

MEMOIR
OF
WILLIAM P. TROWBRIDGE.
1825-1892.

BY
C. B. COMSTOCK.

READ BEFORE THE NATIONAL ACADEMY, NOVEMBER, 1893.

BIOGRAPHICAL MEMOIR OF WILLIAM P. TROWBRIDGE.

The National Academy has lost another of its members, one who was devoted to applied science, which in the last seventy years has so rapidly changed the whole of civilized activity, and who, being in contact with that vast field on many sides, was intellectually a well-rounded man.

Prof. William P. Trowbridge was born in Troy, Michigan, on May 25, 1825, and died at New Haven, Connecticut, on August 12, 1892.

With a father in the war of 1812, with a grandfather who as a boy took part in the battle of Lexington and was afterward a brevet captain in the Continental army, he came of stock from which it is an honor to descend and which has made so strong an impression on our national life.

Of the way in which characters and traits are transmitted we know nothing; of the fact of transmission no one can doubt. A friend of Professor Trowbridge's father saw in a shop window in London a portrait, as he thought, of his friend. On examination it proved to be that of Sir Thomas Trowbridge, of the Royal navy, who fought with Nelson. There was doubtless a distant connection, and over the long route the type had been retained.

Professor Trowbridge was appointed a cadet at the United States Military Academy at West Point, and graduated at the head of his class in 1848, serving in the last year of his cadetship as acting assistant professor of chemistry. Soon after graduation he was ordered back to West Point as an assistant in the astronomical observatory, where he prepared himself for duty on the Coast Survey, on which he served from 1851 to 1856. In this survey he was engaged on the primary triangulation of the coast of Maine; on surveys of the Appomattox and James rivers, recommending on the latter the cut-off at Dutch gap, which was subsequently undertaken by General Butler during the war and has since been finished. From 1853 to 1856 he was occupied on magnetic and tidal observations, extending on the Pacific coast from Puget sound to San Diego, California. In this time he made natural history collections amount-

ing in all to several thousand specimens, which he subsequently presented to the University of Michigan. He was promoted to second lieutenant, Corps of Engineers, on July 1, 1848; to first lieutenant, Corps of Engineers, December 18, 1854, and resigned from the army on December 1, 1856, to accept the professorship of mathematics at the University of Michigan. Not finding this position what he had expected, he resigned in 1857, and at the solicitation of Professor Bache accepted a position as assistant on the Coast Survey, where he was employed on Gulf stream observations and in magnetic work at Key West. From 1862 to 1865 he was in charge of the engineer agency at New York city, and of the construction of the fort at Willets Point, as well as of repairs to other works in New York harbor.

From 1865 to 1871 he was the vice-president of the Novelty Iron Works at New York city; from 1871 to 1877 the professor of dynamic engineering in the Sheffield Scientific School of Yale College; from 1877 till his death, in 1892, he was the professor of engineering in the School of Mines at Columbia College. In 1880 he took charge, under the Tenth Census, of the department of power and machinery employed in manufactures. In addition to these duties he was the adjutant general of Connecticut from 1872 to 1876; was commissioner for building the capitol at Hartford from 1873 to 1878, and commissioner for establishing harbor lines at New Haven from 1872 to 1878.

He was associate editor with Dr. Barnard of Johnson's Cyclopaedia. He was the author of "Heat and Heat-engines" (1874); of several memoirs which have appeared in the reports of the Coast Survey; of an early plan for a cantilever bridge across the East river, and of numerous contributions to the Academy of Sciences of New York.

The degree of A. M. was conferred on him by the Rochester University in 1856 and by Yale in 1870; that of Ph. D. by Princeton in 1880; that of LL. D. by Trinity in 1883 and by the University of Michigan in 1887.

He was a member of the New York Academy of Science, of the American Association for the Advancement of Science, and was elected a member of the National Academy in 1872.

He was married at Savannah, Georgia, to Miss Lucy Parkman on April 21, 1857, who survives him. Such is a brief synopsis of the principal events in a busy and useful life.

WILLIAM P. TROWBRIDGE.

Thus far only his intellectual activity, wide and varied as that was, has been spoken of. Of his fitness as a teacher one of his associates in Columbia College has said, "He had that rare combination of personal qualities of character with intellectual capacity and technical acquirement which made him an almost ideal selection for the position which he was called upon to fill. With ability to appear before a broader public with credit, and appreciating the advantages which follow to an institution from such wider recognition of its professors, yet withal so modest and conscientious as never to be tempted to neglect a new duty because inconspicuous, his loss is made the more greivous by the very rarity of the union of these qualities in one person."

The intellectual life, valuable as it may be to the world, is largely the result of the activity of a thinking machine working on its proper objects. It is not the man. To know the man one must know the ideals which influence or control his life. In the case of Trowbridge one must also know the loving relations with those near to him that strengthened with the growing years; must know the respect and admiration which his fellows in the long path of life felt for him; must know the goodness they saw sculptured in his face by the slow hand of time.

Religious, unselfish, loving, we may well wish to leave a memory like his that shall—

Smell sweet and blossom in the dust.