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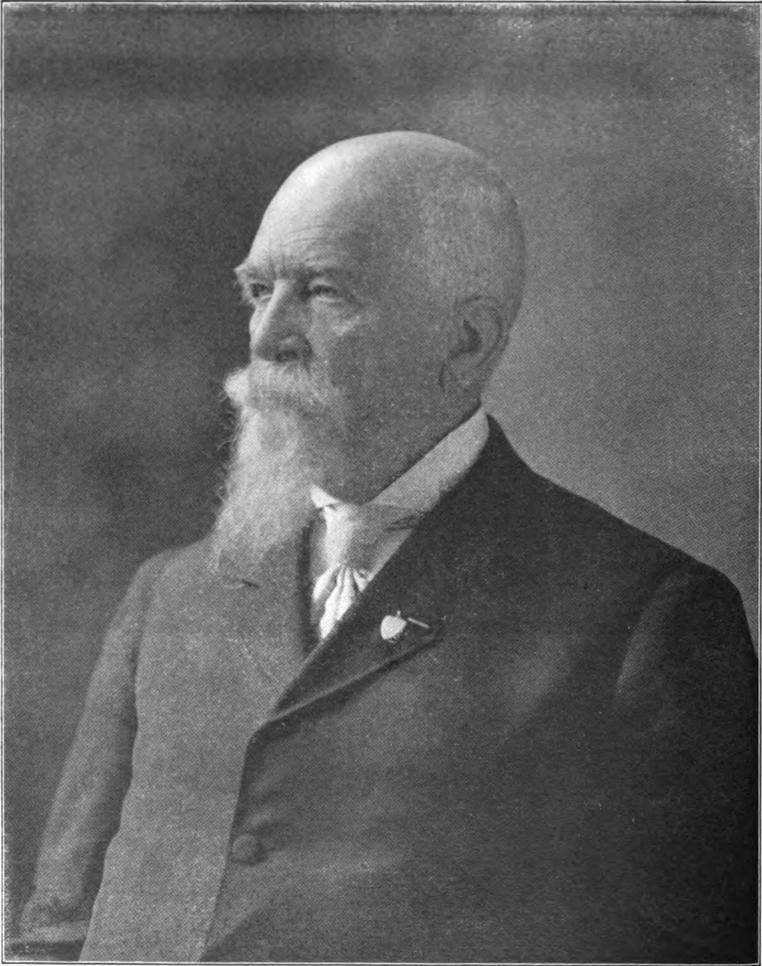
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WILLIAM PRICE CRAIGHILL

WILLIAM PRICE CRAIGHILL, Past-President, Am. Soc. C. E.*

DIED JANUARY 18TH, 1909.

A long and active life spent in the service of the country builds its own enduring monuments. Little remains to his friends other than to pen a few inscriptions, which, though inadequate, may serve to remind the passer-by more clearly of the man whose work is there in testimony of the duty done and the good accomplished. An engineer, eminent in his profession, a Past-President of the American Society of Civil Engineers, and for a time the head of his Corps in the Army, must necessarily have such monuments widely scattered over our land. It is so with General Craighill. The records of his work are found in our improved rivers and harbors, in our fortifications, and also in the lives of the younger men of the profession who were associated with him and whom it was his delight to help.

William Price Craighill was born in Charlestown, West Virginia (then Virginia), on July 1st, 1833, the eldest son of William Nathaniel and Mary Elizabeth (Brown) Craighill. He was of mixed English and Scotch blood, and his ancestors bore a prominent part in the early history of Virginia. The earliest of the American Craighills, William, is believed to have been born near Carlisle, England. His son, Nathaniel, served in Captain William Washington's company of Minute Men, in 1774-75, and later was in the Continental service. The first William Price Craighill, son of Nathaniel, was born at Craighill Point, Westmoreland County, Virginia, served as a volunteer in the War of 1812, and was a member of the Legislature of Virginia about 1817. General Craighill, his grandson, was named after him. Among other ancestors can be named the Littles, one of whom was a friend and neighbor of General Washington at Mount Vernon, and one of his pall-bearers; the Browns, who claim descent from one of the founders of Jamestown; and the Rutherfords, of an ancient Scottish family, one of whom, Robert, the maternal great-grandfather of General Craighill, was also an associate and friend of Washington, as a surveyor and fellow-officer of the early Indian wars, and a participator in the political agitations in Virginia immediately preceding the Revolution. He held many places of trust in Virginia, and was the first Member of Congress elected from the west of the Blue Ridge, having represented Berkeley County from 1793 to 1797.

Among the founders of the Charlestown Academy, in 1795, were three of the grandfathers of General Craighill, Little, Craighill, and Rutherford. Here the General received his early schooling, following his grandfather and father, and here his sons succeeded him. General

* Memoir prepared by the following Committee: General Charles W. Raymond, Colonel William M. Black, Lieutenant-Colonel Gustave J. Fieberger, Bernard R. Green and John Thomson, Members, Am. Soc. C. E.

Craighill was for years a Trustee of the school, and finally President of the Board. On July 1st, 1849, at the age of sixteen, he became a Cadet at the United States Military Academy, the youngest of his class, the roll of which contained many names destined for fame, and among these may be mentioned McPherson, Schofield, Sheridan, Sill, Sooy-Smith, Terrill, Vincent, Tyler, Sweitzer, and Hood. He was graduated in 1853, second in the class, which McPherson led, and was commissioned Brevet Second Lieutenant, Corps of Engineers. His subsequent advances in rank in the Corps of Engineers of the Army were as follows: March 3d, 1855, Second Lieutenant; July 1st, 1859, First Lieutenant; March 3d, 1863, Captain; November 23d, 1865, Major; January 2d, 1881, Lieutenant-Colonel; January 10th, 1887, Colonel; May 10th, 1895, Brigadier-General and Chief of Engineers. On March 3d, 1865, he was made Brevet Lieutenant-Colonel "for faithful and meritorious services during the war, and particularly for services in the defence of Cumberland Gap, and the ulterior operations of General Morgan's forces." He also received the brevet of Colonel "for gallant and meritorious services during the rebellion," but this he declined.

When the Legislature of Virginia adopted the ordinance of secession, in 1861, Lieutenant Craighill was confronted by the grave question whether he should follow the fortunes of his native State or remain in the service of the Union. On the one hand were all the associations of his youth, the pride of his ancestry, and the certainty of immediate professional advancement; on the other hand, a solemn sense of duty and the sincere belief that the ultimate welfare of the whole country depended on the success of the cause of the Union. After the most anxious and thoughtful consideration, he decided that it was his duty to remain in the service of the Union; but he refused to seek advancement in a war in which he found himself opposed to his own people, and thus voluntarily surrendered the opportunity of obtaining the high honors and personal distinctions which were attained by so many of his associates of similar age, training, and experience in both the Confederate and the Union armies.

From 1853 to 1856, Lieut. Craighill was on duty on the improvement of the Savannah River and in the construction of fortifications at its mouth, on fortification work at Dry Tortugas, and in fortification construction and harbor improvements in Charleston Harbor. He was stationed at Fort Sumter during the yellow fever epidemic which ravaged Charleston in 1854-55, and while there became cognizant of one of the terrible abuses which slavery made possible, which made on his mind an indelible impression of the evils of the system. In 1856, he went to Washington as Assistant to the Chief of Engineers, General Totten, Hon. M. Am. Soc. C. E. In later life, he was fond of recalling the methods of that talented and painstaking official, who, with his own

hands, frequently made working drawings of the details of the beautiful stonework to be found in the fortifications of that date, showing a possibility for the careful individual study of the problems of the office, which must be a cause of envy for General Totten's overworked successors of later days. In 1859, Lieut. Craighill was ordered to the Military Academy as Principal Assistant Professor of Engineering, and remained on that duty until June, 1863. While at the Academy, he served for two years as Treasurer, and for one year was in command of the detachment of Engineer soldiers at West Point. He also compiled "The Army Officer's Pocket Companion," a treatise which proved very useful to the Volunteer Army, and translated Dufour's "Cours de Tactique" and, jointly with Captain Mendell, Jomini's "Précis de l'Art de la Guerre."

In the summer of 1862 he was Chief Engineer of the Division of General George W. Morgan, Army of the Ohio, and was engaged in the defense of Cumberland Gap. In his report on the campaign, dated October 12th, 1862, General Morgan writes:

"Nor can I close this report without calling the attention of the Commanding General to the important services rendered me by Lieut. W. P. Craighill of the Engineer Corps. He is an officer of distinguished merit, and is thoroughly informed on all subjects connected with the art of war. He would make an able Chief of Staff, or fill with high credit any other position to which he may be assigned, and deserves a much higher grade than he now holds."

In the summer of 1863, Captain Craighill was Chief Engineer of the Department of the Monongahela, and was engaged in the construction of the defences of Pittsburg, then threatened by the raid of General John Morgan. Later, he was Assistant Engineer in the construction of the defences of Baltimore, and in 1864, was Chief Engineer of the Middle Department and Eighth Army Corps. In 1864, he again went to the Military Academy, where he served as Assistant Professor of Engineering, Instructor of Practical Military Engineering, in command of the Engineer Detachment, and as Treasurer, serving also on Boards for the defences of San Francisco, for fortifications at Willets Point, and for New York.

In November, 1865, he was sent to the Baltimore District, in charge of the construction of the fortifications and of river and harbor improvements, and, with the exception of the tour of duty from 1866 to 1870 as Assistant to the Chief of Engineers, General A. A. Humphreys, Hon. M. Am. Soc. C. E., he remained on that duty until promoted to be Chief of Engineers in 1895. His fortification work included the construction of works at Baltimore, Washington, and Hampton Roads. The river and harbor works extended from the Susquehanna to the Cape Fear, and as far west as the Great Kanawha, in West Virginia. In Baltimore Harbor, the dredged channel constructed by him bears his name.

The improvement of the Cape Fear River presented a notable engineering problem, and the successful closing of the false mouth across the shifting sands of the coast was a work of great importance. In this work was evolved the log and brush mattress, used extensively later on the South Atlantic Coast. Perhaps the most notable and successful of the works was the canalization of the Great Kanawha River, in which the Chanoine system of movable dams is used. It is believed that the introduction of this system in the United States is mainly due to the late Colonel Merrill, with whom Colonel Craighill visited Europe in 1878, for an inspection of works of that character; but the first Chanoine dams actually constructed and placed in service in the United States were on the Great Kanawha River, under Colonel Craighill.

In addition to these regular duties, Colonel Craighill served on many boards formed for the consideration of projected improvements, among which may be named those for the Columbia, Mississippi, Hudson, Ohio, Delaware, Potomac, Cape Fear, Great Kanawha, James, and other rivers, and the breakwaters for Delaware Bay, Sandy Bay, Massachusetts, and San Pedro, California. For several years he was a member of the Light-House Board and of the Board of Engineers in New York, to which were referred questions relating to fortifications and river and harbor improvements.

In 1884 the system of grouping a number of river and harbor districts into a division was inaugurated. From that date until 1895 Colonel Craighill was the Division Engineer of the Southeast Division. When this division was first formed, it had several of the younger officers of the Corps of Engineers as its district engineers, and was known as "the kindergarten." The Division Engineer's visits were always welcome, and he took a keen interest in the work of the younger men, approving their methods whenever practicable. "For," he said, "I have found that generally there are several ways of accomplishing a given result, and that it is best to follow the plan of the man who is to do the work providing that plan be sensible"—a truth not always appreciated by superiors. At another time, he said to a young officer who was reporting to him for duty, "Mr. ———, I propose to be the laziest man in this district, and do not propose to do anything that I can have done by one of my assistants." It is needless to say that, under such a man, the assistants always did their best.

As Chief of Engineers, it fell to General Craighill to arrange for the prompt construction of the many new works of defence for which Congress had for the first time for years made large appropriations. Under him, a number of changes were made in the methods and policy of the Engineer Department, the most important of which was the inauguration of the practice of having the type plans of the batteries, with the general project for the defense of a harbor, referred to the

local engineer, prior to final adoption, in order to obtain the benefit of his local knowledge and experience. Criticisms of the plans were requested from the various branches of the service interested. The results were immediate and beneficial. Due to his insistence, the development of the disappearing carriage for 12-in. guns was hastened by the Ordnance Department, thus permitting the abolition of the very expensive lift type of battery, which, before that, was the only type for 12-in. guns affording protection while they were being loaded. He also changed the type of the mortar batteries, and had important improvements made in the submarine mine system. Under him, was begun the practice of disseminating important technical information among the officers of the Corps by means of mimeographs.

Incident to his service, General Craighill had to appear frequently before the various committees of Congress, where he made many friends. His succinct and straightforward answers to questions were always received with marked attention. His sound judgment and evident thorough knowledge of the subject at issue caused his opinions to have great weight. An evidence of this is found in the history of the Washington Aqueduct tunnel. This had been abandoned after the discovery of fraudulent work on the part of the contractors, and the tunnel project had become thoroughly discredited in Congress. After an expert examination into its merits, General Craighill presented to Congress a full and convincing report, and, as a result, the necessary appropriations were made and the work was successfully carried to completion. The tunnel to-day forms an important link in the Washington water-supply system.

On February 1st, 1897, General Craighill was retired from active service at his own request. Excepting a limited service as a member of the Board of Consulting Engineers of the Dock Department of the City of New York, his retirement ended his active career as an engineer. He died at Charlestown, West Virginia, on January 18th, 1909. The immediate cause of his death was stated by his physicians to have been "disability following a stroke of apoplexy causing paralysis of the right side."

General Craighill was married on October 14th, 1856, to Mary A. Morsell, daughter of Judge James S. Morsell, of Washington, D. C., and, after her death, was married, on September 22d, 1874, to Rebecca Churchill, daughter of the Reverend Alexander Jones, of Virginia. He had three sons and three daughters. One of the sons, William E. Craighill, was graduated second in the class of 1885, United States Military Academy, and is now a Major of the Corps of Engineers, U. S. Army.

Of civic duties General Craighill did his rightful share. The Episcopal Church, of which he was a life-long member, showed its appreciation by making him its deputy from the Diocese of West

Virginia to ten successive Triennial General Conventions, beginning with that of 1880, and also a delegate to the Pan-Anglican Conference in London in 1908. He was a member of the Malta Lodge of Masons, Charlestown, West Virginia, from July, 1855, to his death. In 1888 he became a member of the American Association for the Advancement of Science. He was, in 1895, the sole honorary member of the Historical Society of Maryland. In 1897 the Washington and Lee University conferred on him the degree of LL.D. The following offices were offered to him at various times and declined, viz.: Commandant of Cadets at the Virginia Military Institute in 1860; charge of the Water Department of the City of Baltimore under Mayor Malsted; Superintendent of the United States Military Academy, once by General Sheridan and once by General Schofield; President of the University of West Virginia, in 1895; Superintendent of the Coast and Geodetic Survey, by President Cleveland, and membership in the Isthmian Canal Commission, by President McKinley.

William Price Craighill was elected a Member of the American Society of Civil Engineers on October 7th, 1885; he served as a member of the Board of Direction in 1892 and 1893; and was elected President in 1894, during his term of office as a Director; he was elected an Honorary Member on March 23d, 1896.

It is probably within the truth to say that no epoch in General Craighill's career gave him more pleasure and satisfaction than his official connection with the American Society of Civil Engineers, first as a Director and finally as its President; and it certainly is a fact that this connection with the Society resulted largely to its good, and brought about many permanent and delightful friendships.

In connection with the work of the Society, he was particularly attentive to apparently trivial details, that is, when such details appeared to have an ultimate bearing of importance; on the other hand, when no subsequent advantage was apparent, he was perhaps unequalled in his ability to "side-track" such matters, without, however, appearing brusque or offensive in manner. As is frequently the case where routine matters must be passed upon by a board composed of many men, the tendency is to fritter away time to no useful purpose. Early in the General's service as a Director it was made evident that he had little in common with such discussions, and could confidently be counted on to "vote first and talk afterward." Therefore, as might be expected, he was a business executive of the first order, and it was a delight to sit with him in the Board meetings of the Society.

As a presiding officer, he was exceedingly efficient, combining in a rare degree, seldom equaled, affability, tolerance, tact, dignity, retentiveness of memory, and a swift comprehension of a controverted point. A decision never appeared to be made too quickly; nor was there any uncertainty when rendered.

It is believed that no officer of the Society made, in so few years, so many friends among the younger members of the Society; for, to the young engineer, his courteous and kindly attention was equally a delight to the recipient and to the observer.

He was in all respects well-rounded—a man of many parts. Although bound by the traditions of many years of military service, he was yet peculiarly open-minded in recognizing the necessary differences which have existed, and must exist, in the performance of engineering work under private or individual control and Governmental control. He undoubtedly possessed the attributes essential to success in any walk of life, wherein he would as surely have made his mark as he did in that branch of the Engineering Profession which he adorned so conspicuously.

General Craighill was a member of various committees of the Society, and it may serve to illustrate both the simplicity of his character and his keen discernment of a useful purpose to mention his connection with the Committee which designed the present Society badge. Here, on the face of the matter, the duty was of merely nominal importance, yet he devoted much thought to the subject, and made many suggestions. It is well remembered how, at one of these meetings, he referred with evident gratification to his West Point class pin, the class of 1853, which bore the device of a mortar, with a triangular pile of balls stacked in front of it, and over all the words, "We separate for service." The point he was making was that he believed this sentiment, in his own case at least, had proved to be a potentiality for good, and consequently the same might result from the work in hand. After the present plain lettered badge had been adopted by the Society, he took the keenest interest in having the decision of the Committee carried out, that it should be produced as nearly mechanically perfect as would be possible by available processes and manual skill.

Thus it can verily be believed that in all matters, great or small, his heart was bound in the Society to the end that its influence and prestige might be broadened, the position of the engineering profession be enhanced, and that we, who "separate for service," might with pride and honor carry its insignia of membership.

This brief and all too inadequate tribute to the General's association with the Society may be best closed by his own estimate of the honors it had conferred upon him, for, by his expressed instructions, the following inscription is to be cut upon his tombstone:

WILLIAM PRICE CRAIGHILL,
Brigadier-General and Chief of Engineers,
United States Army;
Honorary Member and Past-President,
American Society of Civil Engineers.

His was a true and loving heart, strong with human feeling. A fitting crown to such a life and character is enduring memory among one's friends and associates. It is certain that he himself would have preferred no honor to his memory more acceptable than this, which, and especially from the members of the Society who had the pleasure and honor of his acquaintance, is abundantly assured.

"Such graves as his are pilgrim's shrines,
Shrines to no code or creed confined."