

MEMOIR
OF
DENNIS HART MAHAN
1802-1871.

BY
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BIOGRAPHICAL MEMOIR OF DENNIS H. MAHAN.

MR. PRESIDENT AND GENTLEMEN :

At the last stated session of the Academy I was appointed to prepare a record of the life and public services of our late associate, Professor DENNIS H. MAHAN. It may well be regretted that this duty has not devolved upon one more nearly of his own age, and better qualified, by intimate personal relations, to present a many-sided view of a character which I can only regard with the veneration due from a pupil to an honored instructor. Deeply sensible of individual obligations to him, knowing the wide and lasting influence which he has exerted upon civil engineering and military science in this country, cognizant of the untiring and life-long devotion to duty which was the distinguishing characteristic of his career, I cannot but feel my inability to state in a fitting manner his claims to be regarded as one of our leading pioneers in scientific culture—one who has laid the foundations upon which many have founded titles to lasting fame.

Dennis Hart Mahan was born on April 2, 1802, in the city of New York; but his parents soon changed their residence to Norfolk, Va., where most of his boyhood was passed, deprived by death of a mother's influence, and with no uncommon advantages in the way of early education. He was destined for the profession of medicine, but having a strong taste for drawing, and hearing that this was taught with special care at the Military Academy, he sought and obtained an appointment through the influence of a friend of his family, the Hon. Thomas Newton, then a member of the House of Representatives. His father died shortly after his admission to the institution.

His career at West Point was brilliant. He took and held the first place in a class which at graduation numbered thirty-one members; and included, among others, the distinguished inventor of the Parrott gun. While only a third classman Cadet Mahan received

the unusual honor of an appointment as acting assistant professor of mathematics, the duties of which he discharged, in addition to the full usual course of study, in a manner to win the marked approval of the officers of the institution.

He was graduated in 1824 and promoted into the corps of engineers. After remaining at the academy as an instructor for two years, he was ordered to Europe to study public engineering works and military institutions. By special favor of the French Ministry of War Lieutenant Mahan was allowed to join the Military School of Application for Engineers and Artillerists at Metz, where he remained for more than a year, under the instruction of men whose names were then, and are now, widely known in science. While in Europe he was often an intimate and favored guest of the family of Lafayette.

Returning home in the summer of 1830, he rejoined the academic staff at West Point as acting professor; and on January 1, 1832, formally vacated his commission in the corps of engineers to accept the professorship of civil and military engineering. The duties of this important office he continued to discharge until his death on September 16, 1871—a total period of over forty-one years.

Both Brown and Princeton conferred upon Professor Mahan the degree of A. M. in 1837; and William and Mary, Brown, and Dartmouth added that of LL. D. at a later date. He was elected a member of the Geographical Society of France in 1828, and subsequently became a member of many American scientific associations, being one of the original fifty incorporators of the National Academy of Sciences.

Such is the brief record of the professional career of Professor Mahan; but it fails to convey any adequate idea of the influence which he exerted upon engineering science in this country. To appreciate this, it must be remembered that for many of those forty-one years West Point was our only school of mathematical and physical science where the rigid requirements and high standard now deemed essential were even attempted. Every officer of the present corps of engineers who has served long enough to win reputation in the performance of the civil duties assigned to that corps, and many of the eminent civil engineers of the country as well, now gratefully remember how before those old black-boards in that unpretending recitation room at West Point they learned from Professor Mahan, with the rudiments of their profession, a high-toned disci-

pline and the fundamental truth that without precision of ideas, rigid analysis, and hard work there can be no such thing as success.

But if civil engineering owes much to our late colleague, military engineering and the science of war owe more. For many years, and up to the day of his death, he was in that branch of the profession confessedly the highest scholastic authority in America.

By reason of our pacific foreign policy, and of our geographical position which separates us widely from the great battle-fields of civilization, this study receives little attention among us; and for that reason, perhaps, is hardly appreciated even among thoughtful men. Its mental requirements are of a high order. The student of physical science works with definite quantities, and his conclusions are based upon precise premises. In the great game of war the field is more extended, and the skilful player must combine the precision of the mathematician with a profound knowledge of the strength and weakness of human nature. Nothing can be neglected. He must grasp the prosaic but vitally important facts and figures of logistics; the comprehensive theory of grand tactics, by which an unwieldy mass of men can be so directed as to deliver overwhelming blows with the precision of a perfect machine; the resources of the military engineer, by which natural obstacles are overcome and often transformed into advantages; and lastly the great principles of strategy, which, dealing with the hopes, fears, and passions of men, and the moral influence of circumstances upon them—elements more varying than the pulses of the most terrible natural tempest—are yet fixed and immutable as the eternal rock.

To the study and the imparting of this all-important science, upon the proper understanding of which the fate of the nation may at any time depend, Professor Mahan gave the best efforts of his laborious life. It was no perfunctory task. He threw his whole soul into the work; and when his teachings bore glorious fruit upon the fields of Mexico, enthusiasm broke through his habitual reserve; the success of his pupils to him was the vindication of their alma mater against the clamors which had filled the air, and, as one of the officers expressed it to me: "He welcomed me home with moist eyes and a silent grasp of the hand more eloquent than words."

The value of his instructions was again shown upon the more extended theatre of the late civil war. The race was open to many men of character and intelligence, but at the close, with hardly an

exception on either side, those who had studied under Professor Mahan had won the highest laurels.

It would, however, be a great mistake to suppose that the influence of his teachings was exerted only upon the graduates of the Military Academy. In the discharge of his duties he found it necessary to prepare many text-books of instruction, both civil and military. These works have been adopted in other institutions, studied by our citizen soldiery, and to-day they are well known to many who never saw the author.

Briefly recapitulated these works are: His "Treatise on Field Fortification," which first appeared in 1836, has passed through six or seven editions, and is, in the opinion of competent judges, the best work on the subject in the English language. His "Permanent Fortifications," a terse and clear compendium of the principles of the art. His "Advanced Guard, Outpost and Detachment Service of Troops," which first appeared in 1847, but was much enlarged and extended in 1862; together with his work on Field Fortification it was reprinted at the South during the war, and has been largely used in military schools and among the national guard of his native State. His "Treatise on Fortification Drawing and Stereotomy," which was published in 1865. His "Course of Civil Engineering," first published in 1837, and enlarged and reprinted from time to time until 1868. This work is universally known to the profession, over fifteen thousand copies having passed through the press. It has crossed the Atlantic, having been reprinted in quarto form in England, translated in whole or in part into several foreign languages, and adopted in one of the government schools in India. His "Industrial Drawing," first printed in 1855, was specially designed for the use of academies and common schools, into which it has been largely introduced. Finally, his American edition of "Moseley's Mechanical Principles of Engineering," which was published in 1856 and reprinted in 1869, bears many traces of his original mind.

Such was the useful and unselfish life of Professor Mahan, the melancholy close of which it is impossible to contemplate without emotion.

He had become so thoroughly identified in feeling with the Military Academy that every slight cast upon it by hostile tongues was to him a personal insult—every success of one of his pupils a personal gratification. No labor was too severe, no sacrifice was too

great to be made in its behalf. As age advanced, and his health began to suffer, these feelings became morbid; and the idea that his increasing infirmities might, in the judgment of others, render it expedient for him to retire from his laborious post became a nightmare to him. In this state of mind, with which every thoroughly earnest man must feel a profound sympathy, he received a terrible shock when, in 1871, the annual board of visitors recommended his compulsory retirement. Although the President, who well knew his worth, cordially assured him that no action would be taken upon this recommendation, the iron had entered his soul, and he became mentally so depressed that his friends, with reason, grew anxious lest the overtaxed brain might give way under the strain. In his battle of life the time had come when, weakened by disease and suffering keenly under a mistaken sense of non-appreciation, death seemed to his proud spirit the only resource. Had he been confronted with physical foes no one who knew him can doubt that he would have headed a last desperate charge, and, sword in hand, have won a soldier's death; but his foes were mental, and he could only suffer. In the early autumn his mind became unmistakably affected; and, while yielding to the entreaties of his family and friends to visit his physician in New York, the clouds settled thick upon him, and in an instant of acute insanity he plunged from the steamer and ended a life which had become too painful to be longer endured.

Language fails to express the feelings of sympathy, pity, and regret with which the news was received by his pupils in the army. That the aged professor, for whom the respect inspired in the recitation room had long since deepened into admiration and regard as his noble aims and life-long labors were more fully appreciated, should thus pass away, was pathetic in the extreme. A deep sense of personal obligations, and regret that it had not been made more manifest to him, prevailed universally among those who were capable of appreciating the nobility of his character.

Professor Mahan was slight in frame and of an intensely nervous organization. His health was always delicate, and it was only natural ability and indefatigable industry which enabled him to perform so much mental labor.

In his happy home circle he was one of the kindest and most affectionate of men. His attention to the little amenities of life was characteristic, and belonged rather to the old school of polite-

ness than to the less ceremonious manners of the present day. To remain covered when addressing a lady was to him an impossible act even up to the close of his life. His children were taught to observe scrupulous courtesy, and to avoid the use of anything approaching slang language in his presence.

In the section room Professor Mahan usually exhibited the earnest and military rather than the kindly side of his character. All his life a hard student himself, he had no mercy for idleness and but little for stupidity. Anything like a pretense of knowledge or a politic concealment of ignorance was sure to be detected, and in forcing the unhappy offender from his untenable positions the professor often chose stones rather than grass. The first impression which he produced upon a new class was, therefore, often unfavorable, and he was regarded as cynical rather than sympathetic. As the year wore on, however, it always became apparent that his peculiarities were those of manner rather than feeling; and the strong interest which he displayed in imparting knowledge and elaborating obscure and doubtful points produced its effect. His pupils rarely graduated without acquiring a high respect for his devotion to duty, his profound ability, his comprehensive knowledge of the subjects included in his course, and his strict sense of justice.

The young officers of the army who served as instructors under him had, of course, a much better opportunity of understanding his character than the cadets, and they usually acquired for him a warm personal regard. Indeed, it not unfrequently happened that the same individual who as a cadet had considered Professor Mahan to be cold in temperament and cynical in disposition, became as an officer enthusiastic in his praise. He was really a man of warm and kindly feelings and genial humor, and I am told of repeated instances in which he exerted an active influence in behalf of cadets in trouble, entirely without the knowledge of the individual.

As a member of the academic board, of which for many years he was the honored dean, his influence was judicious and conservative. He merged all personal aims in the interests of the Academy, and brought to the performance of his duties the most conscientious impartiality and the strictest fidelity. His pride of character is well illustrated by the fact that, when his own son was passing through the academy, he habitually absented himself from the individual examinations of the boy—in order to avoid the necessity of casting

a vote when his class standing was fixed by the board. It need hardly be added that this class standing, upon which the arm of service and rank as an officer depends, was a matter of great importance, and must have been an object of the deepest solicitude to the father.

Upon the roll of those who have given to the Military Academy the reputation which it bears before the country, the name of Mahan must ever hold an honored place. He has made his mark upon the times in which he lived. His life ended in pain and sorrow, but he now sleeps peacefully under the shadow of those eternal hills among which he labored so long and so faithfully. His memory cannot fail to stimulate in others the growth of those sterling virtues which he so highly prized and so worthily illustrated.