

NATIONAL ACADEMY OF SCIENCES
BIOGRAPHICAL MEMOIRS
PART OF VOLUME VIII

BIOGRAPHICAL MEMOIR

OF

JOHN HUNTINGTON CRANE COFFIN

1815-1890

BY

GEORGE C. COMSTOCK

PRESENTED TO THE ACADEMY AT THE ANNUAL MEETING, 1913

CITY OF WASHINGTON
PUBLISHED BY THE NATIONAL ACADEMY OF SCIENCES
December, 1913



J.W.C. Goffine

JOHN HUNTINGTON CRANE COFFIN.

"Man goeth to his long home and the place that hath known him shall know him no more." With amendment to the present tense, the words of the Hebrew prophet may fairly be applied to our deceased colleague, Prof. John Huntington Crane Coffin, U. S. N., who a generation ago played a conspicuous part in scientific and official circles, but whose biographical memoir is now to be prepared by one who never saw him, from scanty material furnished by the fading recollections of surviving friends, most of whom in substance join in the words of one of their number, "The more earnestly I have tried to recall incidents or definite data connected with Professor Coffin's life * * * the more I am astonished at my small stock of knowledge in that direction." It is indeed matter of tradition that Coffin prepared somewhat elaborate autobiographical material that, after his death, was intrusted to a friend for use; but the friend has long since passed away and the material now appears to be hopelessly lost.

From independent sources, however, we learn that the Coffins were a seafaring folk long established in Nantucket and traditionally derived from a distinguished English ancestry whose broken links may perhaps be traced back as far as the Wars of the Roses.

An offshoot of this family betook himself in the seventeenth century to the woods of the north New England coast, now a part of the State of Maine, where his descendants served their time and place as professional men, practitioners of civic righteousness, as well as of law and medicine, until in the fulness of time one of these—Nathanael Coffin—took unto himself as a bride Mary Porter, a niece of the Hon. Rufus King, sometime American Minister to Great Britain, and at Wiscasset, Maine, there was born to them, on September 14, 1815, the subject of this memoir—John Coffin.

The earliest details of his life that are now accessible relate to his student days in Bowdoin College, from which he was graduated at the age of nineteen. A classmate, and subsequent

Bowdoin professor, describes him from memory as "of a singularly sweet disposition—affable, gentle, and, as one might say, of fine grain. There was a rare union in him of goodness and genius, to a degree seldom witnessed, accompanied with a modesty that sometimes approaches in appearance to reserve, and yet he was always social and cheerful, much loved by his classmates. We were of the same age, only a month's difference, but especially in the department of mathematics he was years the older of the two. I always looked at him with admiration and pride, feeling that in mathematics he and Hamlin could not be equaled." This reserved geniality of youth was retained by the mature man who is characterized by an official colleague of his later days as "unusually shy and sensitive, not fond of general society—characteristics which sometimes led him to appear almost brusque when it became his duty to speak outside of his circle of intimate associates. He was a pronounced conservative and at times was seriously shocked at the temerity and radicalism of some of the younger and more progressive members of the astronomical contingent in Washington. At the same time he was kindly disposed toward his younger associates and any adverse criticism was generally finished with a smile."

One may fairly say that these two quotations determine the man's inner character and its development as two fixed points determine a right line. The New England lad, of good family and good parts, but born into a narrow environment, developed through a life of untiring industry into a gentleman of the old school, precise and inflexible, a pillar of the church, a conservator of ancient ideals, a worthy member of that remarkable group of students who first commanded esteem for American science.

Immediately following his graduation from Bowdoin the lad sought his remoter family heritage—the sea—through a prolonged sailing trip with his maternal uncle, Capt. King Porter, with whom he commenced those studies of navigation and practical seamanship that thirty years later culminated in his text-book of "Navigation and Nautical Astronomy," long in use at the U. S. Naval Academy as the standard manual of those subjects.

A more immediate consequence of this experience at sea was Coffin's appointment in 1839 as an instructor of midshipmen in the U. S. Navy—a function pursued on shipboard during a period of some five years and frequently supplemented by his discharging the duties of navigating officer and taking part in surveys of the coast. In 1845 the young professor of mathematics was detailed for duty at the National Observatory, Washington, where he reported in October to Lieutenant Maury, then charged with the task of making an astronomical observatory out of material and along lines that are pictur-esque described in the earlier volumes of the Washington Observations. It has been the writer's privilege to consult the penciled memoranda entered by Coffin in the margin of his private copy of these volumes and to follow with interest the commentary that they furnish upon the official science of that day. Ranging from frank admission of his own blunders, through mild sarcasm of his surroundings, to sober impeachment of the justice and trustworthiness of his official superiors, they cast a flood of light upon the opinion expressed by a contemporary, "American astronomers should never forget that to him (Coffin) more than any other man is due the credit * * * of saving the Government observatory from destructive ignorance. He laid the foundation for good work, but could not control the superstructure." Coffin was assigned to duty upon the mural circle, an instrument now discredited, but at that time enjoying an excellent repute among astronomers, and his study of this instrument—its capacities, the errors to which it was subject, and the result to be derived with it, as published in the first five volumes of the Washington Observations—constitutes probably his most finished scientific work—a model of painstaking skill and acumen. The excellence of this work is shown by a comparison of its probable errors with those of similar contemporary observations at the Pulkowa Observatory, then esteemed as the unrivaled model of scientific thoroughness and precision. There is little to choose between the American and Russian results. Coffin's official relation to this work, however, was that of a subordinate executing the orders of an omniscient superior, who assumed full responsibility and credit for everything done, even precluding the young professor

from so much initiative as is implied in altering the adjustments of his instrument. This restriction was subsequently withdrawn perhaps in recognition of the young man's quality, but it is sufficiently evident that during his entire connection with the Observatory Coffin chafed under this official impediment cast about his scientific work. In justice to his environment, however, it must be said that its irksomeness was no peculiar quality due solely to naval administration. In some measure even the civilian science of that day put into the relation between senior and junior a feudal character of lord and vassal that would hardly be tolerated now.

The pathetic close of Coffin's career at the Observatory is indicated by a brief note in the volume for 1849, under the date November 7: "Compelled by disease of eyes to desist from observing." He never resumed the work, but was later (1855) transferred to the Naval Academy as head of the Department of Mathematics, and upon Chaivenet's retirement, in 1860, he became also head of the Department of Navigation and Astronomy. Following the outbreak of the Civil War the Naval Academy was prudently removed from Annapolis to Newport, R. I. Its staff of naval officers was largely drawn upon for active service, and Coffin, becoming in effect head of all departments of instruction, bore the brunt of Academy affairs in the stirring years that followed. His modesty stood as the chief barrier to the high credit that should have come to him for his distinguished service, which appears to have received scant official recognition, although it may perchance have been a part of the ground upon which Bowdoin College in 1884 conferred upon him the honorary degree of LL. D. At the close of the war came Coffin's transfer from the Naval Academy to the Nautical Almanac, of which he was made superintendent in 1865 and whose seat he soon shifted from Cambridge to Washington. Although the volume of the American Ephemeris for 1868 bears his name as Superintendent, it was chiefly prepared under his predecessor—Winlock—and Coffin's influence is to be sought in the volumes from 1869 to 1880, inclusive. This influence, although appreciable, cannot be called great. New positions of the standard stars were introduced on more than one occasion and "changes of detail have from time to

JOHN HUNTINGTON CRANE COFFIN—COMSTOCK

time been introduced into the work, but the general plan has remained unaltered." Indeed, the composition of an almanac lends no great scope for originality either of substance or method. By operation of law, Coffin was retired from duty as a naval officer in 1877, and, yielding the superintendency of the Nautical Almanac to Simon Newcomb, he passed his remaining years in retirement, departing this life January 8, 1890.

Much of Coffin's life centers about the Church of the Epiphany at Washington, to whose establishment he was a liberal contributor, of which he was long a vestryman, and within whose walls, in the spring of 1845, he was married to Louisa Harrison, a native of Maryland. Two sons and three daughters were the offspring of this marriage, of whom but one, Mrs. Helen Olcott Paine, now survives (October, 1912).

The abiding memorial of Coffin's scientific career is to be found not in his writings, which are few, but in the three Government bureaus that he served—the Naval Academy, the National Observatory, and the American Ephemeris and Nautical Almanac. Upon the beginning of these several institutions his ideals and his imprint were set, long to remain an influence among his successors, even though they know him not.