Alexander Dallas Bache
(1806 - 17 Feb 1867)

Washington Star, February 19, 1867

The Death of Professor Bache.

Treasury Department, February 19, 1867.

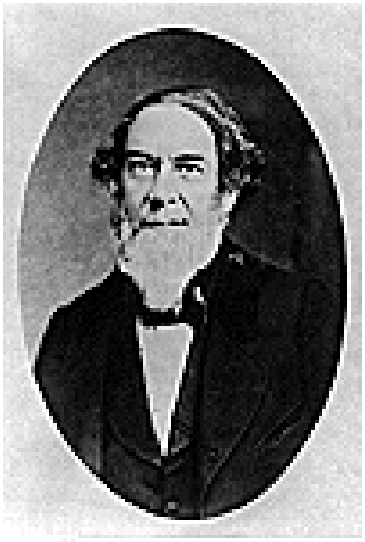
In the death of the Superintendent of the Coast Survey, Professor Bache, The Department mourns the loss of one of its most valuable and most highly cherished officers. His decease occurred at Newport, Rhode Island, on the 17th inst., in his sixty-first year.

No man within the present generation was more widely known in the walks of practical science; none has been so closely identified with collateral service in the various public departments.

Alexander Dallas Bache was born at Philadelphia in April, 1806. He graduated at the Military Academy in 1825 and there remained a year as assistant professor. Subsequently, having resigned from the Corps of Engineers, he filled at intervals, until the year 1843 an important chair in the University of Pennsylvania.

Within the same period he was, during five years, president of Girard College, and matured the system of education adopted for the Philadelphia High School, yielding to that object time for examining the principles of systematic education in Europe.

His devotion to practical science, and his abilities as an administrative officer, being well known, Professor Bache was appointed, in December 1843, to the vacant post of Superintendent of the Coast Survey. Under his direction, that great national work has been eminent no less for its abundant results than for its high scientific character, which has won the approbation of the leading learned bodies of the world, among whom his name has long been held an honor. He possessed by nature the qualities most conducive to success in the management ... Invariably mild and forbearing towards those serving under his direction, his unremitting energies and his untiring patience were an as invariably given to the accomplishment of the service in view.



His sympathy with the efforts of others, and readiness to give credit for their exertions, secured a cordial spirit of cooperation. Sagacity, perfect freedom from bias, and constant activity within the sphere of his public duties, strongly marked his relations with this Department.

He was a member of the Lighthouse Board, and participated in its organization; a Regent of the Smithsonian Institution; and ever the valued associate of leading men to whom are committed questions in regard to matters of public utility. His advice was eagerly sought in the determination of many local and general facilities to further the interest of commerce and navigation.

That the deceased Superintendent had become illustrious in American and in Europe is due to the steady devotion of his great talents to the service of the people.

His genial disposition attracted the love of associates and of subordinates; his wisdom commanded their respect. He leaves us a name of unsullied purity, and a memory that adds lustre to the many public records upon which it is borne.

As a tribute to his memory, The Coast Survey Office will be draped in black, and will be closed on the day of the funeral.

Hugh McCulloch

Secretary of the Treasury

National Intelligencer. February 23, 1867

Arrival of the body of the Late Professor Bache.

The body of the late Professor Bache arrived in Washington at a quarter past six o'clock last evening, by the train from Philadelphia. A committee of officers and others who had served under the immediate directions of the deceased superintendent were in attendance at the depot, and accompanied the remains to the Coast Survey office on New Jersey Avenue whence the funeral procession will move at 3 1/2 o'clock p.m. on Sunday.

National Intelligencer, Saturday, February 23, 1867

Obsequies of the Late Professor Bache

The funeral ceremonies of this distinguished citizen and savant will take place tomorrow. Many of the public bodies with which the deceased had been connected have passed resolutions expressive of the sympathetic relations that have been severed by his death.

The funeral procession will be formed at the Coast Survey office, on New Jersey Avenue at 3 p.m. on Sunday, in the following order:

Clergymen
Pall-bearers
Coffin-bearers
Hearse
Family
Members of the Cabinet
Officers of the United States Coast Survey
National Academy of Sciences
Officers of Smithsonian Institution
Light-house Board
Scientific Societies of Philadelphia
Representatives of Chambers of Commerce of New York, Philadelphia, and Boston
Sanitary Commission
Officers of the Army and Navy
City Councils
Citizens.

Washington Star, March 6, 1867

The Will of the Late Alexander Bache

The will of the late Alexander Dallas Bache was admitted to probate at Philadelphia on Wednesday. After reciting several legacies to the members of his family, the will contains the following:

That after the death of my wife, all the rest and residue of my estate shall be paid over to and vest in the corporation of The National Academy of Sciences, incorporated by act of Congress, passed the 3d day of March, 1863, whom I hereby appoint trustees to apply the income to researches in physical and natural science by assisting experimentalists and observers in such manner and in such sums as shall be agreed upon, the class of subjects to be selected by the Board of Directors, consisting of Joseph Henry of Washington; Louis Agassiz; and Benjamin Pierce, of Harvard College, Massachusetts; and the results of such observations and experiments to be published at the expense of my trust estate, under their direction, out of the income thereof, but without encroaching on the principal.

Cullum, The Biographical Register of the U.S. Military Academy
Class of 1825: Alexander D. Bache
Born and appointed, Pennsylvania, Graduated 1st of 37
Cadet at the Military Academy, July 1, 1821, to July 1, 1825, when he was graduated and promoted in the Army to Bvt. 2d. Lieut. and 2d Lieut., Corps of Engineers.

Served at the Military Academy, as Asst. Professor of Engineering, Aug. 31, 1825 to July 31, 1826; and as Asst. Engineer in the construction of Ft. Adams, Newport Harbor, R.I., 1826-29. Resigned, June 1, 1829.

Civil History: Professor of Natural Philosophy and Chemistry, University of Pennsylvania, 1828-36, and 1842-43. President of Girard College, Philadelphia, Pa., 1836-41. Principal of High School (reorganized by him in 1839), Philadelphia, Pa. 1841-42. Superintendent of Public Schools, Philadelphia, Pa., 1841-42. Member of the Board of Assay Commissioners at the Philadelphia Mint, Pa., 1839. Superintendent of the Geodectic and Hydrographic Survey of the Coasts of the United States, and of the Office of Weights and Measures, Dec. 12, 1843 to Feb. 17, 1867. Regent of the Smithsonian Institution, Washington, D.C., from its establishment, August 10, 1846 to Feb. 17, 1867. Member of the Light-house Board 1851-52, and of it, as permanently established, Oct. 9, 1852 to Feb. 17, 1867. Member of Commission for devising projects for the improvement of Charleston harbor, S.C., 1852; of Savannah River, Ga., 1852; of the James and Appomattox Rivers, Va., 1853-54; of Cape Fear River, N.C., 1853 and 1858; of Portland harbor, Me., 1854-55; of New York harbor and adjacent waters 1855-57; of Boston harbor, Mass., 1860-66; and of Mobile Bay and harbor, 1860. Degree of A.M., conferred by Yale College, Ct., 1830; and of LL.D., by University of the City of New York, 1836, --by University of Pennsylvania, 1837, --and by Harvard University, Mass., 1851. Author of a Report on "European Systems of Instruction,", 1839, and of numerous papers on scientific subjects, 1829-66. Member of Prussian Industrial Union of Berlin, Dec. 28, 1837, --of Academy of Science, Institute of Bologna, Italy, May 20, 1838, --and of Bohemian Industrial Society, Prague, Jan. 31, 1839. Foreign Member of Statistical Society of London, March 15, 1839. Corresponding member of Royal Academy of Turin, Italy, Apr. 7, 1839. Honorary Member of Mathematical Society of Hamburg, Jan. 7, 1840. Foreign Correspondent of Academy of Sciences and Belles Lettres, Brussles May 10, 1842. Foreign Member of Geographical Society of Berlin, June 30, 1849. Associate of Royal Astronomical Society, June 14, 1850. Foreign Correspondent of "Societe de Geographie," Paris, April 4, 1851. Member of the Institute of France, August 12, 1861 Diploma, "Industry of all Nations," London, Oct. 15, 1851. Honorary Member of Royal Irish Academy, Dublin, June 28, 1855, --and of Royal and Imperial Geographical Society of Vienna, Oct. 14, 1857. Honorary Fellow of Royal Society of Edinburgh, March 15, 1858. Foreign Member of the Royal Society of Edinburgh, May 1860. Recipient of Victoria Gold Medal from the Royal Geographical Society of Great Britain, May 24, 1858, for "Successful Labors in carrying out the great Coast Survey of the United States," --of Gold Medal from the King of Sardinia, Jan. 14, 1859, for

"Scientific Merit as exemplified in the publications of the Coast Survey," -- of Gold Medal from the King of Sweden, Feb. 27, 1855, as a "Mark of high satisfaction afforded by the Coast Survey Charts," --and of the Danish Cross of Danneborg, Nov 11, 1856, for "Services in the General Field of Science," President of the American Association for the Advancement of Science, 1850 and 1851. Member of various scientific associations in the United States, 1826-67. Member of the United States Sanitary Commission, June 13, 1861 to Feb. 17, 1867. Corporator and President of the American Academy of Sciences, March 3, 1863 to Feb. 17, 1867. Chief Engineer for devising and constructing the defenses of Philadelphia, Pa., when threatened by the Rebel Invasion of Pennsylvania, June to Dec. 1863. Died Feb. 17, 1867 at Newport, R.I.,: aged 60.

Biographical Sketch

Professor Alexander Dallas Bache was born, July 19, 1806 at Philadelphia, Pa. He was the nephew of George M. Dallas, former Vice President of the United States, and great-grandson of Dr. Benjamin Franklin, in whose path, as an eminent scientist, he was destined to follow to the end of a busy life of threescore years.

Bache received his early education in his native city, where he was an apt and studious scholar. His after education was given at the U.S. Military Academy, from which he was graduated July 1, 1825, at the head of a distinguished class. He was thence promoted to the Corps of Engineers, from which he resigned, June 1, 1829, after a service of one year as Assistant Professor of Engineering at the Military Academy, and three as Assistant Engineer in the Construction of Ft. Adams Newport harbor, R.I.

Before leaving the Army, Bache was called to the chair of Natural Philosophy and Chemistry in the University of Pennsylvania, which position he filled with marked success for eight years. During that time he was also engaged upon scientific researches in chemistry and physics; and, as a member of the Franklin Institute, actively participated in its work, particularly in experimenting on steam-boiler explosions, a line of investigation often as dangerous as difficult.

Bache, in 1836, organized the college, for the building of which the rich banker, Stephen Girard, had bequeathed $2,000,000; became its first President, and went to Europe to study the methods of instruction and discipline there adopted; and, upon his return in 1838, made an elaborate report on European systems of scientific and literary education, which subsequently proved so useful in improving our own methods of instruction. Girard College being unfinished on Bache's return from abroad, he gratuitously undertook the organization of the school system of Philadelphia, which has since been adopted in other cities. Then, for a year, he resumed his old chair in the University of Pennsylvania, besides devoting much time to magnetic and meteorological observations for the American Philosophical Society, which materially contributed to a more extended knowledge of these subjects.

On the death of Professor Hassler, Bache was appointed, on the recommendation of the principal scientific and literary institutions of the country, Dec. 12, 1843, Superintendent of the Geodetic and Hydrographic Survey of the Coasts of the United States, and of the Office of Weights and Measures. This great National work of the Coast Survey, recommended by President Jefferson in 1807, had not been commenced till 1817, and small progress was made before Bache assumed its control. To the day of his death, he devoted his untiring energies and pre-eminent talents to accomplish its great purpose of producing accurate charts of the whole coast; of making detailed surveys of reefs, shoals, harbors and navigable waters; of determining the character of the Gulf Stream and littoral ocean currents; of developing the laws of the tides and winds; of ascertaining the depth, character of bottom, and animal life along our seashores; and of determining, astronomically, triangulation points for any subsequent

survey of the interior country. For conducting the great operations necessary to carry out these varied operations, Bache was admirably suited for to his scientific abilities he added high administrative talents, admirable tact in the management of his many subordinates, a genial and earnest manner which won the confidence of superiors upon whom depended the means for successfully conducting his great work, and a readiness to assume any amount of collateral labor for the advancement of science, not only in the interest of the Government, but for the benefit of the whole world.

Though so devoted to the prosecution of the Coast Survey, Bache found time for many other duties; the construction of standard Weights and Measures for the United States; as Regent of the Smithsonian Institution from its establishment, Aug. 10, 1846; as member of the Light-house Board from its inception in 1851; and as Commissioner for various harbor and river improvements. Even beyond these constant taxes upon his time, his industrious pen wrote many elaborate papers on a great variety of scientific subjects.

During the Rebellion Bache made himself useful in many ways, and was an active and very efficient Vice-President of the U.S. Sanitary Commission. He was in succession President of the American Philosophical Society; of the American Association for the Advancement of Sciences; and of the National Academy of Sciences, of which he was the founder and one of the original Corporators. Degrees were conferred upon him by many colleges at home; and foreign societies showered upon him honorable memberships and golden medals for scientific merit and researches in many fields of learning.

Bache, as a student, was distinguished by his untiring application to acquiring knowledge. From early boyhood he was impressed with a sense of responsibility which attached to his lineage. He therefore resolved to devote the utmost energies of his vigorous mind, and to suppress all tendency to self-indulgence, in order that he might fit himself for a reputable career. As an educator, he was not satisfied with imparting the piled-up learning of others, but added much from his own resources. With him the drudgery of drilling youth in the rudiments of education did not dwarf his expansive mind, which soared above the pedagogue's chair to grasp the most perfect methods of teaching of the experienced schoolmen and philosophers of the Old World. His researches and reflections were published in a report upon 'European Systems of Instruction," which almost revolutionized the theory and practice of the school systems of our country. As a scientist, he had few equals and no superiors in his day, as fully attested by more than an hundred papers exhibiting his skill in original investigations and familiarity with the laws of the universe. Not to a single branch did he devote himself, but with his many-sided faculties embraced the whole field of natural philosophy and chemistry. His scientific ability was also conspicuous in the Light-house System, in establishing the policy of the Smithsonian Institution upon a sound and durable basis, and in largely shaping the measures for the development of the many scientific societies of which he was one of the most prominent members. As an executive, his management and successful prosecution of the Coast Survey is a perfect illustration of his administrative ability, which was only excelled by his skillful application of the most approved scientific expedients in carrying out its various requirements. He assumed its charge when in a languishing condition, and left it at his death one of the highest achievements of the diversified labors of our people. As a patriot, he quickly applied, when our country was involved in civil war, the many resources of his office to securing the success of the Union cause; efficiently used his engineering apprenticeship in fortifying his native city; and as a valued member of the U.S. Sanitary Commission was active in ameliorating the condition of our soldiers in the field and hospital. And as a man, he added, to his continually ascending series of scientific and utilitarian triumphs, a high moral nature evinced by a nice perception of right with a determination to enforce its mandates. His familiar intercourse with distinguished people, his own practical wisdom and purity of purpose, and his genial disposition and self-possession of manner, always

made him a welcome guest. The learned scientist and profound scholar never overshadowed his merry humor and playful fancy among intimates, all of whom devotedly loved him.

"God, when heav'n and earth he did create,
Form'd man, who should of both participate."

Ranks:
2d. Lieut., Corps of Engineers, July 1, 1825