the useless names with which some mineralogists have confused and confounded our science. To achieve this aim he followed the mineralogical literature intently, and thereby acquired a knowledge of our science that many of us might have envied. He wrote to the mineralogists of his day for the new species they described, and obtained much type material in this manner. He accused one famous prolific creator of species of manufacturing names to sell to him. Besides dealers and other collectors he dealt with, if we read his records, thieves and a damned thief, a fool and a scoundrel, the latter a clergyman from Brooklyn. After almost seventy years of constant endeavor, his collection exceeded in completeness the famous public collections of Europe and America. Some idea of its extent is indicated by a few figures: 46 varieties of feldspar, 48 named pyroxenes, 59 named amphiboles, and 64 varieties of mica. Although it contains many superb or unique crystallized mineral and gem specimens, it is essentially, you could say, a mineralogist's collection, in which the scientific investigator was almost certain to find the rarest materials for research or comparison. And the collection was freely available to any scientist who found occasion to use it. In reply to a request from one researcher he replied, "I am always glad to send out rare minerals. It is of no use to keep specimens locked up in dark drawers forever." This enlightened attitude was rare then, even among the scientifically inclined museums.

As you know, the Roebling Collection has been deposited in the Smithsonian Institution. The liberal terms of the gift and a generous endowment by his son, John, permits us to continue Roebling's policies, to gather in everything of mineralogical interest and to make the collection available to all scientific investigators. Larsen used the collection extensively for many of the rarities not obtainable in other collections for his "Microscopic Determination of the Nonopaque Minerals." The 75 varieties of clay minerals in the collection form the basis of much of the recent work on this difficult group, and the many rare uranium minerals are being found invaluable in the current interest in this metal. Some of the specimens have, like an acquaintance of Roebling's, "gone round the world, around and around like a merry-go-round."

This contribution of Roebling's must be evaluated high among the contributions to our science. It could be accomplished only by someone

dedicated to the task, with ample funds to sustain it and a long life to devote to it. I believe that he was as proud of his collection as he was of his famous bridge.

The Roebling Medal is artistically conceived, a beautiful thing. It depicts him from his favorite portrait, a strikingly handsome man in which his kind, gracious and unaffected nature is clearly evident. It would be a desirable object for its artistic merit alone. And the honor that attaches to it is beyond price. That it should befall me to possess it is the greatest honor that I can imagine.