

ANDREW ATKINSON HUMPHREYS.

AMERICAN science is again called to mourn the loss of one of its leaders, the friend and colleague of Bache and Henry. With him, as with them, administrative duties restricted and hampered individual investigation; but he was able to accomplish enough in this field for lasting fame.

Andrew Atkinson Humphreys was born in Philadelphia on Nov. 2, 1810. His family was one of the oldest and most distinguished of Pennsylvania, represented in the first continental congress, and eminent for two generations in the corps of naval constructors. To the skill of his grandfather were due the designs on which were built the famous Constitution and her five sister-frigates, which carried the flag of the Republic so proudly in the war of 1812.

When between sixteen and seventeen years of age, the boy entered the military academy at West Point, then almost the only mathematical and scientific school in the country. He was graduated in 1831, in the same class with Henry Clay, jun., who fell so gallantly in the battle of Buena Vista; Professor Norton, late of Yale college; and several others eminent both in war and in peace. He first served in Florida as an officer in the second artillery; but the climate so affected his health, that in 1836 he was forced to resign his commission.

Two years later the corps of topographical engineers was re-organized as a distinct branch of the army, and Humphreys was appointed one of the first lieutenants. Among his earlier duties was to prepare a plan for extending and remodelling the Capitol at Washington; and his design, in many of its features, was finally adopted.

In 1844 he was assigned to the charge of the coast-survey office, under Professor Bache as superintendent; and for five years he labored most assiduously and successfully to perfect the organization of this institution. His assistance was appreciated by his chief, who always remained a warm personal friend.

In 1850 Capt. Humphreys was charged with the surveys and investigations, then inaugurated, to determine the best method of restraining the floods of the Mississippi River, and of deepening the channels at the mouths. This work continued for ten years, and, even if he had done nothing else for science, would have placed him at the head of his profession. The hydraulics of rivers have been studied by eminent physicists for hundreds of years: but it

may safely be asserted that none among them displayed more skill in conducting investigations, or more ability in discussing results; while the size of the river, and the thoroughness with which the work was executed, were without precedent in any former operations of like character.

But this labor represented only a small part of the professional burden resting on Capt. Humphreys during those ten years of his life. He was also charged (1854) with the direction of the surveys for selecting the best railroad-route from the Mississippi River to the Pacific Ocean, and with discussing and analyzing the results,—a work which he accomplished in a manner scarcely less admirable than that upon the Mississippi. He was also an active member of the Light-house board and of several important commissions. Indeed, it seemed to those associated with him that there was no limit to the demands to be made upon him, or to his ability to meet them. His health suffered from his intense application, but was quite restored during the war.

Gen. Humphreys' military services need not be recounted here. They were of a distinguished character, especially after Gettysburg. From that date he was either chief of staff of the Army of the Potomac, or in command of one of its army corps; and his brilliant reputation as a scientific man was equalled by that acquired as a soldier.

Shortly after the war he was called to the chief command of the corps of engineers and of the engineer department, with the rank of brigadier-general; and for thirteen years he filled this responsible position in a manner to win the respect of every one thrown in contact with him. In 1879 his name was placed upon the retired list of the army at his own request.

With such a record, and at the age of over threescore years and ten, most persons would be content to rest on their laurels. Not so was Gen. Humphreys. His connection with the Army of the Potomac had been of a character to render him, of all men, the most fit to write its history. He undertook the task for the period after Gettysburg; and in two volumes of the 'Campaigns of the civil war,' published by Scribner, he has left a military classic which will form the basis of future history. It is to be regretted that the limits as to size, of this publication, rendered a degree of condensation necessary which has marred the work for any but a professional reader.

Gen. Humphreys' individual contributions to science, and his care to advance its interests,

were appreciated. In 1857 he was elected a member of the American philosophical society; in 1862, an honorary member of the Imperial royal geological institute of Vienna; in 1863, a fellow of the American academy of arts and sciences.

In the same year his name was placed on the list of the original corporators of the National academy of sciences. In 1864 he was elected an honorary member of the Royal institute of science and arts of Lombardy, Milan. He was also a corresponding member of the Geographical society of Paris, of the Austrian society of engineer architects, and of the New Orleans academy of sciences. In 1880 he was elected an honorary member of the Italian geological society. The degree of LL.D. was

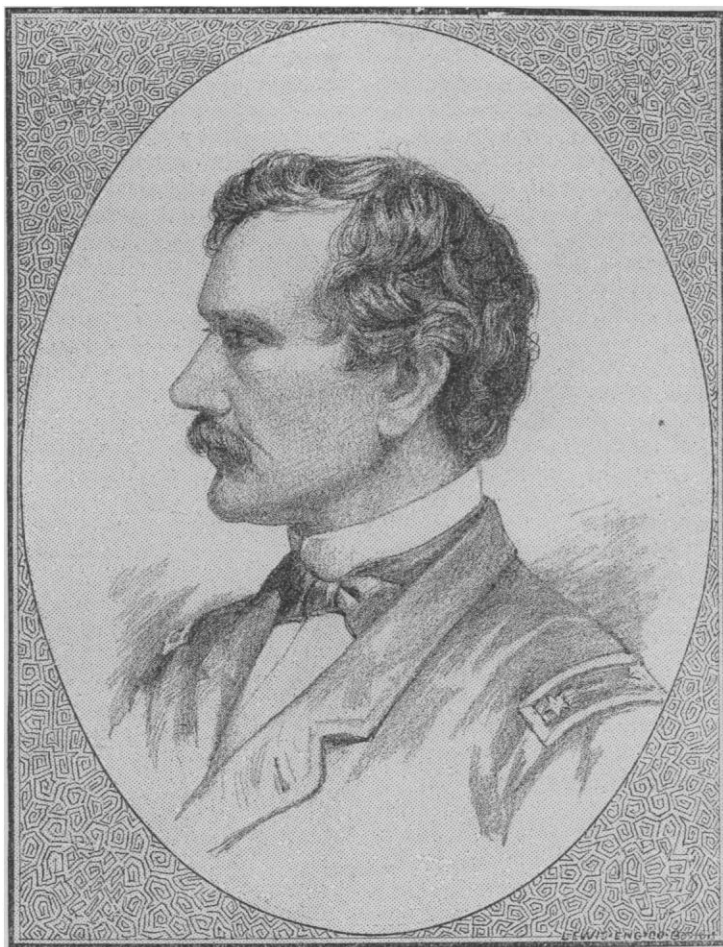
conferred upon him by Harvard college in 1868.

In the regular service, beside the ordinary promotion in his corps, he received the brevets of colonel, brigadier-general, and major-general, for gallant and meritorious services in the battles of Fredericksburg, Gettysburg, and Sailor's Creek.

Gen. Humphreys' death occurred at his home on the evening of Dec. 27, 1883. He passed away when reading at his table, shortly after being left, apparently in good health, by the family. The manner was what the soldier himself would have chosen.

It is difficult, in referring to the personal character of Gen. Humphreys, to avoid seeming exaggeration. He united to all the manly virtues the delicacy and refinement of the weaker sex. Any thing mean, cowardly, or Jesuitical excited his indignation; and the higher the position of the culprit, the more certain and violent the explosion. He was generous in the highest sense of the word, and slow to suspect evil. His mind was analytical, original, and inventive. His intuitive perceptions were of surprising accuracy, but he held his judgment in reserve until the evidence was presented and weighed; then he took his position, and could not be moved. It was impossible to be thrown into intimate relations with him without being impressed with his strength, and charmed with his lovable character.

HENRY L. ABBOT.



Sincerely your friend
W. T. Sherman