

MATTHEW FONTAINE MAURY

By Stuart Moore

Presented to The Fortnightly, November 14, 1941

ON JANUARY 14, 1806, in the part of Spotsylvania County known as the Wilderness, some twelve miles west of Fredericksburg, was born Matthew Fontaine Maury, of French and Dutch ancestry, the first represented by his father, Richard Maury, and the latter by his mother, who had been Diana Minor.

At this time Thomas Jefferson was in his second term as president of the young nation, which had asserted its independence less than thirty years before; John Marshall was its new chief justice, and his decisions were laying a sturdy foundation for the struggling union.

In this same year Lewis and Clark had returned from their explorations beyond the Rocky Mountains, bringing tales of a great new land to be developed. It was the age of the covered wagon and the start of the winning of the west. As a result, families were pouring over the Alleghanies, and in 1810 Richard Maury sold his land in Spotsylvania for \$300,000 and, with his wife, four sons

and five daughters, took the rough trail through southwest Virginia to middle Tennessee.

There his brother, Major Abram P. Maury, had already established himself as a lawyer and prominent citizen; in 1807 a new county was created and named Maury County in his honor. It is reasonable to suppose that it was the hand of this substantial brother that beckoned Richard. The overland voyagers, weary no doubt, drew rein at their new home on the Harpeth River near Franklin, Tennessee, about eighteen miles southwest of Nashville, amid a pioneer land of boundless forests,

Stuart Moore (1893–1961) was born and educated in Lexington and spent his career here as a lawyer, businessman and elected public official. His Fortnightly paper focused principally on Maury's career as a scientist and naval officer. Maury's role in the Civil War and as a Virginia Military Institute professor is explored in somewhat more detail in "All Is Well": The Life of Matthew Fontaine Maury," by Keith E. Gibson of VMI, a paper presented to the Rockbridge Historical Society in 2006 and available in RHS's *Proceedings XIV*.



The U.S. Navy's portrait of Matthew Maury, painted in 1923 by Ella Sophonisba Hergesheimer.

sparsely settled farming land, and widely dispersed log cabin homes.

So far as we know the young Matthew Maury led a wholesome existence as he grew older — hunting, clearing new ground, working in the cotton fields, and at somewhat rare intervals attending the field schools that provided the rudiments of education on the frontier.

Nothing, in short, indicates that he would have developed into other than an enterprising Southern planter, until there came the first of two serious accidents. It is not known whether the youngster of twelve was engaged in hunting, or helping his elders about their work, or merely exercising his young limbs, but he was high in a tree, forty-five feet from the ground, when he fell. By all usual rules he should have been killed by this fall and, in fact, those with him were convinced he was dead. But after a time he revived, badly hurt, his tongue nearly

bitten off and his back so severely injured it was thought he would never again indulge in active work.

To make the best of this unpromising situation, his father, with little or no enthusiasm, entered Matthew at Harpeth Academy, a frontier institution of learning. Yet Matthew's first impetus for more than superficial learning came not from Harpeth Academy and its small corps of somewhat unusual instructors, but rather from an obscure neighborhood shoemaker named Neal. The rough shoes of the numerous Maury progeny must have required numerous trips to Neal's shop for re-soleing, and the new leather bottoms more often than not were covered from end to end with mystic figuring in which the letters "x" and "y" predominated. Prodded by curiosity to investigate the meaning of these symbols, young Maury discovered that the old cobbler was a mathematics fanatic who solved algebraic problems on the fresh sheets of leather; the contagion of this old man's zeal gave birth to Maury's ambition to become a master of the science of mathematics.

ONE OF MAURY'S boyhood dreams was that he might enter the military academy at West Point, but his father's opposition to the idea boiled into rage. There was yet no naval academy, but John Minor Maury, the eldest brother, had boarded a ship at thirteen for training as a midshipman, had seen strange lands and experienced thrilling adventure. So in the year 1825, without disclosing his plan to Richard Maury, Matthew, then nineteen years old, secured an appointment as a midshipman in the United States Navy with the help of Sam Houston, famed native son of Rockbridge County, who was then a member of Congress from Tennessee.

The father grudgingly permitted the boy to go his way; and with a horse bought on credit and thirty dollars in his pocket, he set out into a strange new world, stopping in Albemarle County at the home of his cousin, Reuben Maury, with fifty cents remaining. Then, upon reaching Spotsylvania after fourteen years' absence, he met his kin, and among these was a young cousin, Ann Herndon,

daughter of Dabney Herndon of Fredericksburg. A spark was lighted that smoldered for nine years before Matthew could return to claim her as his bride.

His dwindling funds replenished by a generous traveling allowance from the Navy Department, Matthew proceeded to New York, where he boarded his first ship, the frigate *Brandywine*, which had been commissioned to carry back to France the distinguished visitor Lafayette. The *Brandywine* took sail with the cheers of America following her down the Chesapeake and a rainbow spanning the skies. But foul weather and seasickness soon banished all remembrance of the rainbow, and Lafayette and nearly all on board languished in misery for the greater part of the voyage. Throughout life he was never able to board ship without more or less violent seasickness, but it is related that he continued about his duties preserving an amiable manner even while suffering active nausea.

After depositing its famous guest, who carried the ship's flag ashore as a memento, the *Brandywine* joined the United States squadron under Commodore John Rodgers and remained at Gibraltar for the winter, during which time the young recruit gave serious attention to his duties and studies, learning Spanish and acquiring a reputation as a master of mathematics.

Matthew Maury spent the next three years at various South American ports before heading to the far Pacific, where his ship visited Tahiti, the Sandwich or Hawaiian islands, China and Manila, thence proceeding westward around the Cape of Good Hope and across the Atlantic to New York.

In the Marquesas Islands, Matthew encountered an old native chief who had befriended his elder brother, John Minor Maury, during two years when the young officer was exiled there. Left with six other Americans by a merchant ship which, because of the British blockade, never returned, all but John Maury and one other were killed in the course of a native war. Finally the U.S. *Essex*, under David Porter, came to the rescue of the two survivors. Matthew Maury, by dint of concentrated study during the two or three weeks he spent in



The *Brandywine*, 1831.

the islands, learned to converse with the old chief in the native tongue; and the chief, much impressed, offered Matthew a native bride and a royal throne, the first of many unusual honors, and one he respectfully declined.

In the years from 1825 to 1839, Maury was assiduous in his study and training. During the year 1830–31, while on shore duty, he completed his examination for the rank of passed midshipman [*i.e.*, eligibility for promotion to lieutenant] — but without distinction, ranking twenty-seventh in a class of forty. Then followed a cruise of three years in and around South America.

At last, in 1834 he returned to Virginia and married Ann Hull Herndon. At their new home in Fredericksburg he completed writing a book on navigation, which he had begun at sea. The first work on nautical science by a naval officer of the United States, it was adopted as a text in the Navy and used at the naval academy when the latter was established in 1845.

Maury was promoted to lieutenant in 1836, and was often called upon to deliver lectures on various scientific subjects. He was made superintendent of the United States gold mine near Fredericksburg, and worked in astronomy in Philadelphia and elsewhere. In 1838, he contributed a series of articles to the *Richmond Whig* under the pen name of Harry Bluff, criticizing certain methods and practices of the Navy and pointing out the remedies for these in a keen, witty, and yet forthright manner. He advocated improved means of training young men for

the Navy, and urged the establishment of a naval academy. Seven years later the United States Naval Academy was founded at Annapolis.

Late in 1839, Maury experienced his second major physical mishap — an accident that resulted in his removal from active ship duty and led to the opportunity that brought him far greater achievement and fame than he might ever have attained as a ship's officer. On a rainy night in Ohio, Maury was returning on stagecoach from a visit to his aged father. The coach overturned and Maury, who had relinquished his seat to a lady and was riding on the box with the driver, had his right knee dislocated and his thigh broken. At Somerset in Ohio he lay through three months of painful recovery; and on his return home, crippled and weakened, he asked for work that he might do “on crutches” — but the Navy Department had none for him.

Idleness, enforced or otherwise, was foreign to the nature of this dynamic spirit and, deprived of active effort, he again resorted to the facile pen that had aroused interest in and respect for his views. Thus came the memorable series of articles under the title “Scraps From The Lucky Bag,” which appeared in the *Southern Literary Messenger* of Richmond in 1840 and 1841.¹ For a time he wrote under the former pen name of Harry Bluff, but the power of his writing compelled disclosure of the author's identity. The burden of these articles was the need for reorganization of the navy on a larger scale, adequate to protect our commerce and enforce our laws.

These writings commanded such attention and inspired such public interest that many urged that he be named secretary of the Navy, an appointment nearly made by President Tyler. Meanwhile, Maury again applied for active naval service, seeking to become a flag lieutenant in the Pacific Squadron under Commodore Catesby Jones. This request to return to active duty was not granted, but in 1842 Secretary Abel P. Upshur named him superintendent of the Depot of Charts and



Lieutenant Maury, 1853.
Library of Congress photograph.

Instruments, for which modest buildings and an astronomy observatory were being erected in Washington.

Later called the United States Naval Observatory and Hydrographic Office, this then-relatively inactive post became instrumental to the great work that lay ahead.

TEN YEARS EARLIER Maury had sailed for the South Pacific in the sloop-of-war *Falmouth* and was assigned to be the vessel's sailing master. He had been disappointed and chagrined to find no available information as to the winds, currents or sailing routes. Precious weeks were lost in sailing from an almost universal lack of information as to proper courses and advantageous winds and currents. Of necessity, he began collecting data from every possible source, meager as those sources were. From this need his mind turned more and more to the geography of the sea and air.

Maury became convinced that there should be paths in the sea as well as on land, and that these paths should be charted so as to be readily followed. He asserted that the oceans had rivers as did the land: warm currents following a constant course and bounded by banks of cold water, as clearly defined as any stream on land. He advocated Great Circle sailing as a means of saving time, and prescribed separate paths for vessels plying in opposite directions as a means of avoiding collisions at sea.²

Covered with dust in the Depot of Charts were thousands of old log books of naval voyages, and Maury

avidly digested and collated the data these resources contained. By the end of his first year in office he had gathered sufficient information to deliver an address on the Gulf Stream and its causes before a distinguished audience; but the mass of information at hand was far from enough to satisfy his tireless mind. He prepared a blank chart on which he wished the commanding officer of every ship to lay out and tabulate the course, wind and current direction and force, and other phenomena for every day of every voyage. With this information he proposed “nothing less than to blaze a way through the winds of the sea by which the navigator may find the best paths at all seasons.” He expressed shame in the fact that American ships used British charts to navigate the Chesapeake Bay, and lamented that without the almanacs of other nations, American vessels could not grope their way to sea from an American port with any certainty.

Despite indifference in some quarters, there arose a widespread demand for Maury's charts. By 1851 more than a thousand ships all over the world were sending him regular observations to be carefully tabulated and compiled.

The value of Maury's charted paths of the sea and air was shown vividly when clipper ships began to race to California at the time of the Gold Rush in 1850 and 1851. Theretofore the average sailing time from New York to San Francisco had been 180 days, but with the aid of Maury's charts the time was reduced to an average of 133 days, with some clippers covering the voyage in 110 days. In 1851 the *Flying Cloud* made the trip in the record time of 89 days, 21 hours.

Another amazing instance took place in 1853 when a troop ship, the *San Francisco*, was disabled in the Gulf Stream, about 300 miles from Sandy Hook [New Jersey]. Her original position was reported by an incoming ship which had been unable to offer assistance, and Maury was called upon to calculate her probable later position for the purpose of effecting a rescue. Seated in his office, with the aid of recent observations and charts, he placed a mark on the map and said, “She will be found here.” Following his direction the speeding revenue cutters

went straight to the spot, and there the wounded vessel was found.

Although the British Admiralty prescribed a specific route from England to Australia, Maury charted a new path that lessened the time of passage by one-third from America and by one-fifth from England. The saving to the commerce of each nation was reliably estimated at \$10,000,000 annually.

At the time he was performing this valuable work in navigation his interest in astronomy was not neglected. He took delight in the installation of equipment for this purpose at the Naval Observatory, and in 1845 commenced the ambitious task of cataloging the stars, with the avowed purpose of covering the entire range of visible space. This was a work of the highest importance, but one so colossal that eventually it had to be relinquished, but not until observations of more than 100,000 stars had been recorded.

In 1853 he was designated to represent his country at the Brussels Conference two years hence. The conference was a complete success, and the name of Maury was becoming known to seamen and scientists throughout the civilized world.

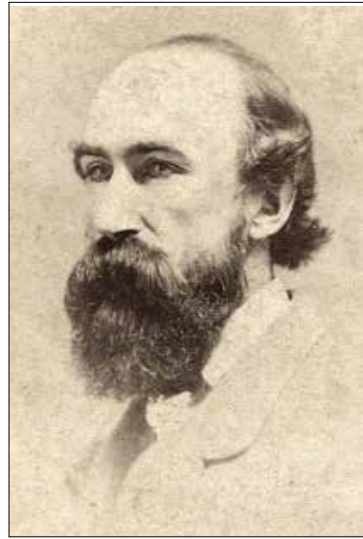
Honors from all parts of the world began to be heaped upon the navigator, who remained a mere lieutenant in the service of his own country, which voiced dim appreciation for his monumental achievements.

His researches and compilations for wind and current data led naturally into many aspects of oceanography. In his various editions of his *Sailing Directions* (1855), which remains a standard text, are found such articles as “Influence of the Gulf Stream on the Trade of Charleston,” “On the Saltness of the Sea,” “The General Circulation of the Atmosphere,” “Red Fog and Sea Dust,” “Equatorial Cloud Rings,” “Deep Sea Soundings” and a host of other subjects which attest to the wide range of his interest and his ceaseless probing into the mysteries of the sea and air.

He had long desired to explore the bottom of the ocean, its mountains, valleys and plains. In the period 1849–53 he had obtained a certain degree of

1 Maury wrote that a lucky bag was a staple of every man-of-war ship and contained “a little of every thing, and something belonging to every body.”

2 Great Circle navigation is the practice of moving a vessel along the shortest distance between two points on a globe. The vessel's course may be elliptical or circular.



John Mercer Brooke, whose groundwork was key to the laying of the Atlantic Cable.

cooperation on the part of naval officers in taking deep sea soundings, and in 1852 was able to prepare a diagram of the floor of the Atlantic Ocean between Europe and America. This revealed the bottom between Newfoundland and Ireland as fairly smooth and regular, with an average depth of about two miles, and he designated this area “The Telegraphic Plateau.”

Samuel Morse and others believed that a long-distance wire for messages could be laid under water, but it remained for the indefatigable Maury to find the place where this could successfully be done. Up to that time every deep sea sounding involved the loss of line and sinker and thus doubt as to whether the bottom had been reached. No one knew what manner of ooze composed the floor of the sea. While these questions occupied Maury’s mind, a simple but effective contrivance for bringing up specimens with each sounding was devised by Lieutenant John Mercer Brooke, who was later to be associated with Maury at the Virginia Military Institute, and whose descendants live in Lexington today. These specimens were found to consist not of mud, sand or gravel, but almost entirely of tiny unworn and unbroken sea shells. Maury reasoned that if the deep sea bottom offered no violence to these delicate organisms, it would not prove hostile to a stout wire or cable, and upon the basis of his findings arose the epic achievement of Cyrus W. Field in laying and completing, after heartbreaking failures and enormous perseverance, the Atlantic Cable on Maury’s “Telegraphic Plateau.” Field is supposed to have paid tribute to the work of Maury in his oft-quoted remark, “Maury furnished the brains, England gave the money, and I did the work.”

Let us not assume, however, that all of Maury’s days were passed in happy usefulness and in graciously accepting high tribute for his accomplishments. His forcefulness in all fields of his interest and endeavor made him an ardent advocate of whatever views he entertained, and he had managed in thirty years of service to accumulate the ill will, if not actual enmity, of a considerable group of his fellow officers in the Navy. Thus, while honors were being heaped upon his name by the rulers and scientists of Europe, his own brothers in arms set about to humiliate him at home.

Under the guise of an Act of Congress “to promote the efficiency of the Navy,” passed February 28, 1855, a reviewing board was established by the president to examine the personnel of the Navy and to report those “incapable of performing promptly and efficiently all their duty both ashore and afloat.” Those who were found delinquent by this early so-called plucking board were to be dropped from active rolls or placed on a reserve list with greatly decreased pay. In September 1855, without warning or intimation, Maury received an abrupt notice that he had been placed on the reserve list with leave-of-absence pay, a reduction from \$3,500 to \$1,000 a year. Yet he was not relieved of any present duty and was specifically directed to remain at his post.

The orders of the board affected about 200 officers, but the case of Maury seemed to arouse the greatest degree of public anger. He was not only incensed by the insult directed at him and other loyal officers, but was offended that the entire proceeding was held in secrecy, with no information revealed as to his shortcomings and with no opportunity to be heard in his own behalf.



Cyrus W. Field, financier, who supported Maury’s work in laying the Atlantic Cable.

Ranking under this injustice, he made a determined effort to have the order affecting him overruled, and appealed to his friends as well as to the authorities for assistance. He ascribed the act to jealousy, with his lameness as a pretext for the indignity, and succeeded in demonstrating that he was as fit physically as many of the officers on the plucking board; moreover, he maintained that General Winfield Scott’s crippled arm did not disbar him from the highest rank in the United States Army. To his searching questions he received from his naval superiors only evasive and unsatisfactory replies.

Eventually, however, the American press began warmly to espouse Maury’s cause. The legislatures of Virginia and six other eastern states adopted resolutions advocating the restoration of Maury to his rank; and finally, on January 27, 1858, President Buchanan not only returned his name to the active list but issued his commission as commander, retroactive to September 14, 1855, the date of his undeserved retirement. The man of science was now completely vindicated.

SOON THEREAFTER came the shadow of war, and in 1861 he resigned his United States commission and offered his services to Governor Letcher of Virginia, by whom he was warmly received and who granted him a commission in the Navy of Virginia, later to be merged with the Confederate States Navy. It is noteworthy that the title commodore, by which he is most frequently designated, was a rank held by him only in the Navy of Virginia.

[Maury was held in disfavor by three influential Southern politicians, however: Jefferson Davis of Mississippi, Stephen R. Mallory of Florida, and Judah P. Benjamin of Louisiana, all of whom had opposed Maury’s reinstatement when they were U.S. senators. As a result, Maury was effectively sidelined by the Confederacy.]

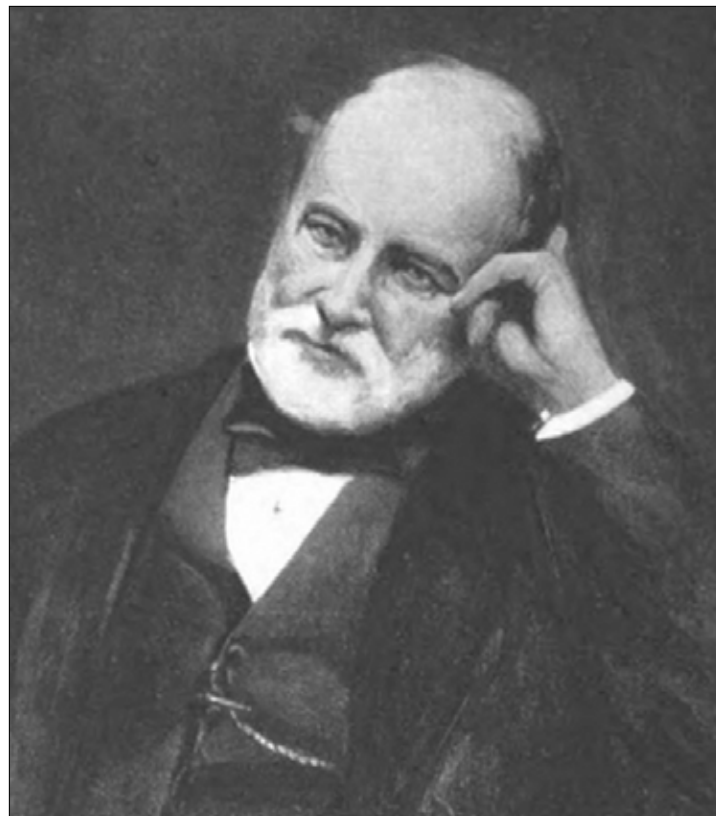
Declining to be bottled up, Maury contributed a series of articles to the *Richmond Enquirer* under the pseudonym Ben Bow, in the manner of his “Scraps From The Lucky Bag,” turning the force of his sharp pen upon the ineptitude of Confederate naval policy.

In this early period of the American Civil War there came to Maury an invitation from the Grand Duke Constantine of Imperial Russia, offering to him a home in Russia with unlimited prestige and material resources at his independent command; and this was followed by a like offer from the Emperor Napoleon III of France. Although thwarted in his best endeavors to serve Virginia and the South, Maury declined these offers without hesitation.

In 1862, Maury was ordered to sail for England to perform “special service” in southern Europe on behalf of the Confederacy. During his stay in England and France, he engaged in a matter of international intrigue so closely guarded that his part in this has never been fully disclosed, although it is believed to have been considerable. This was the ill-fated plot that installed Archduke Maximilian of Austria on an imperial throne in Mexico [1864–67], and we know that Maury corresponded with Maximilian and that one of his proposals called for a joint effort of the invading French and the Confederate army to restore California to Mexico and to maintain a close military alliance against the United States. This ambitious scheme fell apart when the French emperor grew cold toward the Confederacy’s dwindling fortunes and advised Maximilian to have no further traffic with its representatives.

Near the close of the war Maury had determined to return home, but was deterred by the news of Lee’s surrender and by warnings that he might not expect the same amnesty accorded Lee and others who laid down their arms. He was, for a time, bewildered and worried by the apparent collapse of his personal and political fortunes, and worried greatly as to the welfare of his family. Maury himself had nothing whatever left of his moderate accumulations.

Convinced of the unwisdom of returning to his beloved Virginia, he sought contact with his former patron and friend, Maximilian, ensconced as emperor of Mexico, and found a welcome at the newly established court. Maury was joined by his son Richard. His assignment was to establish an immigration service that would



Matthew Maury, later in life.

attract desirable colonists from Virginia and elsewhere in the South; but the attempt was unsuccessful, and Maury accomplished but little in Mexico save the introduction of the cinchona tree, from which quinine is derived.

He left Mexico before the collapse of Maximilian's fortunes, and arrived in England in March 1866. Here he was united with his family, and for more than two years devoted a large part of his time to research and lectures on the electric mine [an underwater explosive device triggered by electric impulse] and in preparing the series of geographic text books familiar to every American school child. In England he began to recover some small measure of financial security, and was overwhelmed with decorations, honors and awards from the nations of Europe. Even the British abandoned their customary reserve and raised a substantial sum as a token of appreciation of their guest.

WHEN THE BITTERNESS OF THE WAR began to subside, positions at the University of Virginia, Sewanee and the Virginia Military In-

stitute were suggested to Maury, and happily he chose the last-named. He entered into his duties in the chair of meteorology on September 10, 1868. His installation became the occasion of a somewhat imposing ceremony, as he appeared wearing all of his foreign decorations. One of his daughters wrote: "The cadets were mightily pleased and cheered till their little throats were dry."

Not until June 10, 1869, was his residence at the institute available for the family, and he was greatly pleased with his surroundings. "Here," he wrote, "people are very kind, the country is beautiful, the views and the scenery lovely, and both climate and air such that exercise is enjoyment."

His duties did not embrace the regular holding of classes, but he lectured often, continued work on his geographical textbooks, and undertook as his principal task *The Physical Survey of Virginia*, a stupendous work designed to catalog the resources of the state. He proposed a system of universal telegraphic meteorological observations and crop reports, a scheme he did not live to see developed, but which now owes much to the groundwork he performed as well as to his persistent advocacy.

In the year 1870 he declined the presidency of St. John's College of Annapolis, and in 1871 first accepted and then declined the presidency of the University of Alabama.

In 1872 he presented his resignation from his position at the Virginia Military Institute in the expectation



Maury family residence on the Parade Ground at Virginia Military Institute.

of accepting the presidency of the University of Tennessee, but was prevailed upon to withdraw this resignation — not, however, before he had refused to consider proposals in connection with the agricultural college at Blacksburg and a polytechnic college to be founded at New Orleans.

THIS FULL LIFE must end sometime; and in the fall of 1872 he returned from a visit to St. Louis, an ill man at age sixty-six. He told his wife, "My dear, I am come home to die." Through a lingering illness of four painful months he was sustained by his Christian faith and fortitude. The inevitable came about noon on Saturday, February 1, 1873. On the evening before, the family gathered about him and sang hymns, including his favorite, which he called "Pass Over Jordan" [actually, "When We Pass Over Jordan"]. Toward the end, others of the family withdrew and left him alone with his sons. He asked Richard, "Are my feet growing cold? Do I drag my anchors? Upon receiving an affirmative reply he said simply, "All's well," his last words.

Not long before his death, his wife had asked him about burial in Richmond, and he had replied: "Very well, my dear; then let my body remain here until the spring, and when you take me through the Goshen Pass, you must pluck the rhododendron and the mountain ivy and lay them upon me." It was not in the spring but in the following autumn that the remains of the Pathfinder of the Seas moved out from Lexington through the wild beauty of his beloved mountain pass on the last voyage of discovery.

In contemplating the career of this truly remarkable man, the wealth of achievement intervenes to obscure the very human figure behind it all. There are few anecdotes in most accounts of his life, but enough are found in intimate family sketches to reveal him as a devoted husband and father, one who did not especially seek friends and acquaintances but who unfailingly received these with grave charm, and a man to whom keen wit was not altogether a stranger. Unless aroused by injustice, his manner was serene and affable. The life

and character of Maury were subjected to the closest scrutiny even by his enemies, who could find no crevice in his armor. He walked with simple dignity in the company of the great, who vied one with another to do him honor. He was unswerving in his loyalty to his country and state, even through their reluctance to extend to him the recognition accorded by others. He charted his own course as he charted that of the sea, and no ill wind could blow him from the paths of duty and honor.

The simple monument erected to his memory in Goshen Pass quotes from a longer tribute by his friend, Admiral Raphael Semmes:

"Thou hast revealed to us the secrets of the depths of the ocean, traced its currents, discoursed to us of its storms and its calms, and taught us which of its roads to travel and which to avoid. Every mariner, for countless ages to come, as he takes down his charts to shape his course across the seas, will think of thee! . . . In short, there is no phenomenon of the sea that will not recall to him thine image. This is the living monument which thou hast constructed for thyself."

