MEMOIR

OF

CHARLES HENRY DAVIS.

1807-1877.

BY

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BIOGRAPHICAL MEMOIR OF CHARLES HENRY DAVIS.

Charles Henry Davis was born in Boston, January 16, 1807. He was the youngest son of Daniel Davis, Solicitor General of the State of Massachusetts. Of the other sons, only one reached maturity, Frederick Hersey Davis, who died in Louisiana about 1840, without issue. The oldest daughter, Louisa, married William Minot, of Boston.

Daniel Davis was the youngest son of Hon. Daniel Davis, of Barnstable, justice of the Crown and judge of probate and common pleas for the county of Barnstable. The family had been settled in Barnstable since 1638. Daniel Davis, the second, studied law, settled first in Portland (then Falmouth), in the province of Maine, and moved to Boston in 1805. He married Lois Freeman, daughter of Captain Constant Freeman, also of Cape Cod. Her brother, Rev. James Freeman, was for forty years rector of the King's Chapel in Boston, and was the first Unitarian minister in Massachusetts. The ritual of King's Chapel was changed to conform to the modified views of the rector, and remains the same to this day. Another brother, Colonel Constant Freeman, served through the Revolutionary war and attained the rank of lieutenant colonel of artillery. In 1802 he was on the permanent establishment as lieutenant colonel of the First United States Artillery. After the war of 1812–'14 he resigned and was Fourth Auditor of the Treasury until his death, in 1824. Still another brother, Nehemiah Freeman, also served in the Army.

Charles Henry Davis was educated at the Boston Latin School and entered college (Harvard) in 1821. He left college in 1823 to enter the Navy, but subsequently took his degree, and his name stands on the Triennial Catalogue in the class of 1825. His first cruise in the Navy was to the Pacific, on board the frigate *United States*, with Commodore Isaac Hull. During this cruise he also served on board the schooner *Dolphin*, under Lieutenant Commanding John Percival. The *Dolphin* made an

interesting voyage among the remote and at that time unknown islands of the south Pacific. She visited the Mulgrave islands of the Marshall group in search of the mutineers of the whale ship Globe. In this hazardous service Davis, with the first lieutenant, nearly lost his life through the treachery of the natives-The boats of the *Dolphin* had followed the native canoes across the lagoon, the group of islands being a coral atoll, in pursuit of parties among which it was believed the mutineers of the Globe were concealed. Finally the natives landed, and on the arrival of the boats approached the beach with gestures of friend-The crews were invited to land and seat themselves on the ground at a feast which had been prepared; but, as was afterward discovered, each savage was armed with a heavy stone, which he concealed by sitting on it. At a preconcerted signal all the white men were to be knocked on the head. This simple ruse had already been tried effectively with the crew of the Globe; but two of the number were spared on account of their youth, and these were now among the natives and undistinguishable from them, but they gave the alarm, and Lieutenant Paulding averted a general massacre by seizing the chief and presenting a pistol to his head. The two survivors of the Globe were brought back to the United States. The Dolphin on this voyage discovered a new island of the Society group, which was named Hull island in honor of the commodore. She was also the first American man-of-war to visit the Sandwich islands. Lieutenant (afterward Rear Admiral) Paulding wrote a very interesting narrative of this voyage, called the "Cruise of the Dolphin." The book is now very rare.

Davis returned to the United States in the frigate United States in 1827. His next cruise was to the West Indies in 1828, in the sloop Erie. This cruise was a very short and uneventful one, except that the Erie on the passage out encountered a severe storm off Hatteras, which is noteworthy only from the fact that the ship sailed round the outer edge of a cyclone for four days. Of course nothing was known then among seamen of the laws of storms, and the manoeuver generally resorted to in the ships of that day in very heavy weather was to scud under bare poles. The log-book of the Erie shows that she kept before the wind, changing her course for every shift of wind and making extremely heavy weather of it, until as a last resort it was determined to

bring the ship by the wind. As she happened to lie in the righthand semicircle and was brought to on the starboard tack, the storm almost immediately ceased, an event which was doubtless attributed to the providence of God. Redfield, if he had not already published, must at least have begun his studies of the West India hurricanes, but the sailors of that day ignored the discovery. With them the wind blew as it listed, and no man knew whence it came or whither it went, and it is a rather remarkable fact that a school in which the instructors were of this character should have produced many officers of sterling scientific attainments, who have been, on the whole, the best that the Navy has ever shown, for in 1828 of instruction on board ships for the young gentlemen there was almost nothing. Some of the larger vessels carried professors of mathematics, but in ships like the Dolphin and Erie a youth learned by virtue of the impetus that was in him, or not at all.

When the Dolphin was at the Sandwich islands in 1825 the port of Honolulu had already become a resort of American whaleships. An American ship was wrecked on one of the neighboring islands and the master applied to Captain Percival for assistance. as the natives had begun to plunder the wreck and there was treasure on board which he was unable to guard. The Dolphin was dismantled and refitting, but Captain Percival chartered a brig and proceeded to the scene of the wreck, manning the brig from the Dolphin's crew. He took Davis with him, and the cargo and treasure were saved. Upon the return to Honolulu the master of the wrecked ship declined to pay the charter of the brig, and Captain Percival adopted the summary process of deducting the amount from the treasure, which was still in his possession. This involved him in a serious dispute with the master, who succeeded in exciting against him the animosity of the missionaries, who virtually ruled the islands. It is unnecessary and would be uninteresting to enter into the details of this controversy, which is only worth noticing, as it affected indirectly Davis' subsequent career. Captain Percival had returned to the United States as first lieutenant of the *United States*, and the ship was no sooner paid off than he was arrested on a civil process by the owners of the ship whose cargo he had saved from plunder. Subsequently he was virulently assailed at the Navy Department by the society of missionaries with whose representatives he had quarreled in Honolulu, and in order to set the matter at rest he demanded a court of inquiry. This was ordered, and as Davis was an important witness he was detached from the *Erie* in the West Indies and sent home. The court was held in Boston, and so for the first time in nearly six years Davis was at home again. He asked and obtained a leave of absence in order to prepare for his examination, to which he was now entitled, and passed the winter of 1828–'29 at his father's house in Boston and in attendance before the board of examiners at the New York navy yard. The passed midshipman's warrant is dated March 23, 1829.

After passing, Davis was appointed acting sailing-master of the sloop Ontario, and made a three years' cruise in the Mediterranean. There is nothing specially noteworthy as to this cruise. The ship carried out a consul-general to Algiers, and also took the last of the tribute money paid by the United States to the Dev of Algiers. She was present at Algiers during the French operations in 1830. She wintered with the squadron at Port Mahon, then . the permanent station for the United States ships, where the Government had storehouses. She performed some service in the Levant. It was principally on occount of the intimacies and associations formed during this cruise and the excellent school which the Mediterranean then afforded for the young naval officer that this period of service left a lasting impression on Davis' mind and character. Dahlgren was a midshipman on board the Ontario, and has left a spirited account of this his first cruise in his journals. Dupont was one of the lieutenants of the ship, and the intimacy formed between Davis and Dupont lasted through life and strengthened with time. McBlair, Davis' own classmate and shipmate on board the United States and Dolphin, was also on board. The friendship between these two was interrupted by the civil war and resumed in the last years in Washington. Commodore James Biddle commanded the squadron, and in a letter addressed to the Commodore by Captain Gordon. reporting on the qualifications of the officers of the Ontario, he says: "Lieutenant C. H. Davis is devoted to the improvement of his mind; his country may expect much from him." Habits of study were formed on this cruise, and a bent was given to his mind by the duties of his position as sailing-master. From the navigation of a ship to the higher pursuits of astronomy and

hydrography is a natural step to the young man of scientific tastes.

The Ontario returned home in 1832, and, after a leave of absence, Davis was appointed to the sloop Vincennes as flag-lieutenant to Commodore Alexander Wadsworth. The Vincennes fitted out at Norfolk and sailed in 1833 for the Pacific, acting as flagship until the arrival on the station of the frigate Brandywine. This cruise was also a short one. The Vincennes passed a year on the west coast of South America, taking care of American interests in the interminable revolutions which form the whole history of the South American republics. She was for some time in the Guayaquil river during civil disturbances in the state of Equador. There was nothing but the most dreary monotony connected with this kind of service. While the Vincennes was at Callao, in the autumn of 1834, an American whale-ship was condemned by consular survey, and it became necessary for the Commodore to take charge of this vessel and send her to the United States. Davis asked for and obtained this duty. He therefore sailed from Callao in September, 1834, in command of the barque Vermont, with three midshipmen as subordinate officers, and made the passage round Cape Horn, reaching New York in February, 1835. The ensuing year he passed at home. His father had retired from active life and was now settled in Cambridge, which was Davis' home until the breaking out of the civil war. His father died in October, 1835. In 1836 he was connected with the Naval Rendezvous at Boston, recruiting for the Brazil station, and in 1837 he was appointed to the razee Independence, destined as flagship of that squadron. The Independence sailed early in that year, having on board the United States minister to Russia and his family. The ship touched first at Southampton, and the officers had an opportunity to travel somewhat in England. Davis was in London at the death of the king (William IV) and saw the young queen. From Southampton the Independence proceeded to Cronstadt, landed the minister, and the officers visited St. Petersburg and were presented at court. The Czar Nicholas also visited the ship. The ship went to Stockholm, and thence sailed for Brazil, touching at the Island of Madeira. The three years from 1837 to 1840 were passed on the coast of Brazil and in the River Plate. The Independence returned to the United States and was paid off in April, 1841.

This event closes what may be considered as the early period of Davis' naval career. He had now been seventeen years in the service and almost constantly at sea. He had visited many parts of the world at a time when travel meant much more than it does today. He had formed habits of observation and study. and was already regarded as an officer of experience and known as a man of parts. He had reached a stage in his professional life when, if not actively employed in labor of his own seeking. he would be doomed, by the system then in vogue, to an indefinite period of idleness and inactivity. Under these circumstances his mind naturally turned toward those pursuits which he had by study fitted himself to follow. The Coast Survey offered exactly the field suited to his talents. Under the superintendency of Hassler and Bache the Survey had made tremendous strides, and was recognized as the one great scientific institution under Government control. The whole Atlantic coast of the United States was then under preliminary examination. and the original surveys, which have ever since formed the basis of coast work, were then in progress. Besides this, there was much to be done in the examination of harbors and plans for harbor improvement. Davis gave himself up to this work with entire and characteristic energy. His connection with the Coast Survey began in April, 1842, though it is on record that he was an applicant for service on the Coast Survey on his return from the Mediterranean in 1832, and he continued in that service until July, 1849, almost without interruption.

During this period he served principally on the New England coasts in command of hydrographic parties, but he was also connected with several harbor commissions not only in New England but in the South. One of the first fruits of his work was the discovery of Davis' New South Shoal, 20 miles south of the Nantucket shoals. His harbor work led him to an examination of the laws governing the geological action of the tidal and other currents of the ocean, and he published several papers on this subject. His "Law of Deposit of the Flood Tide" is still an accepted authority.

The meridian of Greenwich had been adopted in the Coast Survey as the prime meridian, and also generally by American geographers, but our navigators and astronomers were still dependent on the British Nautical Almanac, a disadvantage which

had long been apparent to Davis, and his Coast Survey work served to strengthen his conviction of the necessity of a national ephemeris. Perhaps no one achievement of his life, not even excepting his later naval service as admiral, entitles him to higher or more lasting fame than the foundation of the American Ephemeris and Nautical Almanac. He was placed in charge of this work in July, 1849, and by the wisdom of the Navy Department was left absolutely unfettered in its execution. The Almanac stands as a monument to his success more enduring than brass or marble. Of his methods of administration it is not necessary to speak. Those who assisted in the early development of the work have testified, and the Almanac itself bears witness.

The Almanac was established in Cambridge, for the facilities afforded by the University and the Cambridge Observatory. Cambridge had been Davis' home since 1835. In 1842 he had married Harriette Blake, youngest daughter of Hon. Elijah Hunt Mills, United States Senator from Massachusetts. In 1846 he built a house in a new street just opened, in close proximity to the college grounds, to the eastward of which the fields and meadows stretched in almost unbroken undulations to East Cambridge and the marshes. The years of residence in this house, though years of labor, were peaceful and happy ones.

Mrs. Agassiz, in the life of her illustrious husband, has drawn a picture of the society of Cambridge at this time. Perhaps it would be necessary to go back to the republics of antiquity to match the social life of the University town of this period in the highest intelligence combined with severe simplicity of living. It was a society peculiarly congenial to Davis. Agassiz himself was Davis' next-door neighbor. In the same street lived either collectively or successively Dr. Beck, Dr. Channing, Dr. Walker, Bond (whose house was temporarily fitted as an observatory, preliminary to the present establishment), Joseph Cook, Felton, Sparks (the historian), Jeffries Wyman, Dr. Peabody, Rev. F. D. Huntington, the family of Horatio Greenough, Henry Greenough. and Davis' own brother-in-law and bosom friend, Benjamin Peirce. Besides the latter, there were in Cambridge at that time names which have become conspicuous in astronomy and mathematics—some of them associated with the Nautical Almanac in its early days.

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In 1853 Davis served with his friend Dupont as United States commissioner to the "Crystal Palace" Industrial Exhibition in In June, 1854, after thirty-one years' service in the Navy, he was promoted in rank and received his commission as commander, and in 1856 the congenial Cambridge life and scientific pursuits were interruped by a call to active naval service-He was appointed to command the sloop-of-war St. Marys on the Pacific station. He sailed from New York in the autumn of 1856 in the frigate Wabash, carrying the relief officers and crew of the St. Marys to Aspinwall, and crossed the isthmus with his ship's company by the newly completed Panama railroad, and assumed command of his ship at Panama. For the next three years he cruised in the Pacific. He visited several of the ports on the west coast of South America, the Marquesas and Sandwich islands, and surveyed some uninhabited islands in the South Pacific, the principal object of these surveys being to determine the value of these islands as guano deposits. He spent several months refitting his ship at the newly established navy vard at Mare Island. Farragut was then in command at Mare Island, and Davis' letters at this period abound in allusions to his intercourse with Farragut and present an interesting summary of the character of this distinguished officer. It is worthy of remark, as an evidence of Davis' clearness of judgment, that in 1857 he estimates Farragut as possessing the qualities of a great naval commander.

In 1855 William Walker, a native of Tennessee and an American citizen, a born adventurer and a professional filibuster, had landed in Nicaragua with a handful of followers for the ostensible purpose of lending military assistance to the democratic party in the intestine troubles with which that republic was distracted. After a succession of adventures he became first generalissimo and then president and dictator of Nicaragua. Apparently secure in the possession of power, he began the distruction of his own fortunes by revoking the charter of the Vanderbilt Company, by which the transit through Lake Nicaragua was managed, and also by revoking the decree prohibiting slavery in the dominions of the republic, which had been in force for thirty-two years. Violent insurrections immediately broke out, which were seconded by other Central American republics, and to which the agents of the Vanderbilt Company rendered mate-

rial aid. In the spring of 1857 Davis was sent to San Juan del Sur in the St. Marys to watch events in Nicaragua. By this time Walker was reduced to the last extremity and was besiged in Rivas, with constantly dwindling forces. His total destruction was now only a question of days. Acting entirely on his own responsibility, without instructions either from the Government at home or from the commodore on the station, and acting solely in the interest of humanity, Davis went to Rivas and by judicious pressure on the insurgent chiefs succeeded in raising the siege, and accepted the surrender of Walker with sixteen of his principal officers, carried them to Panama in the St. Marys, and sent them to the United States. His conduct of this affair was made the subject of a congressional investigation. It is needless to touch upon the political aspects of the Walker episode, which are sufficiently obvious. It is enough to say that Davis was justified; and, judged from this distance of time and from a standpoint afar from the violent political feeling of the day, it is difficult to see how he could have acted differently or how he could have been justified now had he remained at anchor in the St. Marys to witness quietly the massacre of American citizens, no matter how misguided. But the Walker episode had another result, as far as Davis was concerned, in bringing out conspicuously the leading traits of his professional character—fearlessness of responsibility, independence and soundness of judgment. and strong self-reliance. Though a trivial event in itself, it served to mark Davis as an officer who could be depended upon.

Davis was relieved from the command of the St. Marys in the spring of 1859, and returned to Cambridge and resumed his former place at the head of the Nautical Almanac. During his absence in the Pacific his English translation of Gauss' "Theoria Motus Corporum Coelestium" had been published, and he had had the honor of giving to the mathematical world the first English version of the Method of Least Squares, and he had beguiled the monotony of ship life on board the St. Marys by translating Kerhallet's "General Examination of the Pacific Ocean," with notes of his own. This book is still the standard authority for navigators of those seas.

When the civil war broke out, officers of mark in both services, regardless of rank, came directly to the front. Davis was only a commander in rank, and though the action of the retiring

board of 1855 had advanced him rapidly in this grade he had held the commission only six years; but even had he so desired it would have been impossible for him to have continued in Cambridge after the war had once begun. He was summoned to Washington. His first duty there was as detail officer in the Navy Department, a duty which was onerous and distasteful to him, but which he was, nevertheless, exceedingly well qualified to perform. He was an excellent judge of men. As an administrator, he possessed the really great quality of recognizing the capacity of others and of leaving each to the performance of his special duties without interfering, looking only to general results, but at the same time the duties of detail were thankless and distasteful. He also served as a member of what was known as the "Construction Board," which had under consideration the plans of ships to be built and added to the Navy. The civil war came at a time when naval architecture, especially as applied to menof-war, was just entering upon the transition stage, which has ended in the steel steamers of the present day, and the board had to consider new forms of construction and to face ideas which were novel to the seamen of the day. The three types of armored ships, or "iron-clads," as they were called in the language of the time, which the board finally adopted were represented by the New Ironsides, the Galena, and the Monitor. Of these three the first was the only one which was really efficient as a sea-going fighting ship and the last is the one that became famous. It is proper to say that Davis was opposed to the Monitor design from the first and held out against the other members of the board. As a scientific man he knew that the contrivance of Ericsson was a false design and worthless as a sea-going ship; he knew that the principles of naval architecture rest on laws of nature immutable as those which control the motions of the heavenly bodies, and that he who proclaims that he has "invented" a ship which shall defy these laws simply proclaims himself a charlatan. He yielded, but he did so because the Monitor was the one type that could be hastily constructed and because as a floating battery and in smooth water she might do some service; but it is told of him that when he had signed the report authorizing the construction of the Monitor he handed the model to Ericsson and said, "Mr. Ericsson, you can take that little thing home and worship it and it will be no sin, for it is not made in the likeness

of anything in the heavens above or the earth beneath, or the waters under the earth." It is not necessary to defend his position with regard to the Monitor. He could not foresee the destiny of the vessel, neither could be foresee, though he might guess, that her ultimate fate would afford the clearest possible proof of the soundness of his judgment; but could he have foreseen the far-reaching effect of the pernicious fallacy to which the Monitor gave birth it is safe to say he would not have yielded. It has been said by many writers that at the beginning of the war people went mad. Some people did—wise men kept their heads—and the terror inspired at the North by the building of the Merrimac and by the destruction of the wooden frigates at Hampton Roads was very nearly akin to madness. The Monitor arrived in the nick of time, fought a drawn battle, and although she neither captured nor destroyed her antagonist she crippled her, and the northern seaports breathed freely again. The real condition of the Merrimac, or her capacity for mischief, were neither known nor questioned. She was a monster to be dreaded, a new thing which some one had "invented" which was to reverse all preconceived notions of warfare; and another, a man of superior genius, had in the very nick of time "invented" something even more novel and ingenious by which her destruction was accomplished: and so the Monitor left her lesson and sank miserably at the end of a tow-line. Writing in 1799 of the French possession of Louisiana and Florida, Washington had said: "No less difficult is it to make them (the people) believe that offensive operations oftentimes are the surest, if not the only, means of defense." This lesson never has been learned. If it could have been inculcated as applied to naval defense by the experiences of the civil war, the false lesson taught by the Monitor has belied it, for this has taught the Navy that the part of American seamen in defensive warfare is to skulk in harbors and shoal waters in vessels that cannot keep the seas, and it has taught the people at large that a sea-going fleet forms no part of an effective scheme of defense, and that at a pinch something can always be "invented" to baffle an enemy, no matter how powerful.

But in the mean time other services were in sight more congenial than bureau work in Washington. For the success of naval operations on the southern Atlantic coast it was necessary that the Government should hold a harbor sufficient for the ac-

commodation of the largest ships, where stores could be accumulated and repairs effected—in short, a base nearer the scene of operations than any northern port. After consultations, in which Davis took part, in Washington, the expedition against Port Royal was planned. The command was given to Dupont, and Davis was named as fleet captain and chief of staff. A fleet of more than fifty ships-of-war and transports assembled at Hampton roads, and sailed on the 29th of October, 1861. Off Hatteras the fleet encountered a heavy gale, in which the smaller vessels and transports suffered severely, and the fleet was dispersed, so that on the fourth day out but one ship of the great fleet was visible from the deck of the flagship Wabash; but Port Royal bar had been given as the rendezvous in case of parting company, and the frigate kept on. She was joined by most of the men-of-war before arriving at her destination, and the transports joined soon after. On the morning of November 4 the Wabash. with twenty-five ships in company, anchored outside the bar at Port Royal. The importance of Port Royal had been recognized by the Confederates, and the channel was defended by strong works on Bay point and Hilton head, and all buoys and aids to navigation had been removed. To replace these, so that the heavy ships could cross the bar in safety, was the first care, and this duty was performed by Davis and Mr. Boutelle, of the Coast Survey, and before dark they had sounded out and buoyed the channel, and the next morning the heavy ships were piloted into deep water inside the bar and a reconnaissance made in force to draw the fire of the forts. Early on the morning of the 9th the signal was thrown out by the flagship for the fleet to get underway and form line-of-battle.

The Battle of Port Royal Bay has been somewhat overshadowed by the later naval victories of the war, but at the same time it was admirably planned and brilliantly executed. It was a battle in which ships engaged and captured forts on shore which were supposed to be impregnable to attack from the sea, for the army remained on board its transports and took no hand in the fighting, not landing until the forts had been abandoned under the fire of the naval guns. It had a good moral effect, for it came at a time when the Confederate arms had been generally successful and the feeling of despondency at the North was widespread, and this effect was felt abroad as well as at home. The

object for which the expedition set out had been perfectly successful, and the plan carried out in its entirety, without hitch or mistake.

Davis remained as fleet captain with Dupont until the spring of 1862. His work was principally staff duty and organization, but in January, 1862, he commanded an expedition into Warsaw sound, with the object of cutting communication between Fort Pulaski and Savannah. He left Port Royal with seven ships and three transports, having on board 2,400 men. The vessels entered Little Tybee river and passed Fort Pulaski, but were brought to a stop by heavy piles driven in a double row across the channel above Wilmington island. Here they were attacked from above by the fleet of Commodore Tatnall and fought an action lasting only half an hour, in which the Confederate squadron was driven back. As a demonstration, this expedition may be considered a success, although it was not fruitful of results.

Flag Officer A. H. Foote, who had been in command of the Mississippi flotilla from the beginning and had distinguished himself in several engagements with the enemy, had been severely wounded at Fort Donelson and had suffered almost continually from his wound for three months. During the month of April his fleet had been before Fort Pillow, though without carrying on any active operations. His health now gave way, and it became necessary to relieve him of the command, and Davis was named as his successor. Foote and Davis were old friends. Though not of the same date, they had been shipmates on board the United States as midshipmen in 1826, and they had served together in the West India squadron in 1828. It was arranged that Davis should go to the Mississippi, nominally as second in command, but this was done to spare as much as possible Foote's feelings. Foote never had anything to do with the squadron after Davis succeeded him, and he was relieved before Fort Pillow on May 9, 1862. Davis hoisted his flag as flag officer on board the iron-clad *Benton*. The new flag officer, who was entirely strange to river work, had very little time for reflection, for on the very next day, at an early hour in the morning, the Confederate flotilla, consisting of eight armored vessels, came out from under the guns of Fort Pillow and attacked the Union squadron. Davis had seven iron-clads to the enemy's eight. A severe engagement followed, the enemy fighting with great spirit and

using their vessels as rams, by which two of Davis' ships were sunk. These were subsequently raised and repaired; but the Union ordnance was far superior to that of the enemy and their practice better, and the machinery of four of the enemy's vessels was disabled. At the end of an hour's hard fighting the enemy succeeded in withdrawing under the guns of the fort.

The flag officer now commenced a vigorous bombardment of Fort Pillow, which lasted almost without intermission until the 4th of June, the enemy replying with a constant and well directed fire; but here, too, the superiority of the Union gunnery became apparent. On the night of June 4 a number of explosions were heard in the fort, which led the flag officer to believe that the garrison was about to evacuate the place. He therefore gave the order to get underway at 4 o'clock on the morning of the 5th. At daylight the fort was found to have been evacuated during the night. Davis now dropped down the river and at dark was anchored within two miles of the city of Memphis. His squadron was reduced to five iron-clads, for the two which had been sunk in the action off Fort Pillow had not yet rejoined, but he was reinforced by a new element in the form of a flotilla of four rams, commanded by Colonel Ellet, a most dashing and gallant officer, who, though he acted with the army and was not placed under the flag officer's orders, cooperated in complete harmony with him and contributed largely toward the complete victory of the following day, although only two of his rams were engaged. These rams were ordinary river steamers, protected as well as possible, and strengthened by longitudinal beams of wood. They carried no guns.

At twenty minutes past four on the morning of June 6, 1862, the Union flotilla was underway and stood down the river toward the city of Memphis. The Confederate fleet was discovered at the levee, and these immediately cast off and stood out to attack. They were the same eight ships which Davis had engaged a month before in front of Fort Pillow, and they opened the battle with a furious cannonade, to which at first it was difficult for Davis to reply without firing into the city and the hundreds of spectators who had gathered on the levee to witness the destruction of the Union flotilla; but the gallant Ellet dashed to the front with two of his rams, and the action immediately became close and general, terminating in a running fight between

the iron-clads, which carried them 10 miles downstream. The result of the action was the total annihilation of the Confederate fleet. Of the eight ships that went into battle three were totally destroyed, four were captured and later were added to the Union fleet, and one escaped. In addition to this, five large transports and a considerable amount of cotton were captured, and a large ram and two tugs on the stocks at Memphis were destroyed. The loss of life on the Confederate side is not accurately known, but the estimate of killed and wounded is one hundred. On the Union side not a single vessel was lost, but the casualties included the gallant Ellet, who received a wound from the effects of which he afterwards died.

At 11 o'clock Flag Officer Davis received the surrender of the city of Memphis, and two regiments which had accompanied the fleet in transports marched in and took possession.

The squadron remained in front of Memphis for about three weeks, but on June 12 an expedition of four ships was sent up the White river to destroy certain batteries, clear the river of the enemy's vessels or boats, and open communication with Major General S. R. Curtis, who after the battle of Pea Ridge had commenced a march eastward to the Mississippi. The ships attacked and captured the batteries on the 16th, and this action would have been insignificant but for the fact that a shell from the batteries, entering the casemate of the Mound City, exploded in the steam drum. Many of the crew were killed outright or frightfully scalded, and many jumped overboard and were drowned. Out of 175 people on board only 35 escaped uninjured. General Curtis did not arrive in time to communicate with the squadron, but reached the Mississippi at Helena, about 80 miles below Memphis.

Of the battle of Memphis, Admiral Porter says: "For the second time Rear Admiral Davis won a strictly naval victory, and won it without a single mistake. * * * In his report he makes no distinction among his officers. He simply says, 'The officers and men of the flotilla performed their duty.' The proof of the manner in which it was performed was the total annihilation of the enemy's forces. Take the battle with its results, it was one of the handsomest achievements of the war; but it did not receive that general notice which it deserved." Davis himself in after life seldom referred to this battle. To boast or

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vociferously to claim recognition for himself on account of services which he had performed was as foreign to his nature as it was to talk in German, though he understood both languages.

On June 29 Davis left Memphis with his fleet and six mortarboats in tow of transports, and on July 1 anchored at Young's Point, a few miles above Vicksburg, and there joined hands with, Admiral Farragut's fleet from New Orleans. The entire Mississippi from Cairo to the Gulf had now been navigated by Union vessels; but another year was to elapse before the stronghold of Vicksburg should fall. At this time Farragut was making his first attempt against Vicksburg. Some of his vessels were above and some below the fort, and the combined fleets of Farragut and Davis remained in this position during the month of July. On the 15th some of Davis' light-draft vessels were sent up the Yazoo river on a reconnaissance to obtain information with regard to the large iron-elad ram Arkansas which was known to be building and about which the most extraordinary reports were in circulation. They had not been gone long before firing was heard, and they soon appeared at the mouth of the Yazoo, coming down at full speed and closely followed by the Arkansas.

It so happened that not one of Farragut's fleet had steam up and the *Arkansas* passed directly through it, receiving no injury from the broadsides of the ships, and got into shelter under the guns at Vicksburg. Farragut undertook to destroy her by passing the batteries at night, but the attempt failed, and it soon became apparent that the Navy alone could effect nothing against the strong fortifications of the place, so on the 27th Farragut returned to New Orleans and Davis' fleet went up the river again.

During the remainder of Davis' period of command on the Mississippi no operations of any consequence took place. The river above Vicksburg had been cleared of the enemy and only Vicksburg remained, which was to defy the combined operations of the Army and fleet for another year.

The summer had been a very trying one to Davis. In the torrid and malarial climate of the river his health had suffered. The month of August had been passed principally in establishing the naval station and depot at Cairo. He had intended to occupy the Yazoo river and thence to carry on operations against the enemy; but he found that nothing could be done in that stream at low water, and the enemy had erected heavy barricades,

defended by batteries, at Haines' bluff, some miles above the mouth of the Yazoo, and with these his force was not sufficient to contend, and in fact his field of operations was entirely too wide for the force under his command. His ships all needed repairs, and he went to Cairo for this purpose. Here his health broke down completely. He suffered from repeated attacks of chills and fever, and in October he was relieved by Admiral Porter.

Davis had been promoted to the rank of post captain, then the highest grade in the Navy, in 1861. By virtue of the command of the Mississippi flotilla he became flag officer, and was made commodore on the creation of that grade in July, 1862. He became a rear admiral on February 7, 1863, and on the same day the President signed a vote of thanks of Congress passed for the victories of Fort Pillow and Memphis. This vote of thanks was not an empty honor, for it carried with it certain privileges, and up to this time it had only been conferred on such officers as had commanded in chief in battle. The list of rear admirals at this time was Farragut, Goldsborough, Dupont, Foote, Davis, and Dahlgren, in the order named. Each one had been promoted for cause.

About this time an act passed incorporating the National Academy of Sciences. Of this the Admiral wrote: "Congress has incorporated a National Academy of Sciences, with fifty incorporators, of which I am one. This measure, from which should proceed a great institution, is due solely to Mr. Wilson, Senator of Massachusetts."

In 1863 Admiral Davis established the Bureau of Navigation of the Navy Department by becoming its first chief. His original conception of this bureau was to unite under one head all scientific work pertaining to the Navy as related to astronomy, hydrography, and navigation. The scheme included the Naval Observatory, the Hydrographic Office (though this was not established as an independent branch until 1866), the Nautical Almanac, the Compass Office, then becoming a most important branch, owing to the introduction of iron ships, and all matters pertaining to the purchase and care of nautical and astronomical books and instruments and of such articles of a ship's outfit as belong properly to the master's department. Very much against the Admiral's desire, and although entirely foreign to his original

scheme, the Office of Detail was incorporated with this bureau, although under a separate detail officer. Passing through successive stages of transmutation, this office has now absorbed the entire bureau, its scientific character is lost, and its title has become a misnomer. Admiral Davis remained in the bureau two years, and during his administration he began a book which should in some measure correspond to the "Admiralty Manual of Scientific Inquiry" and serve as a general guide to naval officers in scientific investigation abroad. Articles were prepared on various subjects by eminent scientific men, but the Admiral left the bureau before the book could be issued and his successor suppressed it.

Admiral Davis gladly relinquished the Bureau of Navigation in the spring of 1865 in order to assume a post which had long been the goal of his ambition, the superintendency of the Naval Observatory, to which he succeeded on the death of Gillis. Though this place had been made by his own act subordinate to the one he had quitted, it was in the line of duty entirely congenial to him and for which he was preëminently qualified. He served twice as superintendent of the Observatory, and whatever the intrinsic merits of his administration may have been, the fact remains that the Observatory reached its highest point of prosperity and efficiency under his direction. So well established was its reputation abroad and so efficient was its organization considered that the French copied our system and placed their national observatory under the administration of a naval officer of eminent scientific attainments, citing the success of the American system as their incentive. In 1866, and in accordance with a resolution of the Senate, Admiral Davis prepared, as a public document, a complete review of all surveys hitherto made with a view to possible routes for interoceanic railways and canals across the American isthmus. This book is still the standard authority on the subject, and was among the volumes used only last year (1895) by the United States Nicaragua Canal Commission. In this year also (1866) he served with Admirals Farragut, Dahlgren, and Porter on the board of admirals to review the services of naval officers during the civil war and to recommend promotions as a reward of merit. The labors of this board were an invidious and thankless task. Reward for gallant acts performed in war should be conferred on the spot

and at the time or not at all. The obligations of this board assigned to it attributes that were nearly akin to the divine, and its results bore inevitable fruit for years in jealousy, heart-burning, and bitterness. But Admiral Davis was still a flag officer in activity, and after two years at the Observatory he was again called afloat and assigned to the command of the Brazil squadron. He fitted out in his flagship, the *Guerrière*, a splendid new steam frigate, at Boston, and sailed from that port in June, 1867, relieving Rear Admiral Godon at Rio de Janeiro after a passage of about thirty days.

Francisco Solano Lopez was the third in regular succession of the absolute dictators or tyrants who had ruled the so-called Republic of Paraguay since its foundation as an independent state. When Paraguay declared her independence of Spain in 1819, her remoteness from the sea and the occupation of all available Spanish forces in the attempt to quell simultaneous insurrections in the more accessible colonies caused her act to be ignored by the mother country. Paraguay became independent without a struggle or the effusion of blood. A congress held in Asuncion the same year named the celebrated Dr. Francia dictator for one year, and at the end of this period his nomination was confirmed for life. Very little is known of the actual condition of Paraguav in the reign of Dr. Francia, because he pursued a policy of complete seclusion and excluded all foreigners from the country. Stories were circulated imputing to him the utmost severity and cruelty, and he has generally been viewed as a gloomy and malignant despot. But the evidence rests principally on the testimony of two Scotchmen named Robertson, brothers, who had settled in Paraguay before the revolution and sought to open a commerce with England. These had offended the dictator and either fled the country or were banished. Carlisle has celebrated Dr. Francia in a famous essay. For years the country remained as isolated to the outside world as the heart of Thibet. On the death of Francia, in 1840, a short period of anarchy followed, which was succeeded by another dictator in the person of Don Carlos Antonio Lopez. He followed very much the same course as Francia, except that he was more liberal to foreigners. A tax was, however, levied on all vessels navigating the Paraguay river. Lopez took the title of president and established a constitution by the terms of which the con-

gress could only be convened by an act of the president; the president, in case of death or disability, was to be succeeded by the vice-president, and had the power of nominating and appointing the latter; so that Lopez had only to name his own son vice-president to make the succession secure in his own family. In 1855 the United States steamer Waterwitch, while surveying in the Paraguay river, had been fired into from a Paraguayan battery and one man killed. The United States therefore sent a naval expedition, with a commissioner, to demand and enforce reparation. In 1859 the commissioner of the United States concluded a treaty with Paraguay, and from that time a United States minister had continued to reside at Asuncion. Francisco Solano Lopez was educated in France, and being secure in the succession to the rulership of his country he received a military education and imbibed rather ambitious ideas in the France of the second empire. He succeeded his father, Carlos Antonio, in 1862. He was even more liberal than the latter, and virtually opened the country to commerce, but maintained the tax on vessels navigating the Paraguay. This tax was a sore point with Brazil. The Paraguay river was the highway to her southwestern provinces and its free navigation an important question. Moreover, Lopez had become aggressive. He had Napoleonic ideas of conquest and military dominion. A conflict between the two countries was inevitable. War broke out in 1864 and dragged on for six years, the Paraguayans fighting against overwhelming odds, with great spirit, the allies, for Brazil had formed an alliance with the Argentine Republic and Uraguay, having the advantage in vastly superior numbers. The Paraguayans were driven up the river from one stronghold to another, the fighting taking place almost exclusively along the river course, and Paraguay remaining as hermetically sealed to the outside world by the operations of the war as it had been in Francia's time, for the river is the only approach to the country. Meanwhile the American minister continued to reside at Asuncion long after every other foreign representative, consular and diplomatic, had withdrawn.

Such was the condition of affairs in the River Plate when Admiral Davis took command on the station. To keep open communication with the minister at Asuncion was one of the duties which devolved on him.

The war on the part of the allies degenerated into a personal war against Lopez, who was denounced as a tyrant and miscreant whom it had become a virtue to destroy. Stories of his barbarity were rife in Rio de Janeiro and Buenos Ayres, and these stories may have been true or not, but outside of Paraguay only one side of the case has ever been heard, for Lopez had no friends beyond the confines of his own dominions. The country was a military camp. Every male capable of bearing arms was enrolled and most of the females were with the army, so that the towns and villages were deserted, industry, except as related to military affairs, was suspended, and the dictator was commanderin-chief. Even had he been the constitutional president of a free country the situation would have been the same, for the whole country was in a state of siege and perforce under martial law, and martial law is apt to be rigorous law in all countries. The American minister had written to the State Department in the early part of the war in terms of the most fulsome flattery of Lopez, but unfortunately the minister himself was beginning to get into trouble with both sides. He was accused by both parties to the war of using his diplomatic privileges to further his private interests. These stories may or may not have been true, but in this case at least both sides were heard. The Brazilians accused him of carrying on a profitable traffic in supplies and arms which were passed unexamined through the Brazilian blockading fleet as the personal property of the American minister and sold to the Paraguayans at a considerable profit, and the Paraguayans accused him of acting as a spy in the interests of Brazil and selling military information to their enemies, and later Lopez accused him of aiding and abetting a conspiracy which he discovered, or pretended to discover, against his life and of harboring the conspirators and refugees from military justice in the legation of the United States. Be this as it may, a simple recital of these circumstances is necessary in order to make clear a situation of affairs in which Admiral Davis now became involved and with which it became necessary for him to deal in his own way, and for the same reason a somewhat extended account of the actual condition of the republic of Paraguay and the circumstances attending the war of extermination waged by the triple alliance against Lopez has been given, even at the risk of irrelevancy.

In the summer (or winter of the southern hemisphere) of 1868 the Wasp had been sent by the Admiral to Asuncion to communicate with the minister. The latter sent by this vessel a message to the Admiral, asking for the immediate return of the Wasp, as he felt his situation precarious and he might be obliged to leave at short notice; he wanted a vessel of war to fall back upon. So upon the return of the Wasp to Montevideo the Admiral despatched her again at once to Asuncion and gave her commander instructions to place his vessel at the minister's disposal.

The Wasp was an iron paddle-wheel steamer which had been captured on the blockade and taken into the service. She carried a light battery of brass guns, and was well adapted for river service. Her captain was Commander (now Rear Admiral) William A. Kirkland, who was admirably qualified for service in the River Plate, as he had passed almost his entire active service abroad in that country, spoke Spanish and the dialects of the river like a native, and was thoroughly familiar with the habits and traits of the natives, understood the native character, and was a skillful diplomatist as well as a gallant officer. Indeed, so well was the value of his qualities understood in Washington that he had been kept almost continuously on duty in the River Plate. He knew Lopez probably better than any one in South America.

When the Wasp reached Asuncion the minister was, or thought he was, living in daily terror of his life. The legation was surrounded by Lopez' police, and no occupant of it except the minister himself dared stir abroad. No overt act had been committed, though it was undoubtedly the intention of Lopez to immediately arrest any member of the household, except the minister himself, who ventured to guit the precincts of the lega-Captain Kirkland believed that the minister's fears were greatly exaggerated, but there is no doubt that he was thoroughly frightened, perhaps for causes best known to himself, and had but one wish, which was to get on board the Wasp and out of Lopez' reach at the earliest possible moment. Arrangements were therefore made for the immediate embarkation of himself and his household. The party left the legation headed by the minister himself, carrying the American flag, and no sooner were they on the street than two of the party, refugees whom the

minister had sheltered, were forcibly arrested. Even then it is probable that had the minister resisted and protested the arrest would not have taken place, but on the first appearance of the police he had turned and fled. In dire precipitation he reached the boat which was in waiting for him and was conveyed to the Wasp. No sooner was he on board than he insisted on sailing at once. It was in vain that Captain Kirkland represented that, having undertaken to extend his protection to these men, it was shameful to leave without them, and that a demand from himself would procure their instant delivery. A frightened man does not listen to reason, and Captain Kirkland, against his own judgment, but acting in strict conformity with his orders, weighed anchor and proceeded down the river.

When the Wasp arrived at Buenos Avres the Admiral was at Rio de Janeiro. There were no telegraphs in those days, but the news of this outrage upon an American diplomatist reached him in due course of post perhaps three weeks after the event. Admiral Davis never had the slightest doubt as to the course which it was proper to pursue in this case. He never probably gave the question more than one thought. In the bitter attacks upon him which followed his enemies charged him with vacillation, hesitancy, irresolution, reluctance to perform his obvious duty. This charge was absolutely false. Even if there could have been more than one side to the question, there could be no doubt to those who knew him as to the falsehood of such a charge, for it ascribed to him qualities which were foreign to his nature. The business which had brought the Admiral to Rio de Janeiro at this time was directly connected with this affair, or rather with Paraguay. He had received information from Washington that the new minister to Paraguav would arrive in the mail steamer now due in a few days. The former minister was recalled. While his ships were assembling at Montevideo he remained in his flagship to receive the new minister and offer him a passage to the river, and at the same time he knew that it was important to see the new minister and place him in possession of information relating to existing affairs. Matters would not be hastened by his presence in Montevideo at this time, for he had given the necessary orders for the assembling of the squadron and immediate preparations for the demonstration which he in-

tended to make. In the meantime he was compelled to face a quarrel with the United States minister to Brazil.

On the arrival of the first news of the outrage at Asuncion this official's manner became so dictatorial, overbearing, and meddle-some that it was justly regarded by the Admiral as offensive and so resented. Admiral Davis never sought a quarrel in his life; but this was a case in which, to use his own expression, he must "fight to keep the peace." The new minister to Paraguay arrived and was received on board the Guerrière, which sailed at once for Montevideo. He was a distinguished officer of the civil war, and acted throughout this whole affair in thorough accord with the Admiral. Upon arriving at Montevideo the squadron was found assembled and preparations in active progress, and as soon as these could be completed, as many of the ships as could be floated over the bar at Martin Gracia proceeded up the river. These were the Pawnee, Kansas, Huron, Quinnebaug, Shamokin, and Wasp. The Admiral hoisted his flag on board the latter vessel.

It is about a week's navigation from Buenos Ayres to Asuncion, for after ships enter the narrower reaches of the Parana and Paraguay they must anchor at night, and the strong current of the river retards progress by day. It was in the midsummer (December) of 1868, and in the upper rivers the climate at that season is something infernal. All along the right bank stretches for miles the Gran Chaco, a noisome wilderness of jungle and morass, which no human being can enter and live and in which no living thing except alligators can dwell. A Brazilian army which entered this swamp for a march of about twenty miles to flank Asuncion died there like rotten sheep. From this bank great segments of tangled forest growth break away with the force of the stream and float down with the current in the form of floating islands, some of them of enormous extent, so that at times the river ahead seems to be land. These gather across the ships' bows and chains at night and must be cleared away with great labor in the morning. All the day a vertical sun beats down on the mirror of the river. In the furnace heat and damp of the swamps swarms of noxious insects breed, and these and the foul miasmas of the Chaco make the nights unbearable, and as a variety to these torments a tornado will occasionally sweep across the river from the south, and the temperature will fall forty or fifty degrees in an instant. The health of the squadron

necessarily suffered. Many men were on the sick list from mosquito bites, and one man on board the *Wasp*, driven mad by these pests, jumped overboard and was drowned. The Admiral himself suffered, and though not actually ill he was wretchedly pulled down.

In the meantime Asuncion had fallen and was occupied by the allies. Lopez' last stronghold on the river was at a point called Angostura, about twenty miles below Asuncion, where he had erected a battery which commanded a bend of the river. When the Wasp arrived the Brazilian iron-clads were bombarding this battery, coming up into action in the morning and dropping down out of range at night. To those officers who had taken the hard knocks of the civil war at home the Brazilian methods of warfare seemed simply puerile. The Admiral had in his squadron guns enough to have knocked this battery down in half an hour if American methods had to be resorted to; but he had left the whole squadron some miles below the lower Brazilian lines, and came on alone with the Wasp, as he did not choose to make a show of force until it became necessary to use it. The new minister to Paraguay was also on board the Wasp, but it is needless to say that Lopez was unaware of this fact until the affair was concluded, nor was he aware, as he had no means of obtaining information from below, that the Admiral had a force back of him. On the morning after the arrival of the Wasp, which had anchored just below the battery and out of the line of fire, the Brazilian fleet came up into action, the leading ship carrying the American flag at the fore, a proceeding which called forth a peremptory challenge from Admiral Davis, as while this flag flew the fort did not fire, and the ships were enabled to get into position before the guns of the enemy could open upon them. It is needless to say that this experiment was not repeated. It was explained by the Brazilian admiral that this was intended as a signal to the Wasp to get out of the way. The Wasp was quite capable of taking care of herself; but this incident, trivial as it was, was perverted by the Admiral's enemies in their subsequent attacks on him.

Immediately upon his arrival in front of Angostura the Admiral had notified the commanding officer that he wished to communicate with the president. Lopez was with the army some miles in the interior, but a meeting place was arranged at an in-

termediate point. The Admiral sent his fleet captain and Captain Kirkland. The conference, so far as these were concerned, was limited to a peremptory demand for the immediate surrender of the two persons arrested from the protection of the American minister. Lopez would not have been a South American potentate if he could have yielded this point without talk. The men were actually at a place some distance in the interior, and it took a day to produce them, but they were delivered on board the Wasp as soon as they could be brought down. With them Lopez sent certain documents relating to the charges on which they had been arrested. These the Admiral could hardly decline to receive, as they were addressed to the Government of the United States. This closed the incident. The American minister then landed and presented his credentials, and the Wasp proceeded down the river, and within a week the whole squadron, with the exception of the one ship which had grounded with a falling river and was not floated until the following season, was in Montevideo again. Before the Admiral reached the United States Lopez was dead, his government overthrown, and Paraguay a Brazilian conquest.

This, in explicit terms, is the whole story of an event which if it had not borne fruit in bitterness and mortification and ended an honorable service of forty-five years in disgust, might have been dismissed in a single paragraph. It was the last incident of Admiral Davis' active career, and it is his own side of the case, which has never yet been given. His enemies placed their slander in the chronicles of the nation. It is difficult to explain the animus which dictated the attack on Admiral Davis which followed his conduct of this affair. It might be implied or inferred, but it is better to let the Admiral's story stand as a plain statement of facts. There was enough imputation on the other side. The parties in the attack were the minister to Brazil and the ex-minister to Paraguay. The former acted in retaliation for the Admiral's curt and proper reproof for his meddlesome impertinence and domineering conduct. The latter had no cause of offense and no complaint to make until the two had met and conferred. They both entirely mistook the Admiral's character. That he was a gallant and distinguished officer, a learned man, and a modest gentleman was a sufficient cause of offense, but they could not understand that force of character

was not inseparable from brutality of deportment. Indeed, the fact that the Admiral was a cultivated man was publicly cited against him. To these two were added the two refugees whom the Admiral had rescued from what they and their friends believed to be impending death. These had been loud in their expressions of gratitude when first delivered, but they became the tools and instruments of the persecution. There was one other. An officer of the Guerrière had lent himself to this plot, and served as a spy and a talebearer against the Admiral. This person's name, if remembered at all in the service, is only remembered with infamy.

Admiral Davis returned to the United States in the Guerrière in June, 1869, in time to face a congressional investigation set on foot by his enemies. It was not enough that his conduct had been approved by the Secretary of the Navy and the President; the times were against him, for they were the same in which the name of a great and single-hearted warrior could be made the emblem of a shameless system of political knavery. One of the principals in this persecution was the member of a powerful political family, and though a person of less than no consequence himself, he had friends who commanded great influence and his interest was enough to control the investigation. A committee composed of members, every one of whom had prejudged the case and every one of whom was hostile to Admiral Davis, carried on the investigation. It failed to examine witnesses who could have testified in the Admiral's favor, and such evidence as was favorable to him was suppressed in the printed report of the proceedings of this committee; and in addition to the report of the committee a history of Paraguay. written and published by the ex-minister, rehearsed the whole complaint; but even this committee could not bring in a direct vote of censure. The charges against Admiral Davis were dilatoriness in proceeding to act after the first receipt of the news of the outrage in Paraguay; treating with Lopez and accepting the surrender of the two refugees under conditions, and receiving them and holding them as prisoners. These charges were all The first was inspired by the minister to Brazil, based on the quarrel in Rio de Janeiro; the second was founded on the fact that the men were not produced at once (they could not be), and because Lopez talked and sent certain papers on board

which the Admiral could hardly refuse to receive; and the third charge was that the Admiral had refused to allow these men to communicate with the allied commanders while he was within They were exceedingly anxious to do so in order their lines. to convey military information by which they hoped to injure the Paraguayan cause. They were both men of doubtful character. One was an American adventurer and the other a British subject. They had both been in Lopez' service and were accused by him of conspiring against his life. They took refuge in the United States legation, and the minister, in order to give color to their presence, conferred on them some sort of nominal appointment as attachés, which, considering their situation as refugees, was clearly an injudicious thing to do. Admiral Davis had never credited the stories of Lopez' barbarity. He had the most reliable information of the actual condition of Paraguav during the war from Captain Kirkland, who made repeated trips up the river in the Wasp, and he had better evidence to judge by than any one in South America. Moreover, he was a man of sound mind and clear judgment, and he did not form opinions from gossip. Notwithstanding the dismal predictions that the men would be murdered, Admiral Davis was quite sure that he would find them in good health. The event proved that he was They pretended that they had been tortured by a process which they described to the committee and which must have left indelible physical traces, but their persons when received on board bore not the slightest evidence of violence. They were not even emaciated, though there was a decided scarcity of provisions in Paraguay, and some of the native soldiers were mere skeletons; but there is no doubt that they were thoroughly frightened and very vindictive toward Lopez.

Lastly, the facts that the Admiral had actually accomplished the object of his undertaking, which had been carried out with spirit and firmness, and that his proceedings had the approval of the President and the Secretary of the Navy were set aside and ignored. In its findings the committee virtually censured him because he was a gentleman and not a blackguard. The matter never came to a vote in the House.

But the Admiral at this time had other causes of preoccupation more agreeable to him than the proceedings of this committee. Upon his return to the United States in June, 1869, he

had gone with his family to the hills of Maine for the summer. In the autumn he took duty in Washington as a member of the Light-House Board. During his absence in Brazil the University of Harvard conferred upon him the degree of doctor of laws, the only instance in the history of the institution in which that honor has been paid to a naval commander.

In 1870 Admiral Davis was appointed to command the naval station at Norfolk and spent three years at this post. They were uneventful years and to himself and his family a period of social isolation. Southern society had not yet recovered from the effects of the war; the Admiral's former Norfolk friends and old brother officers were still in the sulks; but the time passed not unprofitably, for the Admiral was a man to whom leisure was not idleness. The official duties of his station were not onerous, and with his books and the society of his family the time was not lost. He returned to the Superintendency of the Observatory early in 1874, in time to take part as chairman of the Transit of Venus Commission in the preparations for the observations of that year.

The journals and memoranda of the voyage of the Arctic discovery ship Polaris, together with Captain Hall's journals of previous expeditions to the Arctic regions, had been purchased by the Government, and in accordance with a resolution of the Senate were entrusted to Admiral Davis to edit. worked industriously on these, assisted by Professor Joseph Nourse, who published the second narrative after the death of the Admiral. This work and labor in connection with the Observatory and naval exhibit at the Centennial Exposition occupied the last year of his life. The summer of 1876 in Washington was an extremely hot and unhealthy one, but the Admiral worked faithfully on the *Polaris* narrative, although he had been obliged to abandon the Observatory dwelling for the summer on account of its malarial surroundings, and had the satisfaction of seeing the volume appear. In November he served with Admirals Porter and Rowan on a board to fix the site of a naval station at Port Royal. On his return from this duty he had an attack of his old Mississippi complaint, chills and fever. His general health declined rapidly during the winter, and he died at the Naval Observatory in Washington on the 18th of February, 1877.

He had written from the Pacific in 1857, "I love the very stones in the streets of Cambridge," and so he was buried on the banks of the Charles river, within sight of the towers of the University, and in a spot which still retains its rural beauty. In the memorial hall of Harvard a stained glass window looks out directly upon the house in which his children were born and the scenes in which he walked familiarly through the happiest years of a useful life and records the fact that he was the oldest representative of the University and the senior in rank who served in the civil war.

To those who treasure the memories of his life his private virtues are a theme almost too sacred even for the memoirs of the august Academy which he helped to found. At home his charm and power lay in his keen intellect, unswerving integrity, and winning artlessness. The innocence of the dove, the wisdom of the serpent, these brought the inevitable compensation to his last years in "that which should accompany old age, as honor, love, obedience, troops of friends." In estimating his public character it is only fair to judge him by the light of his own times. No man attains eminence without making enemies in his own day, and Admiral Davis was no exception. Although a man of singular sweetness and evenness of temper, of absolute impartiality and freedom from prejudice in his relations toward men, he had his detractors and calumniators. It was sometimes said of him in the Navy that he had subordinated the regular duties of the profession to the pursuits of science. This is untrue. The battles of Port Royal Bay and Warsaw sound, of Fort Pillow and Memphis are an answer to this calumny. He took up scientific work at a time when the alternatives would have been total idleness or such occupations as the hunting of game or the rearing of chickens, and his detractors have been found among those who chose these. He entered the field of science when the gate stood wide open to him, and although not a man of genius, he went as far as a deep love of knowledge and truth and the talents which God had bestowed would carry him. Whatever he had to do he did with all his might; and so when the test came which sorted men according to the merit that was in them, the scientific officer went easily to the front and the idler dropped into oblivion. He passed the alembic of trying times.

So, as a naval officer, he must not be judged by the present

standard. He had some qualities which were meritorious in his own time, such as his fearlessness of responsibility, self-reliance, and the independence of a sound judgment, upon which he was accustomed to depend. He served at a time when other virtues could be found in the service besides a blind subordination to printed regulations. There were no printed regulations in his day, and the Navy did well, because time-honored custom and the individual character of the officer stood instead. He was an admiral, not because he had attained a certain age, but because he was a flag officer and commanded fleets with which he fought and won battles. In short, he belonged to the past and his own time.

Von Holst has said that it will be easier for the next generation to picture the life of the ancient Egyptians than the social condition of its own grandfathers in this Republic in the first half of the nineteenth century. But if the political sins and passions of that era are as dead as the iniquities of the Pharaohs, so surely also some virtue has passed out with them, and Admiral Davis' lot was cast in the Navy when if ships were built of wood men were of steel. He was not pugnacious or quarrelsome, nor did he love fighting nor war for themselves, but he fought battles with exactly the same singleness of purpose with which he had run lines of soundings from Nantucket Shoals, and he wore his sword, not as an obsolete weapon, which might be an encumbrance in conflict with a person armed with a self-cocking revolver, but as a badge of his commission and the emblem of an almost forgotten honor.