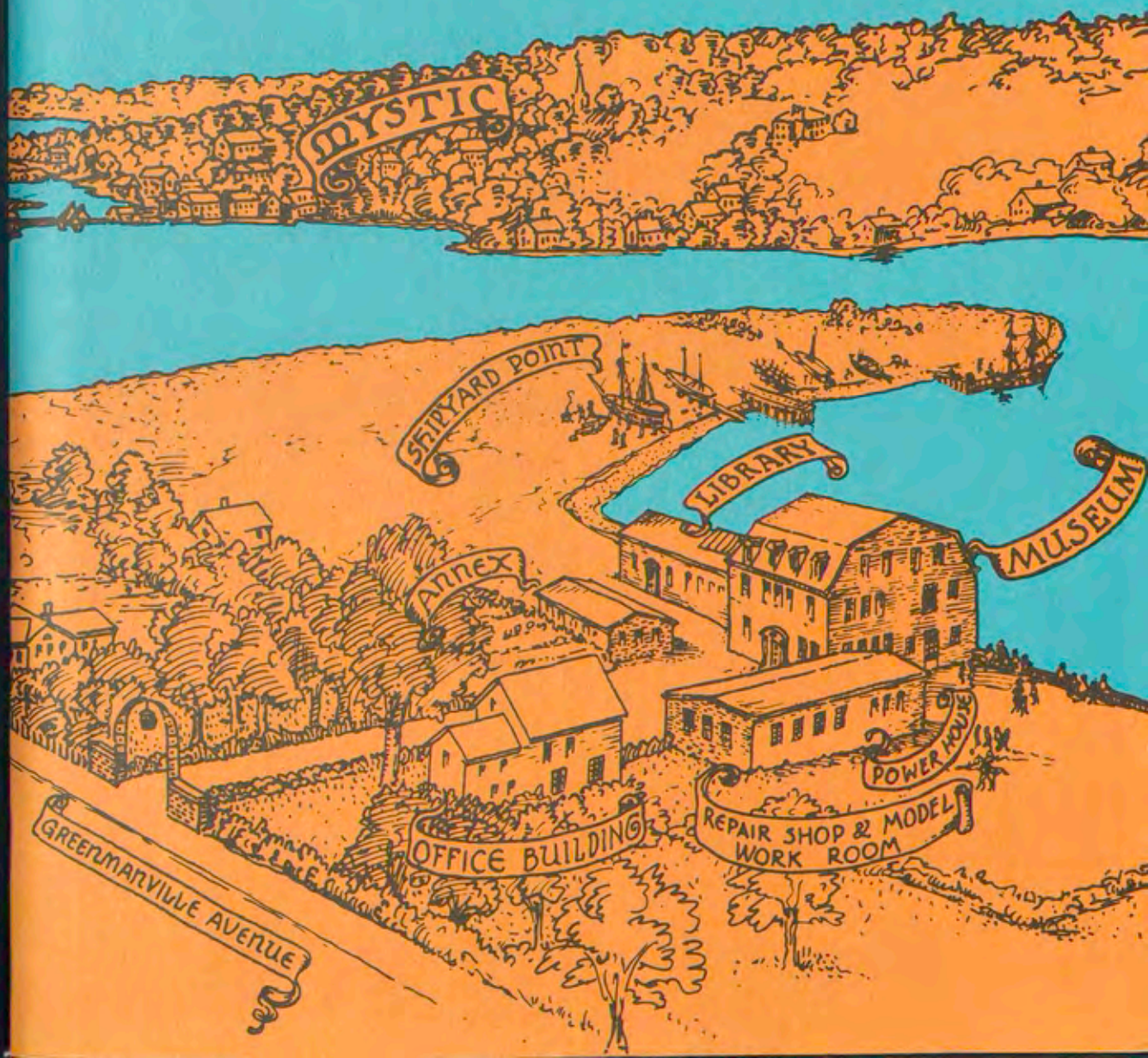
Fall 1979

THE LOG OF MYSTIC SEAPORT



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FRONT COVER: *This is Mystic Seaport Museum as visualized by its founders in 1931. The Museum now spreads across Shipyard Point, far beyond their expectations.*

FACING PAGE: *James McBey (1883-1958) depicted the site of Mystic Seaport, as it appeared between 1890 and 1930.*

BACK COVER: *With the Arrival of the* Charles W. Morgan, *the Museum's focus began to move outdoors, from the Stillman Building toward Shipyard Point, site of the George Greenman & Co. shipyard, seen here about 1944.*

Volume 31, Number 3 / Fall 1979

THE LOG OF MYSTIC SEAPORT

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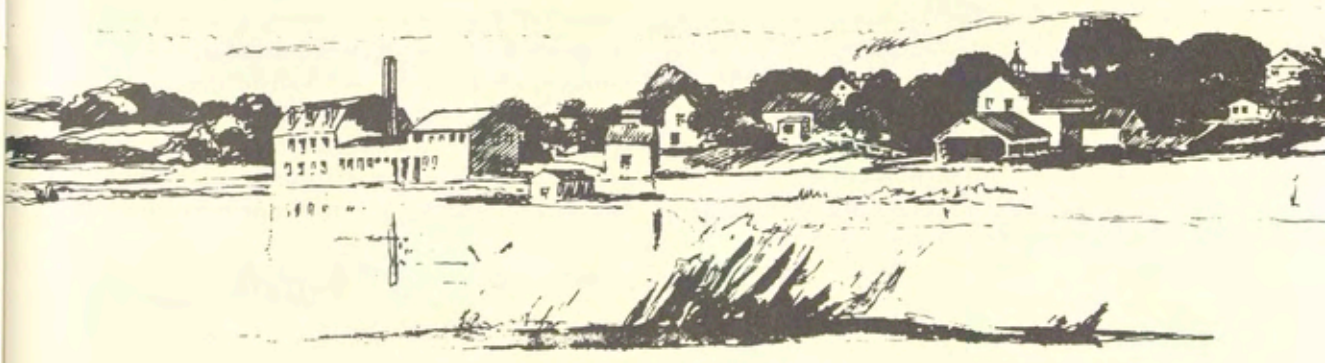
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SIGHTINGS



Fifty years ago, in the summer of 1929, three residents of Mystic met to discuss the sad fact that much evidence of New England's rich maritime past was being lost or destroyed. These discussions were partially an outgrowth of frustrations Carl C. Cutler encountered as he gathered material for his writings. Sharing his concerns with Edward E. Bradley and Dr. Charles K. Stillman, these determined men agreed to develop an organization that would help remedy the situation. On Christmas day, 1929, they met to sign the papers incorporating The Marine Historical Association, and in doing so brought Mystic Seaport Museum into existence.

Many individuals and events have shaped the Seaport and transformed it from a small historical society in the depressed years of the early thirties into one of the most diverse and dynamic maritime preservation institutions in the world. As we begin our fiftieth year a glance at our Museum's past seems appropriate. Since many of our members joined only in the last decade they are unacquainted with earlier worthwhile publications. Therefore the next four issues of *The Log* will contain interesting articles, carefully selected from the Museum's long tradition of publishing; a pictorial section illustrating the museum's evolution; plus a chronology listing major events in the Seaport's growth. In subsequent issues, the book review section will emphasize maritime classics from the past which are now available in reprint or new editions.

In this issue, we initiate our fiftieth anniversary series with an article from each of the Museum's founders. These pieces clearly demonstrate the intense interest in maritime subjects which brought these men together half a century ago. Carl Cutler, maritime scholar and catalyst of the group, prepared his piece on "Important Types of Merchant Sailing Craft" as the first publication of the infant Marine Historical Association. Two years later, Edward Bradley's story of his service aboard the clipper ship *Mary Whitridge* was published. In 1933, Dr. Stillman attempted to awaken the interest of the Association in the significance of shipbuilder's half-hull models. This article was of singular importance since one of the tragedies observed by the founders was the destruction of hundreds of half models burned as firewood! Through these articles we hope that today's 17,000 members will be able to see more clearly the interests and intentions of our founders.

Both Dr. Stillman and Edward Bradley died before the Museum had survived its first ten years, but Carl Cutler carried on active leadership in the Museum until 1952. When Mr. Cutler died in 1966 the direct tie to the Museum's founding was severed. Only three individuals from the 1930 era remain–Mrs. W. Ellery Allyn, who joined in May, 1930, Mr. Jesse Stinson, the Association's first Assistant Treasurer, and Mr. S. Jerome Hoxie–who represent that early group with the vision to support the cause of maritime preservation in Mystic. Mr. Hoxie's talent as an illustrator is well demonstrated in the sketches for the Cutler article.

This museum has weathered difficult times and achieved considerable success since its tenuous birth and uncertain growth through the years of the Great Depression. It is hoped that these retrospective issues of *The Log* will give us all an appreciation for what has been accomplished. With this perspective, we will be strengthened as we take our Museum into its second fifty years of preserving our maritime heritage.

J. Revell Carr

Important Types of Merchant Sailing Craft

CARL C. CUTLER

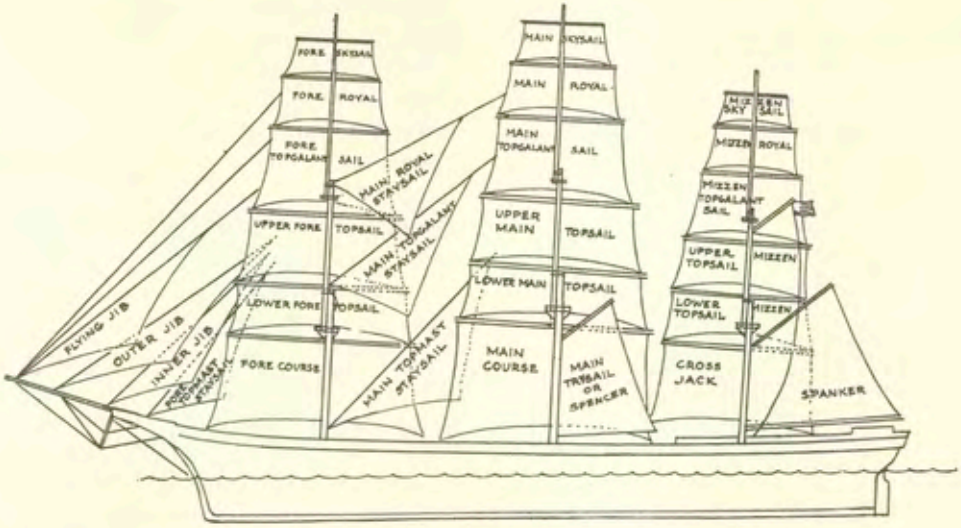
With the passing of the sailing ship many commonplace, but historically important, facts are becoming dim and confused. The past fifty years, especially, have served to bury almost completely an immense body of slowly and painfully accumulated maritime knowledge. Even the very names, which once were household words, are becoming lost.

Carl C. Cutler (1878-1966), a lawyer, sailor, and ardent student of the sea, is best known for his books *Greyhounds of the Sea* (1930), still the definitive work on American clipper ships, and *Queens of the Western Ocean* (1961), the story of American sailing packet lines. His research for *Greyhounds of the Sea* convinced him of the need to preserve maritime artifacts and stirred him to interest Stillman and Bradley in founding the Marine Historical Association, now Mystic Seaport Museum, in 1929.

Illustrations by S. Jerome Hoxie.

This is not strange when one considers the situation. Down to 1840, roughly speaking, nautical conditions were relatively static and had remained so throughout historic times. Sailors who manned Phoenician fleets would have manifested little awkwardness on the deck of a merchantman of the early nineteenth century, while the packet master of 1840 A. D. would have experienced no difficulty whatever in handling, rigging, and repairing ships of 1840 B. C.

Some progress had been made, it is true. Labor saving devices and slight improvements in rig and design had appeared from time to time as man power became more expensive and longer voyages became the rule, or as accident or the exigencies of jury rig led to new discoveries. Nevertheless, the



The Sails of a ship–fully square rigged on all three masts.



Fig. 1. Sloop.



Fig. 2. The common type of fore-and-aft sloop.

rate of change was hardly noticeable until after 1700, and even then it was very slow. In general the improvement in ships synchronized with and paralleled the advance of the scientific age.

By 1800, all important types and rigs of sailing vessels had come into existence, and these persisted with slight modification in detail and none at all in principle to the very end of the days of sail. To some, these rigs and the terminology of the period are still familiar; to others they are all but lost. Since it is impossible to discuss the influence and history of the old merchant marine without using such terms and phrases, this article is designed to refresh our recollection concerning several of these age-old matters.

Here accordingly, in brief compass and simple outline, are described and illustrated the more important merchant types used in American waters prior to and during the first half of the last century. In carrying out our plan, many of the finer distinctions of rig–some of which are of quite modern origin–are omitted. Thousands of reasonably well-informed seamen, to cite an instance, lived their lives on salt water without once drawing a line between the brigantine and the hermaphrodite brig. Local usage also developed a wide, but for us, unimportant, variation in the meaning of certain terms. The word "smack," for instance, in some places meant a definite type of small fishing vessel, while in others it was a general name for a variety of sailing craft. Such matters are of importance now only to the antiquarian, and we can afford to pass them with scant attention.

The simplest, as well as the most ancient type of merchant rig, was the single-masted craft. In American waters this usually took the form of the sloop rig–paralleled in British waters by the cutter, which differed from it only slightly. The sloop held an important place in American and colonial commerce. Not only was it extremely useful in the coasting trade but, prior to 1840, it was frequently sent on long foreign voyages.

Three common types of sloop are to be noted. The simplest was supplied merely with a fore-and-aft mainsail and one or two jibs on a pole mast and bowsprit (Fig. 1). This was the immediate ancestor of the present "knockabout" rig. (Parenthetically, it should be stated, perhaps, that the term "fore-and-aft" was formerly used almost universally to distinguish the present typical schooner rig, for example, from the "square rig" where the sails were set on yards crossing the masts.) Next, in order, came what may be regarded as the typical sloop rig. It added a separate topmast and sometimes a jibboom to the lower mast and bowsprit (Fig. 2). On these spars were spread a triangular gaff topsail and jib topsail, supplementing the canvas shown in figure one. The third variety set square sails on the topmast, instead of a gaff topsail (Fig. 3). These sails usually included a square topsail and topgallant sail while, in running before the wind, a huge square

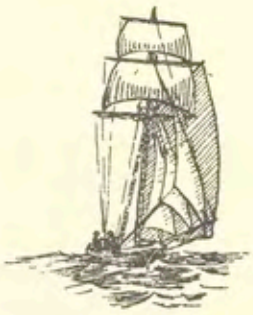


Fig. 3. Square topsail sloop–showing also the less common square topgallant sail.

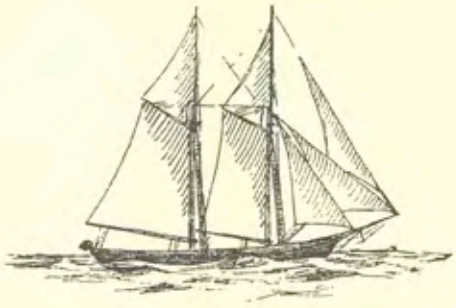


Fig. 5. The common type of fore-and-aft schooner.

lower sail or "course" was frequently set. This rig was much used in the eighteenth and early nineteenth centuries where speed was important, but it practically disappeared from American waters after 1870.

The schooner is said to have originated in Massachusetts in 1713. The statement, however, appears to rest on tradition rather than official record. Perhaps the characteristics of the schooner rig may be most readily grasped by visualizing any one of the above types of sloop with the addition of one or more masts carrying similar sails. In other words, a schooner might be a simple pole-masted affair with jib, foresail and mainsail (Fig. 4). It might carry one or two topmasts or more, with gaff topsails and jibs to taste (Fig 5), or it might have square topsails on the fore and main topmasts (called a "double"or "two-topsail schooner") or on the fore only (called a "fore topsail schooner") (Fig. 6). The number of masts might be increased to three or more.

Not so many years ago, it was not uncommon to see on the Pacific a three-masted craft which carried square topsails and topgallant sails, and occasionally royals, on the fore and main masts (Fig. 7). In nautical euphuism such vessels were known as "Jackass barks," but it would not be wholly incorrect to describe them as three-masted topsail schooners. During the closing years of the nineteenth century, mast after mast was added to the fore-and-aft

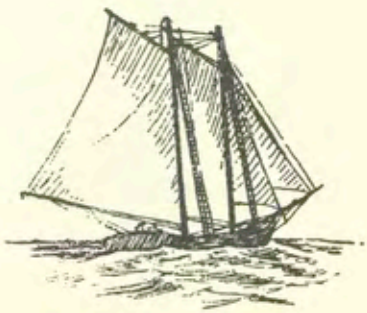


Fig. 4. Pole-masted schooner.

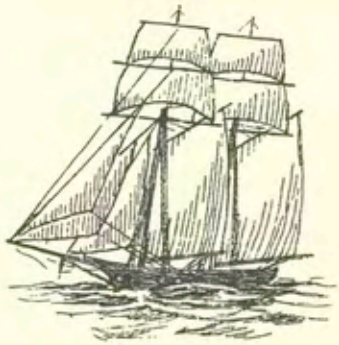


Fig. 6. A "two topsail" schooner. The more common type of topsail schooner carried square sails on the foremast only.

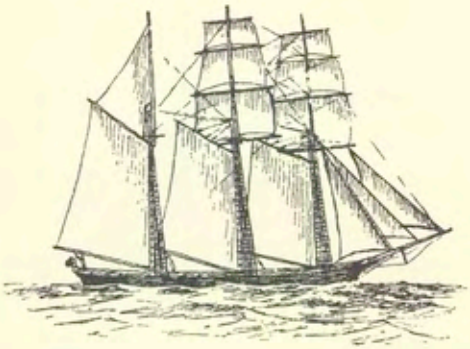


Fig. 7. A variety of topsail schooner commonly known as a "Jackass bark," rarely seen except on the Pacific.

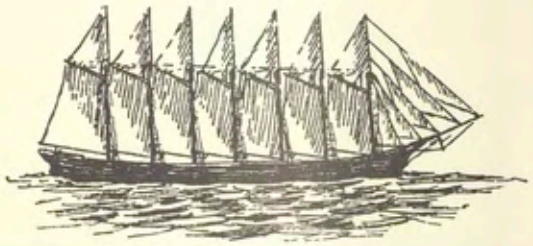


Fig. 8. The ultimate development of the schooner rig–the seven-masted *Thomas W. Lawson.*



Fig. 9. Spritsail rig. Much used on small craft and on cargo lighters in harbor transport service.



Fig. 10. Leg-of-mutton rig. Used principally on small craft such as whaleboats and flat bottom vessels up to forty feet or so in length.



Fig. 11. Lugger. This type was not used much in American waters except in the Gulf of Mexico.

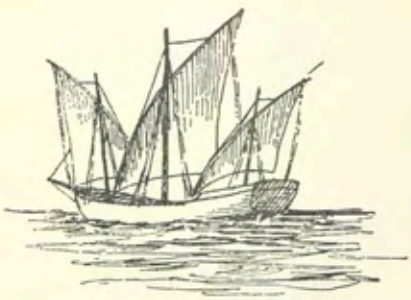


Fig. 12. Lateen Rig. Rare in America but much used in southern European and Oriental waters.

rig, culminating in the 5,000 ton, seven-master, *Thomas W. Lawson* (Fig. 8).

In passing from the foregoing simple to more complex rigs, one may pause to note the appearance and local popularity of a considerable number of small craft types. Peculiarities of hull were responsible for such names as "pinky," "carryaway boat," "pettiauger," "chebacco boat," "Block Island boat," "sharpie," and many others. Rigs ranged from combinations of the humble spritsail and leg-of-mutton cuts (Figs. 9 & 10) to the rare–in American waters–lug sail and the still rarer lateen (Figs. 11 & 12). The ketch (Fig. 13) has been seen here from early colonial days, while the yawl rig (Fig. 14), differing from the ketch principally in having a relatively small jigger mast stepped much farther aft than the corresponding mast of the ketch, has enjoyed a degree of popularity in yachting circles in recent years.

These, and other rigs and models, appeared from time to time as refinements or sports of more common and, on the whole, more useful types. It is sufficient to our purpose to pass them by without further description. Picturesque as they were, they had little, if any, influence on the course and development of the American merchant marine.

Next, in order of complexity, come the several varieties of the brig–a class which includes the full-rigged brig (or brig, proper), the brigantine, hermaphrodite brig and the snow. Except for a brief period around 1850, when the present barkentine was classed as a brig, the brig was invariably a two-masted vessel, square rigged on both masts (Fig. 15). Her masts were divided into three spars–the lower mast, topmast and topgallant mast–the topgallant being sometimes divided into topgallant, proper, and royal mast. The only fore-and-aft sail on the brig, aside from jibs and staysails which were common to every type of large sailing vessel, was the spanker. (See page 71.)

The brigantine (Fig. 16) carried the full

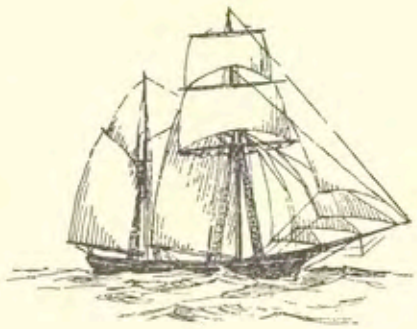


Fig. 13. Ketch. Also to be seen without square sails. A very useful rig for a small crew.



Fig. 14. Yawl. Characterized by a very small jigger mast, usually stepped abaft the rudder post. Used on yachts, but rarely on cargo carriers.

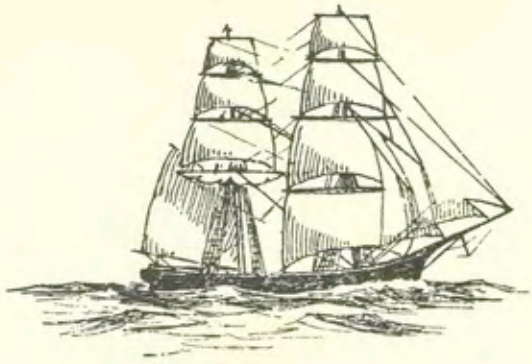


Fig. 15. Brig. Completely square rigged on both masts.

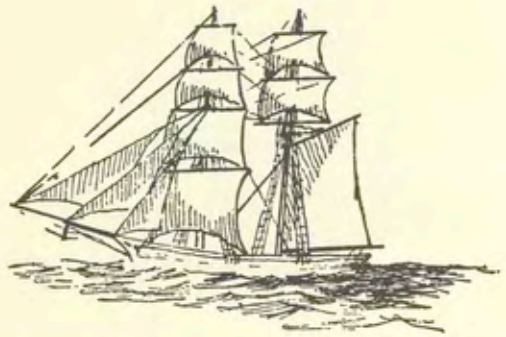


Fig. 16. Brigantine. Square-rigged foremast, and topsail-schooner-rigged mainmast.

brig rig on the foremast and topsail schooner rig on the main. It should be observed, however, that some latitude was used in rigging the after mast. Here, as elsewhere, the individuality of master and owner frequently resulted in peculiarities and innovations of a useful and striking sort. Sometimes spar plans were altered in such manner that the old time sailor of the sail would have been hard pressed to find a suitable name for the resulting effect.

Hermaphrodite brigs were similar to brigantines, with, however, the mainmast carrying the simple rig of the fore-and-aft schooner (Fig. 17).

The snow virtually disappeared as a separate classification about the end of the Napoleonic period (Fig. 18). It differed from the ordinary full-rigged brig merely in having its spanker hoisted on a small spar or mast, separate from, but attached to, the after side of the mainmast. This feature persisted long after the term "snow" became obsolete.

One of the most ancient forms of the square rig to survive in modern times was the bark (or barque). The bark was typically a three-masted vessel, although toward the end, four and even five-masted barks were built (Fig. 19). The distinguishing characteristic of the bark was the fore-and-aft rig

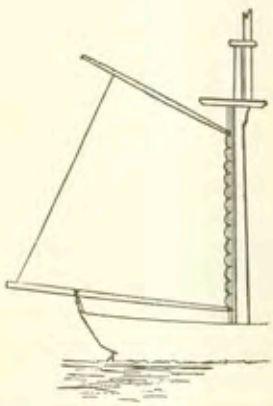


Fig. 18. Method of rigging the spanker of a snow.



Fig. 17. Hermaphrodite Brig. Foremast square rig only. Mainmast fore-and-aft rig only.

on the after mast–all other masts carrying the full square rig. Prior to the period of 1750, or thereabouts, the after mast usually carried merely a single lateen sail, which gave place to the regular fore-and-aft schooner rig.

Before 1800 the bark rig was very popular, but it was supplanted largely by the ship in the first half of the nineteenth century. Following the financial depression of 1854-57, the rig once more resumed its sway, since it was not only much more economical to operate, but was almost as fast as the full-rigged ship. In the closing days of

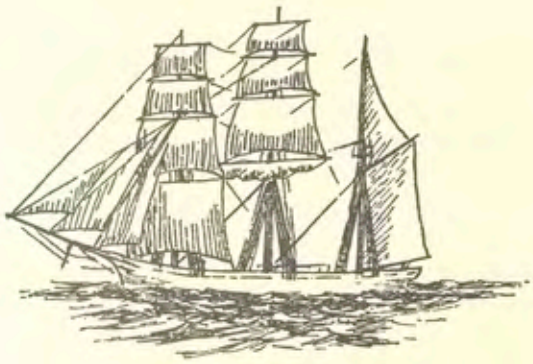


Fig. 19. Bark. Foremast and mainmast square rigged, mizzenmast fore-and-aft rigged.

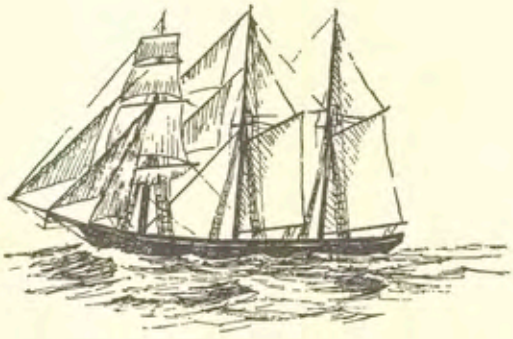


Fig. 20. Barkentine. Foremast square rigged, main and mizzen masts fore-and-aft rigged.

sail, barks were far more numerous than ships, whereas in 1850 the reverse was true.

Somewhere between the bark and brig may be placed the barkentine (Fig. 20). When this rig first appeared (ca. 1850) it was, as already noted, called a three-masted brig, the name being changed to barkentine about 1856. At first all barkentines were three-masted, but later four and five-masted vessels of this type made their appearance. They proved to be very efficient vessels, especially on the Pacific, where weeks of close hauled sailing in the trades might be succeeded by a long period of "running free" before light, following breezes.

The ship rig is possibly too well known to require description. Its only essential feature was three masts, all of which were fully square rigged. (Fig. 21) Obviously, additional masts might be added without changing the nomenclature. When the fourth or fifth mast was fore-and-aft rigged, however, it would be strictly proper to describe the vessel as a four or five-masted bark. The modern term "shipentine" was never applied to this, or any other rig, by sailors of the sail, so far as the experience of the writer goes.

The three-masted ship was generally considered to have been the handsomest of all rigs. Certainly when her spars were well designed and symmetrically proportioned, few more beautiful sights could be imagined whether she was observed in port at anchor, or bowling along rap-full in a smart breeze. They were sights which never failed to stir the blood of the most hardened old shellback. In that respect, doubtless, they played some such part in the development of an effective merchant marine that the fife and drum played in the winning of battles.

With the foregoing elementary but essential terms in mind, we may undertake an extended survey of sailing ship history. It is still largely a virgin field. Historically speaking, the very measure of American maritime achievement has still to be taken. What

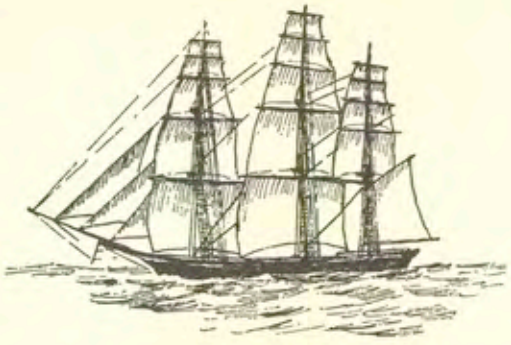


Fig. 21. Ship. All three masts square rigged.

the generation of the sail endured; what they accomplished for the world; the marks they left on civilization, are still largely unwritten and untraced. This is not altogether as it should be. The mere collection of maritime fact does not, perhaps, concern us. But there are lessons of practical value to be derived from that period, and they do concern us intimately. It is not improbable, when the last pronouncement is made, they will be found to concern us vitally.

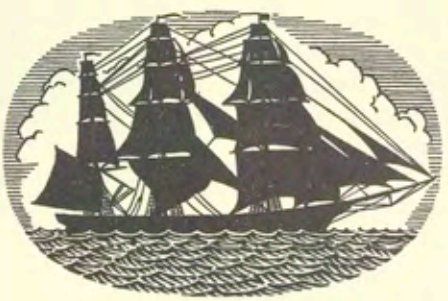
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Modern authorities are sure to disagree with some of the terminology used by Cutler in this article. However, Cutler, who went to sea in 1898 and studied and wrote extensively about sailing vessels from 1922 to 1961, was the authority in 1930. The above no doubt reflects terms which found general acceptance in his day.

William A. Baker, naval architect of Hingham, Mass., adds the following qualifications. "The original 'knockabout' had no bowsprit, and something much more complicated than Fig. 1 was its immediate ancestor.

"The snow was the basic 'full-rigged' two master from about 1700 to 1810. The true brig with a square main course and a spanker set on the lower mainmast had a relatively short life beginning about 1770 and running thirty or forty years. Practically all brigs of the early nineteenth century were really snows; the pre-1770 brig was really a brigantine.

"The English four-masted bark was the ocean workhorse during the last part of the nineteenth century. When the Sewall family of Bath built their wooden 'Big Four' and then went into steel with the *Dirigo* and others, all rigged as four-masted barks, they always referred to the vessels as ships, for they had at least three masts, all fully square rigged."–*Editor*



Before the Mast on the Clipper Ship *Mary Whitridge* of Baltimore

Adapted from the Journal of
EDWARD E. BRADLEY
During the Years 1875-76

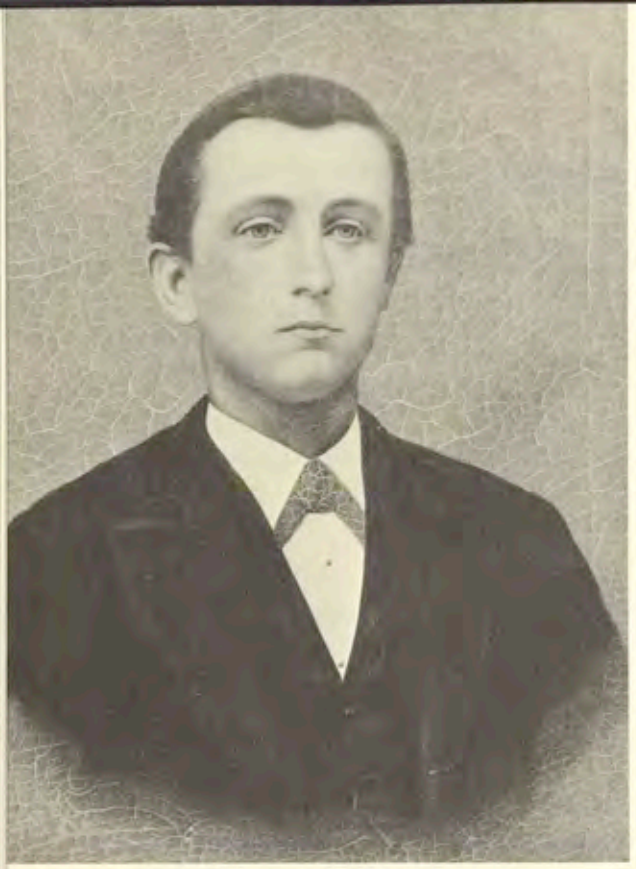


THOSE living in the clipper days just after the Civil War will remember the important part shipping played in the everyday life of the average person. Nearly every family within a few miles of the coast had members or near relatives at sea, and most of those whose means permitted, owned shares in at least one vessel. Ships, voyages and personal anecdotes of the sea and shipmates were topics of daily conversation. Men whose explorations, discoveries or daring seamanship were known all over the world were still familiar figures in nearly every seaport. Altogether the life of almost any New England coast town made the lure of the sea irresistible to the average boy of the 1870s.

This was especially true of Stonington, Connecticut, where I was brought up. Not only had the town a fine naval record in our two wars with England, but nearly every grown man had been to sea or was connected in some way with shipping interests. Many of the older men were famous characters. It was natural, therefore, that after the Civil War, which I can just remember, Stonington boys should once more fall back on shipping as the chief source of excitement. From the ages of seven or eight onward, we whittled our models, sailed our skiffs, climbed about docks and shipyards, or listened, open mouthed, to ancient mariners, some of whom had served on privateers or slavers, and all of whom, as I remember, had learned to draw the long bow with amazing skill. As we grew in years, the sea became more and more a vast fairy world of adventure. We boys imagined ourselves undergoing incredible hardships which somehow were more pleasant than otherwise. We dreamed of sailing triumphantly through terrific gales, in which we were always warm and comfortable, or performed, in fancy, remarkable feats of strength and courage in shipwrecks, with none of the inconveniences of reality.

All ships attracted, and every corner of the world invited us, but no ships had quite the appeal of the clippers, and no lands quite the lure of the Far East. Stonington at this time had several famous old clipper captains, but only one of them was still active when I had finished the schooling the town afforded and felt myself ready at last to embark on what I regarded as my chosen calling. Captain Benjamin F. Cutler was a native of Stonington, who had begun life afloat on coasters, had "whaled it" for a time and then gone, as so many captains of the fifties had, into the clippers. He had been

Edward E. Bradley (1857-1938) was an industrialist and inventor in the field of silk making machinery. His two years on board ship, described in this article, gave him the lifelong interest in the sea which attracted him to the plans of Cutler and Stillman. He served as first President of The Marine Historical Association.



Portrait of Edward E. Bradley painted in Hong Kong, 1876. (From a photograph taken in 1963.)

master, successively, of the clippers *Ariel*, *Eureka*, and *Grey Eagle*, and now commanded the *Mary Whitridge*, owned by Thomas Whitridge & Company of Baltimore. The *Mary Whitridge* was a Baltimore built medium clipper of slightly less than one thousand tons, but she was, in many respects, one of the finest and fastest of the later clippers. There was hardly a boy in Stonington who was not familiar with the story of her remarkable maiden passage of thirteen days, seven hours, from the mouth of the Chesapeake to the English Channel in the summer of 1855.

Captain Cutler had arrived from a China voyage in the early summer of 1875, and it was understood that he would sail again for the East in the early Fall. I was then going on seveteen, and the more I pondered the matter, the more I felt it was now or never. Accordingly, all summer long I dogged the good captain's footsteps whenever my courage permitted. Captain Cutler was a genuine, kindly soul, one of those rare men who took their religion to sea, instead of shipping it overboard off Montauk, as a good many did, and he listened to my mumblings about the *Mary Whitridge* with good natured, if non-committal, tolerance. Finally, along toward the end of the summer, he relieved my suspense by telling me that he would take me. By this time I was so keen on going that I immediately began getting my outfit together and when this was done, hurried down to New York a full week before the ship sailed.

The *Mary Whitridge* lay in the East River at the foot of Dover Street, just below the then half completed piers of the new Brooklyn Bridge. I shall never forget my first impressions as I first saw her, that hot morning of 27 August 1875. To my eyes she was the most beautiful sight I had ever seen, freshly painted in shining black, with a narrow gold beading along her rounding sides, her heavy, raking, lower masts and slender upper spars towering at an immense height above her decks.

As I stepped aboard I am not sure whether my feelings of pride or bewilderment were uppermost. I had a hasty impression of massive timbering, broad, heavy rails and immensely long spare spars lying in the waterways. Everything seemed to be tremendously strong and ponderous and yet, as a whole, it had a smart appearance of lightness and symmetry. Loading was still going on. An alert looking man, who turned out to be the mate, stood by the main hatch directing operations. Cargo was dropping swiftly into the hold on slender whips, operated by pairs of horses which tramped back and forth on the wharf below. Riggers were at work about the deck and aloft, setting up shrouds and stays, reeving running gear and bending sails. The air was full of noise; shouts, calls, orders barking, blocks creaking, hammers thumping, whistles blowing. There was plenty in sight to

catch the eye of a green youngster, and as everyone was busy, I stood a few moments on the main deck near the gangway looking about. Brass work was everywhere. On either side, amidships, stood two heavy brass carriage guns, with their muzzles snubbed to the closed ports. Forward of the main hatch was a beautiful capstan of mahogany and brass. Aft a heavy brass binnacle caught my eye, while every stanchion was ornamented with fancy brass work. The cabin opened off the main deck in a short poop, which extended a few feet forward of the mizzen mast. Through its door, open for ventilation, I caught a glimpse of racks of muskets and cutlasses–reminders of days not so long ago, when ships disabled or becalmed in eastern seas had to be prepared for piratical attacks.

Finally there came a lull in the loading, and I spoke to the mate. He turned me over without ceremony to the third mate, who took me to a small room in the forward house where there were two bunks and told me to put my dunnage in one of them, after which he turned me to work at once. For the next few days he kept me on the jump, sending gear aloft, stowing away ship's stores and doing the thousand and one things to be done constantly about decks.

The work, however, was nothing compared to the torture I suffered from mosquitoes. I slept alone in the little room; the weather was sultry and the air at night was fairly alive with the pests. When the captain and others came down from Stonington a few days later, my face was so swollen that they did not recognize me at first.

Early Saturday morning, September 4, the crew came aboard, the second mate coming about the same time. He was a huge man who had been bos'n in Liverpool packets. He stood six feet three in his stockings and was one of the hardest looking customers I had ever seen–"face like a meat axe"–as the saying went. Fearing I might be in his watch, my heart dropped into my boots as he came over the rail. As soon as the crew was aboard, in various stages of dilapidation, we hauled out into the stream and started for Shanghai. It was a beautiful clear morning with a light westerly breeze. We dropped the tug just outside Sandy Hook and made sail, we boys tailing onto sheets and halyards and keeping out from under foot as much as possible. In a surprisingly short time we were slipping along under all plain sail. I had done a good deal of sailing around Stonington and in spite of all the rush and confusion I could not help noticing how smartly we went along in the light breeze. Other vessels were around, outward bound like ourselves, but we left them astern one by one.

There is not rest for anyone on sailing day. We worked like beavers until late afternoon, clearing up the decks, coiling down rigging, stowing the anchors, washing down and getting things to rights generally. When this was done the crew was mustered by the mainmast and watches chosen, the first mate choosing one, the second mate the next and so on. True to my foreboding, I was picked for the second mate's watch, known as the starboard, or captain's, watch. Frank Hancox, another Stonington boy, was in the same watch.

In addition to the captain, we carried three mates, twelve able seamen, a carpenter, cook, steward and three boys–twenty-two in all. The third boy, Phineas Randall, also from Stonington, being in the opposite watch, bunked with the carpenter and myself in the little room already referred to. The able seamen occupied the forecastle which was below decks in the forward end of the ship. The forward deckhouse, part of which had formerly been used for passengers, was now used principally for the cook's quarters, carpenter shop and a large room for spare sails, lumber, etc.

The crew, like all crews on American ships in those days, was a mixed lot, but there proved to be some fine seamen among them. Little Mike, a happy-go-lucky Liver-

pool Irishman, was not only a smart sailor but a natural wit whose humor did much to enliven the ship. I recall also big John, a good natured, clumsy Norwegian; Swedish John, a good sailor but always growling, and Nat Phenix, a fine young New York fellow who was third mate on a later voyage. Most of the men had been on several long voyages and were good "marlinspike sailors," able to work all kinds of intricate knots and splices as well as all the usual sailor's fancy work. I think we had a rather better crew than usual, but perhaps this was partly due to Captain Cutler, for under his genial influence the *Mary Whitridge* was "a home"–to use the most flattering description sailors had for a ship.

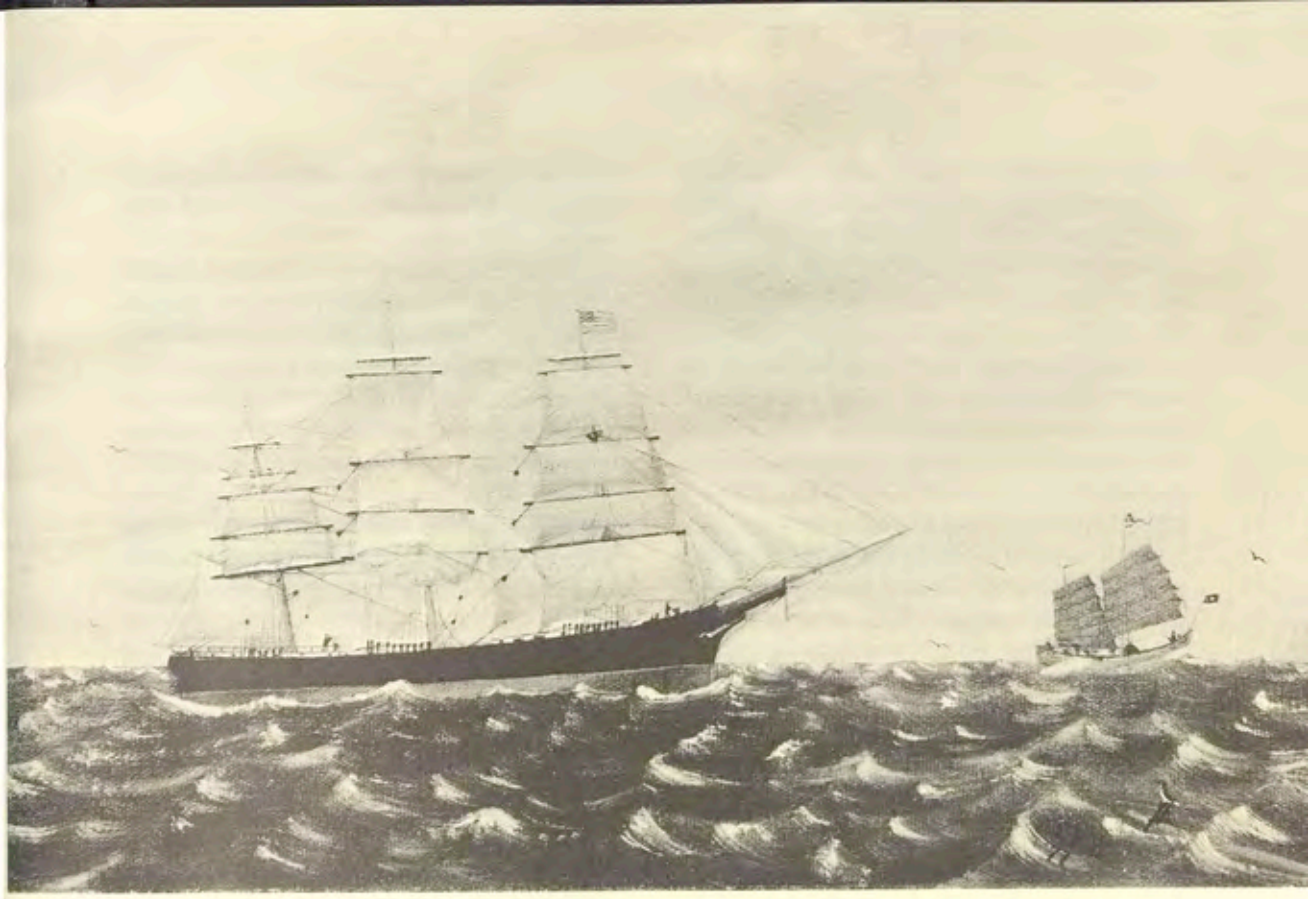
By the time we had the decks cleaned up and everything "ship shape and Bristol fashion," it was near the end of the dog watch, and I was glad to turn into my bunk for a rest. Every bone and muscle in my body ached. It seemed, however, that I had no sooner dozed off than I was aroused by loud shouting, and I jumped onto the deck to see a big schooner drive by so near that I could have almost jumped on her rail. Quick as I was, it seemed that all the watch below was on deck before me in various stages of undress, hauling feverishly at fore and main braces, as the ship was off her course and almost aback. It was a close call but we cleared her by a few feet and in a short time everything was going on as usual.

Sunday morning the weather was fine, with a fresh breeze. The ocean was all I expected and a sailor's life looked very good, though perhaps I was just a bit early in my conclusion. I recall going to the galley for my first breakfast, tin cup and pan in my hand, and the cook dishing out cracker hash, a bit of salt junk, with bread and coffee–a black concoction sweetened with black molasses. Such a change from "Mother's breakfasts." We boys soon protested about the coffee, and the captain ordered the same as the cabin for us. At this time the food served to sailors was very limited in variety, consisting of salt junk (beef), salt pork, salt fish, beans, potatoes, hard bread, coffee and tea, with bean or pea soup four days per week; and the great sailor luxury, plum duff, on Sunday. Most ships kept the crew on a stated allowance of food and water per diem, and not always of best quality. Ours was very good and unlimited in quantity. Also we had fresh bread or gingerbread nearly every day.

It was the custom of our captain to allow no unnecessary work done on Sunday. This first day at sea passed very pleasantly. I was started in my nautical training by the captain, who had me take noon observation of the sun and work out our latitude, which I made 39°9′ north, only 132 miles south of Stonington.

My real sailor life commenced Monday morning, by being hustled out on deck at four in the morning. At daylight we were given hot coffee, and then we began washing down decks. I was given a bucket of water and a cloth and started scrubbing the white paint; this was my task for many mornings, varied by polishing the big brass binnacle aft, on alternate days, when I was on the early morning watch. After breakfast, sleep until twelve o'clock, and then the dinner of soup, salt pork, potatoes and gingerbread. This was followed by work until four o'clock, then rest in first dog watch until four bells (six o'clock), then on deck through second dog watch until eight o'clock, when we went below.

We had on board a sheep, two pigs and two dozen fowl, which were kept under the topgallant forecastle deck, just in the bow of the ship. These were for the captain's table, as there were no fresh meats on sailing ships for the crew in those days. My shipmate Frank and I were detailed to go in there and look after these, and to cut off the ends of the wings of the fowl, so that they could not fly over the side. The ship was pitching, the air under the forecastle head was hot and close, and full of unpleasant odors, and soon we began to feel very un-



Bradley painted this view of the *Mary Whitridge* taking on a pilot off Hong Kong, April 1876, a year after his service aboard her. Oil on canvas, 11⅝" x 17⅝", signed EEB '77. (64.38)

happy. Poor Frank would lean out over the windlass for fresh air, and–well, the less said the better. After this job was finished, I curled up on a coil of rope, in the lee of the house, and when the second mate came to find me and give me another job, I begged off, saying I was sick. After looking at me a bit, he left, instead of driving me to work. I was glad to get to my bunk at eight bells, and when called for supper at six o'clock, decided I did not need any. This first afternoon's work was one of the worst experiences, and remains in my memory to this day. Such jobs and accompanying sensations had never been mentioned in any of the sea stories I had read.

All this day there was a fresh breeze and we had all sails set, including topmast and lower studding sails. This drove us along at a good speed, the log registering twelve knots and more at times, thus keeping up our reputation of being one of the fastest of clipper ships.

The sailing qualities of the *Mary Whitridge,* indeed were the wonder of every one who was not acquainted with her record. This was partly because to the casual observer she showed none of the usual marks of the clipper. Her spars were heavy, but not extreme, and above her load marks, she had easy rounding lines, more like those of a Western ocean packet than a clipper. Under water, however, she was sharp enough to meet the most critical taste, and it was this circumstance that fooled those who did not know the ship.

During the two years and more that I was on her, the *Mary Whitridge* was never passed at sea. I remember one incident which hap-

pened on a later voyage, which was more or less typical of several such experiences. It was while we were lying in San Francisco, in September, 1876. Right next to us was a big English ship, named the *Castle Roy*. Unlike us, she was long and lean, with a sharp razor-like bow, and looked to be a genuine clipper. We boys became acquainted with her apprentices while there, and naturally we had discussions about speed. Once I ventured the remark that I hoped we would sail at the same time, as I wanted to see how badly the *Mary Whitridge* would beat the *Castle Roy*. The apprentices greeted this remark with a loud shout. "Beat us," they said, "why the *Castle Roy* would run your old tub out of sight in two hours!"

It so happened, however, that both ships sailed in the morning, on the same tide, and both bound in the same direction; we for the west coast of South America, and loaded a foot deeper than usual, while the *Castle Roy* was bound around the Horn, and consequently in lighter trim than usual. Each ship took steam and was towed out, but the *Castle Roy* was well outside with all sail set long before we had cleared the harbor. Outside, there was a good whole-sail northwest breeze, and when we made sail, I took great pleasure in noting that we were coming up with the *Castle Roy* hand over hand. Before noon we had overhauled her and passed so close to her that our friends, the apprentices, were easily distinguishable on her decks. By sunset she was out of sight, astern, and our "old tub" had shown another proud clipper a clean pair of heels.

Tuesday, Sept. 7. Another fine day, driving along with all sail set, but I have lost my wild enthusiasm for a sailor's life; and sincerely wish I was back in old Stonington. I have to keep going about, however, and by last watch decide that I am nearly normal, though not interested in meal hours.

We have a nice dog and kitten and both were also very much under the weather. They had refused all food, but today are willing to eat salt junk and hard tack with the rest of the crew.

Wednesday, Sept. 8. I turned out at eight bells; the wind was N.E.; it rained; the sea was rising; I put on my new "oil skins." The smell was all the breakfast I needed. The wind increased rapidly, and soon came orders to shorten sail and the mizzen royal was clewed up and the captain called out "Ed! lay aloft and furl it!" I looked up at the swaying mast and the fluttering sail on the "fifth floor" (I had not yet ventured above the "first"). I replied, "I don't know how to furl sail yet." "Get aloft!"

I did, and how I did hang on, one hand for myself and one for the ship, but I reached the sail and made it fast after a fashion, and then safely reached deck again. Then one sail after another was taken in and before noon we were under reefed topsails and half a gale blowing.

It was not a pleasant morning watch. Rain would wet me through my "oiler." The ship rolled and tossed about, but as she was a wonderfully dry ship, only spray came across the decks.

The hot soup really was good at the dinner hour, but I could not get interested in the boiled salt pork and potatoes. I tumbled into my bunk, thankful that I could lie there until the dog watch. Fortunately this was short, and I found I could take tea and hardtack for my supper, and face the long night watch, from eight to twelve, which ended a long, long day.

Thursday, Sept. 9. At four A. M. on deck again. The wind was falling; the full topsails were set, and at daylight we began to set more sails. By eight bells we had her under full canvas. No washing paint this morning.

Friday, Sept. 10. Today clear and with a fresh breeze, but I still have doubts about my choice of occupation. Home life is what I crave. This forenoon we met a steamer bound for New York, and I had a great desire to be one of her crew; only one week at sea already, twenty more before I could

step on land again, and then back the same way. I can begin to understand why the song "Home, Sweet Home" was written. But I had to keep at work, for that never ends for a sailor, so I was sent up on the poop deck, given a palm and needle and started mending a sail. I made good progress, and was kept at that work the whole watch.

The breeze dropped, shifting aft; studding sails were set forward, and drew well, speeding us up. The crew was at work on various parts of rigging, looking at splices, blocks, and replacing any worn or weak parts. Took sight at noon and I worked out our latitude, 36° 27′ N.

Monday, Sept. 13. Nothing eventful the past two days, fair breeze and the sea smooth, with one dash of rain. I was allowed to take the helm last evening dog watch. It was a fine sensation to have control of the ship, and feel the response to the slightest turn of the wheel. I was quite elated when the captain, who had been watching me, informed the second mate that I could take a regular two-hour trick with the rest of the crew. This brought the additional duty of two hours lookout during the night, so I feel that I am progressing finely.

It thickened up during the day, with rain and a rising breeze. All royals were taken in and I had another chance of furling one, and that in the darkness. I spent most of the day sail making. We are getting some of the older sails ready to bend in place of the new, as we are soon coming into the light winds of the doldrums at the equator.

Wednesday, Sept. 15. A stormy day and no ship work could be done.

Thursday, Sept. 16. Pleasant with light breeze, and all sail set. I was at work on the rigging all my watch, learning to splice and serve. We saw a sail to windward in the morning, and a bark passed near, bound north. It looks good to see a ship on this vast waste of ocean.

Friday, Sept. 17. Another fine day, light breeze and all sail set. I was sent aloft to help unbend a royal and bend a new one. It was quite a job, as the ship was rolling some, but I am feeling quite at home now on the top floor. Sighted five sails today. We are getting well to the east and in track of more vessels. Worked out Latitude 29° N. Longtiude 37° W.

Monday, Sept. 20. Pleasant with a good breeze and under all sail. We caught a fine garfish, and so had a taste of fresh fish. I had a lesson in taking observation for latitude by the Polar Star at 5:15 this morning; this star gives very exact latitude when well north of the equator. I was sail making through my watch in the afternoon and am getting quite expert in this work.

Thursday, Sept. 23. We have had three days of fine weather, with all sail set, and the work of overhauling the various parts of the rigging has kept the crew busy. There is always some part needing attention; have sighted one or more sails each day. During the day the wind veered to the N. E. and we are in the Trade Wind at last.

Tuesday, Sept. 28. Squally and rainy all night and watch kept standing by, ready to clew up sails if the squalls came too heavily. It was then all rush to their stations and work lively. By this time I can name and locate at its proper belaying pin along the bulwarks, or at fife rail, each of the 131 different halyards, clewlines, buntline or braces, even in the darkness. This is very necessary, as a mistake in letting a wrong one go would mean disaster.

During the day we spoke the French ship *St. Jean,* and soon after spoke the English brig *J. B. Wood* bound for London, who promised to report us.

Wednesday, Sept. 29. Another pleasant day, with all sail set. Signalled a large English steamship, bound from Aspinwall to London. The sun was eclipsed this noon, quite an interesting event. Worked out Latitude 6° 06′ N. Plenty of flying fish about, darting in great schools from wave to wave. They glitter like silver in the sunshine. Bonitas and porpoises in schools were racing ahead of the ship, but we failed

to catch any, though we tried to harpoon them from the martingale. This was a disappointment, as fresh fish would have been a welcome change from salt food. I am already tired of our dinners: bean soup, salt pork, bread, potatoes, or pea soup. salt junk or salt fish and bread, though some days we have gingerbread and once in a while, an extra treat from the cabin table. Still our food is better than most ships, and plenty of it, so the crew, who have sailed on other ships, tell me.

Wednesday, Oct. 6. A very pleasant day, with a good whole sail breeze. During the morning we sighted a ship to windward on same course as ourselves. At night she was far astern. Our clipper keeps up her reputation. The crew had made great preparations to celebrate our crossing the equator today, thirty-two days out. Neptune came on board with his harpoon and oakum whiskers to look for victims to initiate into his kingdom, but the captain, to spare our one passenger, bought His Majesty off with tobacco, so we boys also escaped, greatly to our joy. I have been painting the bulwarks and other parts that needed freshening. One of the crew was at the same work; others were at rigging.

Saturday, Oct. 9. Another fine day. We seem to be past the doldrums, and have the S. E. Trade Wind with all sail set, braced sharp up by the wind. Sighted the Island of Ferdinand de Noronha. I went up to the main royal and had a good look at its lofty peak. It bore N. W. about thirty miles. This island is a Portuguese penal settlement with a very unsavory reputation. Latitude 4° S. Longitude 31° 55′ W.

Sunday, Oct. 10. Pleasant most of the day. but had a heavy squall and had to take in all royals, but soon set them again. We sighted the coast of South America near Pernambuco. Could just see two peaks from main royal.

Sunday, Oct. 17. Have had a week of fine weather with good all sail breeze, and making good progress, eight, nine and ten knots as a rule. Our general course is now S. E. and wind more to north. Had to shift studding sails during the afternoon watch. One of the halyards to the lower one parted and we nearly lost sail and yard as it dragged in the water. Had very lively work to save them. Have been at various jobs, and added painting outside the bulwarks for a change. The albatross and cape pigeons are beginning to join us, and we sight sails nearly every day. Crossed the Tropic of Capricorn in Longitude 29° 37′ W.

Wednesday, Oct. 20. Cloudy with rain squalls, and the wind veered to S. W. and rapidly increased. Had to shorten sail rapidly, until down to topsails on mizzen, and topgallant sails on fore and main. I am kept busy in the rigging, putting on new ratlines, though it is hard work on account of the ship pitching in heavy head swell. The wind moderated toward night and kept us busy during dog watch making sail again.

Sunday, Oct 24. Good weather for the past few days; have been bending heavier sails, as we are getting down where we must expect to have stormy weather, though fine today. Killed the sheep yesterday, and all hands have had fresh meat, which was appreciated. Getting cooler; sighted Inaccessible Island at 8:00 and Tristan da Cunha at 8:30 this morning. We passed about two miles east, and had a good look with the glass; the first was desolate and rocky and we could see flocks of penguins on the shore, lined up like troops of soldiers. The latter island is much larger, an extinct volcano, the peak rising into clouds, to 8,500 feet elevation; had several good views of the snow crown, as the clouds blew away. It is well wooded and a small river could be seen near a small village of a half dozen houses and some huts. This ran down a valley to the sea. The rest of the shore was very rocky and precipitous. We could see people, also some cattle on the top of the bluff near a small fort. Why a fort? Surely no one would wish to capture a lonesome land. It was,

however, a beautiful place to view as we sailed past. Many kinds of sea fowl were flying about us and over the shores. We sighted a ship astern and could just see Nightingale Island to the west in the afternoon. Latitude 37° 02′ S. Longitude 12° 15′ W.

Wednesday, Oct. 27. This has been an exciting and anxious day. It commenced to blow hard yesterday and we began to shorten sail. We had a few in when the main topmast staysail blew away, with a noise like thunder, hardly a piece left. Before night we were driving under reefed fore and main topsail, forestaysail, foresail and reefed mainsail, and gale increasing through the night. When I went below at 4 this morning, I thought it could not blow harder. We were then under only lower fore and main topsails, foresail and forestaysail. I was roused just at seven bells by a terrible crashing, and the sound of rushing water over the deck; my room was afloat. I was out in a hurry, and found that a heavy sea had boarded us, crashing through the carpenter shop and galley. The bulwarks were smashed in places, and everything on deck was afloat. The poor cook was nearly drowned and was a frightened Chinaman. There was no breakfast; the gale was shrieking through the rigging; the waves seemed like small mountains, and the white spume was blowing across like snow in a blizzard, at times obscuring the view. The ship was scudding like a frightened horse. It must have been five hundred feet from one wave crest to another, and when we raced down the slope, the top of the following wave was so high that it broke the wind and the sails would drop back loose, but when the ship would struggle up to the crest again, it seemed as if they would blow from the bolt ropes. The seas seemed to grow worse every minute. We were running before it and the danger of one coming aboard from aft was great. The captain was at the wheel, with the regular man, watching the coming waves. It was my trick at the wheel at eight bells. I made my way aft, clinging to the rail. The captain looked at me, then shouted, "You can't hold her. Send one of the men." It hurt my pride, but I found the next in turn and sent him aft. About this time another tremendous sea came roaring over the port rail, filling the decks to the top of the bulwarks; for a long moment it looked as though the ship would not climb the next crest. She was almost on her beam ends, with the water roaring over the lee rail, like Niagara. She finally righted and drove on. Then the carpenter grabbed a maul and broke away quite a bit of the lee bulwarks so as to allow the floods to escape quicker. Next a huge lurch broke the lashings holding the spare topmast along the deck, and that began to crash from bulwark to midships. A dash was made to lasso it, but it seemed alive and its savage dashes threatened to crush everything in its way. Finally a rope was cast around one end, checking it enough to get another lashing fast, and finally it was secured.

The wind seemed to increase all the forenoon; the great seas would come roaring and foaming down on us, looming up higher than the main yard, but just as they seemed about to overwhelm us, the ship would struggle up, creaking and groaning, and we would breathe again. All hands kept on deck, and I think most of them feared that our finish was just ahead. Frank and I spent most of the morning flat on top of the big water tank amidships, hanging tight to the lashings. I had always been anxious to be in a real gale, but I had seen enough. At noon it began to rain hard, and the wind seemed to let up a bit. Never was rain so welcome, for it battered down a rough sea very quickly, and by evening it was greatly moderated, and the upper topsails were set.

After it was over, I felt better, though it was a magnificent sight. At its height, the sun would shine through a bit during the forenoon and then the foam-topped waves, tipped with rainbows, were grand beyond words. This evening, the captain said he was

very anxious all the forenoon, fearing the ship would broach to; then all would have been over, and another ship missing.

Sunday, Oct. 31. Crew busy the last three days, clearing up after the storm; found the lower foretopsail yard badly sprung in the slings. It was a wonder that it held through the gale. If it had gone, our situation would have been desperate. Fished it up, and think it will be safe, if we have no bad gale. The carpenter has partly repaired the bulwarks, and made a new galley door and we have bent a new foretopsail and fore and main topmast staysails. Thursday there was a heavy sea, but it has been much smoother since, and the weather fine. It was blowing hard when I came on deck at eight bells, and we had to shorten sail in afternoon with half a gale by night; plenty of water on deck all day. Latitude 42° S. Longitude 17° E. We are getting up to the longitude of the Cape of Good Hope.

Sunday, Nov. 7. Have had a week of favorable weather, with a fair wind, and only a few hours of rain. It is quite cold when the wind comes from the south. We are sailing along Latitude 42° S. and doing well. Made 1,577 miles this last week. I have been learning to splice in blocks, serve and parcel rigging. Most any member of the crew can do any work needed about the rigging, and so I have a fine chance to learn all the practical part of a seaman's duty.

Monday, Nov. 8. Found almost a gale blowing, when I turned out at eight bells, and the ship laboring along under close reefs. The other watch had been shortening sail all through.

A sad event occurred this afternoon. Our pigs found a bucket of dried peas, tried to eat them all, and soon were in extremis. Poor Dennis died, and was consigned to the waves, and to save Pat, he was butchered at once. We shall be reconciled to our loss tomorrow, when we get some pork chops.

Today the captain began an inquiry to find out why such a run on tobacco by the crew; the slop chest was nearly empty. It turned out that there had been fast and furious "Poker" in the "Foc-sul," and about all of the weed was in possession of one lucky sailor. An embargo was declared on tobacco sales.

Thursday, Nov. 11. Cloudy with rain squalls. Last night's gale has blown out, but it was some night to remember. It began to freshen at noon with rain; by night it was bad; light sails were in. Our watch began to shorten sail as soon as we came on deck, and were kept on the jump until midnight, when we hove to, under three sail, the lower fore and main topsails, and fore staysail. The wind was blowing with hurricane force. I shall never forget my struggle, helping to furl the fore topgallant sail. It was bitter cold, the rain driving in torrents down my neck and up my arms; the mast swaying about forty-five degrees each way and pitching at the same time; the sail thrashing as we tried to gather it in. It would break away again and again, and the violent pitching seemed to throw one from the yard almost.

Norwegian John had a narrow escape. The order came to reef the fore topsail and our watch rushed aloft and out on the swaying yardarms. John was ahead. He missed the foot rope and down he dropped with one wild scream. I thought he was lost, but luckily he caught the lower yard and managed to get a hold and clambered up again, unhurt. It was then I thought that the authors who write the alluring tales of a sailor's life, do not tell it all. What a relief it was to get below, doff the wet clothes and tumble into my bunk. I am very thankful to have it moderate today, for at eight bells this morning I found nearly all sails set again. The other watch had to work at that all through. Latitude 42° 8′ S. Longitude 59° E.

Thursday, Nov. 18. We have had a rough sea, with rain and gales for past week and I find a sailor's life in these latitudes anything but a happy one. Have had only one completely pleasant day during the past three weeks; decks flooded a good part of the

time and all hands wet and miserable; constant shortening of sail, and then making it again; blew away a few and had to bend new ones, which was a hard task in such weather. I had one two-hour lookout watch during the night. It was very rough and we were close hauled under short sail, and plunging into a head sea that would sweep clean over the bow at times. I had to lash myself to the capstan to keep from being washed away. It was bitter cold, and I was thankful indeed to finish, and get below.

We have just changed our course to N. E. and soon will be in warmer latitude. Commenced scraping down the spars and oiling them today. A new job. Can't say I enjoy it, as I had to do this work up on the royal mast with only one stay to hold on to. Latitude 39° 30′ S. Longitude 89° 59′ E.

Thursday, Nov. 25. Thanksgiving day at home, but for me it is the same as all the rest, with the same ship's work. The weather is very good. I think we are out of the latitude of gales from the South Pole. I did not find roast turkey and mince pie when I went for my dinner, but we caught a dolphin, and had a fish chowder for supper, for which I was thankful. Have had a lot of drilling this past week on working our position by "Lunar Observation," without chronometer time. It requires three, as the altitude of the sun and moon and their distance apart must be measured at same instant, and from this can be found true time at Greenwich, and thus our longitude. This enables one to find position in event of loss of chronometer. We have entered the southeast Trade Wind and have all sail set, including studding sails. All hands busy during the days, scraping spars and freshening up paint. Latitude 29° 57′ S. Longitude 107° 05′ E.

Saturday, Nov. 27. A pleasant day with fresh Trade Wind and all sail set, making fine progress. This morning sighted a sail dead ahead and rapidly overhauled her. It was the bark *Nettie Merriman,* from Boston to Yokohama. She sailed July 1, 65 days ahead of our ship. When our captain shouted the date of our sailing, her captain threw up his hat, tossing his arms and evidently using strong language. She surely was a poor sailor, as we left her out of sight before night, a good twenty miles distance. She must have had head winds and calms. Long afterwards I learned that she was 250 days on the voyage to Japan, about double the time of our voyage out.

Thursday, Dec. 2. We are again in the tropics; fine weather; breeze is getting lighter and fickle, and it has been very hot for a few days. The pitch has been melting in the deck seams. Great schools of flying fish are about, which make a pretty sight as they fly from crest to crest shining like silver in the sunlight. We have had a very heavy job the last two days, getting the anchor chains up from the chain locker in the bottom of the ship, and rigging the anchors out over the bow, ready for an emergency as we near the islands. The intense heat with this heavy work about used me up. Latitude 14° 33′ S. Longitude 116° 59′ E.

Monday, Dec. 6. Pleasant with light breeze; sighted Sandalwood Island at daylight. It was good to see land once more. The island is quite mountainous, covered with dense forests. At sunset it was about ten miles to leeward, and made a grand and beautiful picture. The clouds had gathered over it in dense, dark masses, with pile upon pile of lighter ones massed all about, showing gold and crimson in the light of the setting sun, and the sky above all a beautiful blue. I began to realize that some of my dreams of the sea were coming true at last. Latitude 10° 40′ S. Longitude 120° 0′ E.

Thursday, Dec. 9. Still pleasant and hot, with light breezes. We are among beautiful islands these days, Flores, Timor, Solor, Adonara, Lomblem and other smaller ones. We sighted the volcano on Flores when fifty miles away, high up in the clouds. We were close this morning, and it showed up fine, with the smoke curling up from its summit.

Finished the day with a musicale, during

the second dog watch. Phin is a fine banjoist, and two of our watch have fine voices. All hands gathered amidships, and we enjoyed listening to old sea songs and home songs, but the last made us a bit homesick. We have had several of these musicales during the past pleasant evenings.

Friday, Dec. 10. Still fine weather. We were close to the islands of Pantar and Ombai which are of the same rugged volcanic formation. At sunset Ombai was a beautiful picture, as the setting sun lit up its hillsides and mountain peaks, showing vividly the valleys filled with palms and cocoanut trees and dense vegetation. We could see little villages with smoke curling up from their fires. It makes a never-to-be-forgotten picture, for there is an indescribable charm as one floats along these seas.

Monday, Dec. 20. Still among these beautiful isles of the Moluccas group. We have had light breezes with calms and an occasional light squall. Passed within one half mile of Pulo Gasses, a beautiful island, the loveliest one yet. The fragrance from the trees and vines was wafted by the gentle breeze and I longed to be put ashore and play Robinson Crusoe.

We have been in sight of a bark for the past four days, and today we drifted quite close. She was an old style English tea packet, the *Albuera* from London to Yokohama, 110 days out (we are 107 from New York). They sent a boat on board after dinner, and we had a nice visit. They brought us some pumpkins, for which we are thankful, and now we can have pie for Christmas. One of her boys was with the boat. He was a pleasant chap. He said they had to work very hard. One of their crew died six weeks ago. Their ship leaked like a "bloody bawsket" which made it harder for them. I gave him some magazines and the captain gave the others some tobacco and they went away happy. This little visit was a pleasant interlude. We are almost at the equator. Latitude 0° 54′ S. Longitude 128° 40′ E.

Thursday, Dec. 23. Rainy most all day with squalls and light baffling winds. A large hammerhead shark, about fifteen feet long, has been hanging around for several days. It would not take the baited hook, but this morning while we were becalmed, it lay just under the bow of the ship and the third mate got out a harpoon and tried to get it, but the iron passed through one side fin, tore out, and away he went, leaving a streak of blood. I was glad to see it leave.

Quite an exciting time this afternoon; just before four bells a squall struck up, and while trimming sails, John, the clumsy Norwegian, fell from the rail into the sea. The ship was going about seven knots. A startling yell "Man overboard!" brought the other watch on deck. Down went the helm; the captain threw a chair and steps over for him. The order to clear away a boat came next. This was lashed on deck amidship, but tackles were quickly rigged from main and mizzen yardarms and the boat dropped over the side, with the first and third mates, Harry and Nat, who pulled for John, who was clinging to the steps quite near. The captain had brought the ship around so as to drift close to him. He was nearly exhausted and all the time was expecting the big shark would return. The boat and crew were quickly on deck again and under way, all done in half an hour—some well planned and skillful seamanship by our captain. Latitude 1° 01′ N. Longitude 129° 14′ E.

Friday, Dec. 25. Christmas day, and pleasant. What a change of surroundings from all my previous ones. I feel a bit homesick as I think of all the dear ones far away. No work today, and an extra fine dinner with plum cake and pumpkin pie, which, though made with condensed milk and no eggs, was pie. Six large sharks were hovering around the boat all day, perhaps wishing another man would fall overboard. Latitude 3° 27′ N. Longitude 133° 50′ E.

To be continued in the Winter issue.

The Development of the Builder's Half-Hull Model in America

CHARLES K. STILLMAN

From Personal Studies and Including Information Furnished by Carl C. Cutler, Louis F. Middlebrook and Charles G. Davis.

Modern knowledge of methods used by ancient designers preliminary to the construction of ships includes little positive information that is not derived from naval sources, and in many respects even that information is fragmentary and unsatisfactory. There have been handed down from antiquity ship's plans, specifications, drawings and elaborate full models of naval vessels, the latter often fully rigged. Such models, referred to as Admiralty models, are to be seen in the Louvre, in the Science Museum, South Kensington, London, and in collections of a rather limited number of museums and individuals in America and abroad. Admiralty models were sometimes used as exhibits to assist the decisions of naval boards and rulers in behalf of sundry expensive constructions. Some of them, it appears, were built after the actual construction of the vessel which they represented as gifts to important personages or as instructive official miniatures, and it is not unlikely that a few of them were executed then, just as full-rigged models are built now, by skilled workmen, for sentiment. The Admiralty model does not appear to have functioned in shipbuilding in precisely the same way as did the later half-models with which we are so familiar. While the type may have had many important uses it is probable that plans were depended on in construction work to a very considerable extent. Practical details of construction were so thoroughly drilled into ship workers from the time of the later Tudors and the Stuarts onward that a plan was to them simply an order for the assemblage, in a certain sequence, of a great many details or units with which they were already familiar. The earliest known systematized English drafts and plans were those of Matthew Baker, a leading shipwright, 1586. They show, as do subsequent ones which have come down to us, the high theoretical understanding which master shipbuilders had for their calling. Shipwrights in general were, as has already been stated, especially well trained men competent to build a merchantman or smaller vessel by rule of thumb and that they did this we may infer from the performances of men who are still personally remembered. If they ocassionally attempted to assist their conception of the vessel-to-be by whittling a model from a block of wood we are in ignorance of the fact, for no such models are known to have survived. There was no need for Admiralty models in America before the Revolution, but coincident with the development of the United States Navy the custom of building them was inaugurated. The old Navy Department Building is said to have housed a fine collection of models

Dr. Charles K. Stillman (1879-1938), a doctor by profession, an angler by preference, and a collector of marine artifacts by avocation, was the grandson of Clark Greenman of the Mystic Shipbuilding firm of George Greenman & Co. Greatly enthused by Cutler's studies, Stillman joined him in planning The Marine Historical Association and served as General Manager and guiding spirit until his death. His passions were half models and the development of a maritime training station for young people.

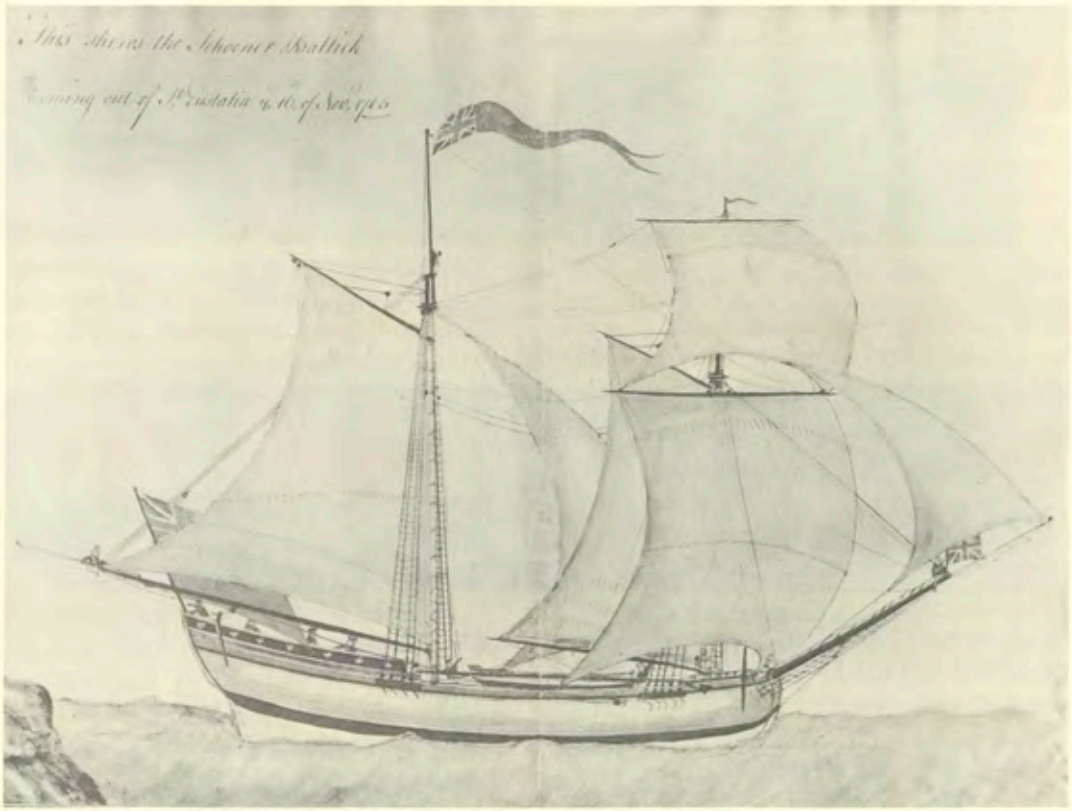
of famous American square-rigged sea fighters, which are said to have been destroyed by official order when the edifice was razed.

Probably the majority of colonial ships were made from plans or built by rule of thumb, although skillful designers were by no means unknown. With boatbuilding exceedingly active after 1700 there was need for a simple method of model building. Eventually the familiar builder's half-hull model, in one form or another, was to supply this lack.

It has been stated that the builder's half-hull waterline model was an American invention of the 1790s and the names of Enos Briggs of Salem and Orlando Merrill of Newburyport are the earliest ones to be coupled with it. The danger that lies in the making of categorical statements is illustrated by the circumstance that the author has before him, as he writes, an American builder's half-model which seems to antedate the time given for the beginnings of waterline model building by at least twenty-five years. Rather than run risks in assuming that the building of half-models was an unknown art before some particular date in the colonial period prior to 1800 it seems better simply to admit that we have no evidence of earlier half-models building. Along the New England coast in particular there were scores of small isolated builders during the early years of the eighteenth century, and one does not like to say that the making of half-models, like many another discovery, may not have been hit upon by one or more of them before its final broadcast to the world.

The earliest American example of the half-model builder's art known to the writer is one which was unearthed a few years ago from a location near Clinton, Conn., and which now forms part of the writer's private collection. It is a pine model, 5 feet long, 9½ inches wide and 8½ inches deep, with stem, keel and rudder post affixed to a somewhat crude backboard. The method of fabrication is similar to that of the "waterline" models which became popular after 1825 in that the body of the hull is built up of superimposed horizontal lifts, but the resemblance does not go beyond this.

Whether this model was the ingenious expedient of some isolated builder to surmount difficulties in the preconstruction stage or was an example of practices more or less common around the middle of the eighteenth century is, of course, impossible to say, but the sureness of touch and other evidence of expertness in workmanship suggest previous familiarity with this form of handicraft. The general appearance of this half-hull is peculiar to modern eyes with its round bow, shallow draft, broad beam, high stern, short waist, and with the long sweeping lines of its poop deck gradually rising aft to accommodate a rather towering transom. It is further embellished with a broad "black line;" painted, as was the custom, not parallel with the waterline but touching it amidships and sweeping upwards fore and aft in a gentle arc. Only the bulwarks, forecastle and aftercastle superstructures are needed to complete the picture of the typical Dutch type coast trader which was the popular sailing vessel of the earlier colonial period. It is interesting to note the resemblance of this hull to that of the schooner *Baltick*, 1765, the original painting of which is in the Peabody Museum at Salem, Mass. Nevertheless the comparison does not imply that our model and the schooner *Baltick* were rigged alike, for the type of hull illustrated was a rather universal one which was rigged more or less according to size and the fancy of its owner. In the case of our model, oral tradition says that it was a frigate which carried guns and transported slaves, that it was named the *Sylvester Hull*, and was built by Leander Hull at the old Indian River yard in Clinton, Conn., a yard which, although limited in facilities and handicapped by insufficient depth of water, has been a shipbuilding point since the year 1700.

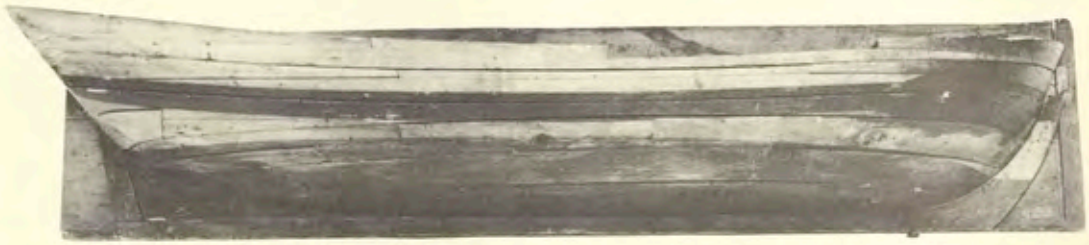


Painting of schooner *Baltick* of Salem, 1765, showing style of hull much favored by colonists prior to the American Revolution. (Courtesy: Peabody Museum of Salem)

Sectional Half-Hull Models

"Sectional half models," that is half models shaped from a solid block of wood and sawed vertically into sections representing the frames, are assumed to have been well known, if not in rather general use, in the colonial period prior to adoption of the practice of using lift models. As these models are seldom found in collections it might be inferred that few were built. This may be true, but it seems quite likely that very few would have survived in any case; they lacked the beauty which would have saved them as decorations, they fell apart rather easily and the sections were lost, and last but perhaps not least, the small, handy, flattened blocks of wood of which they were composed must have proved a real temptation to the builders of kitchen fires.

The model here shown is that of the bark *Star,* said to have been built at Counce's shipyard, Thomaston, Maine, early in the nineteenth century. The shape of this vessel, which has greater depth, less beam, and less sheer than is shown in the *Sylvester Hull* model, illustrates very well the decided change in the practices of naval architecture that took place in America during and just following the War of the Revolution. In the old Dutch type exemplified by the *Sylvester Hull* there was still a trace of the galleon; the *Star* is, decidedly, a forerunner of the modern ship.



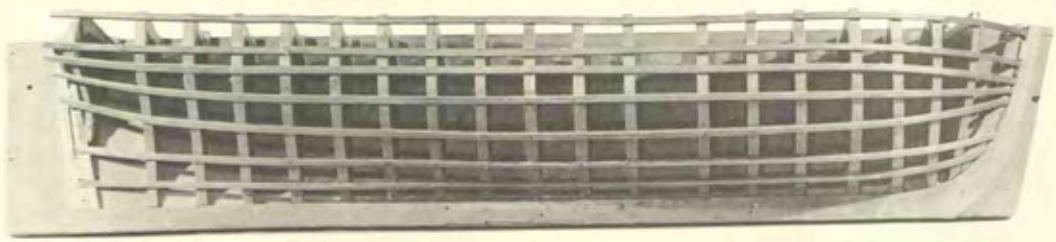
Old model which oral tradition says was that of a "frigate" named *Sylvester Hull.* Pine. 59⅞" length x 9¾" half breadth. Formerly in the author's collection. (38.436)



Sectional model of the bark *Star,* reputedly built at Counce's Shipyard, Thomaston, Maine, ca. 1820. 45" length. Formerly in the collection of Carl C. Cutler. (39.2134)

Open Frame and Batten Models

While the lift model continued to gain in favor after 1790, its popularity was not sufficient to cause an immediate and universal abandonment of previous practices. Some were inclined through natural conservatism to adhere to old methods; radical changes do not come easily. Probably some were not satisfied with the advantages offered by the new method. Whatever the causes, a radically different system of model building came into use during the next quarter of the nineteenth century and the models produced by the adherents of this method are perhaps the most interesting curiosities which fall into the hands of the present day half-model collectors. These models, known as "hawks' nests," "basket models," "open frame models," or described in catalogues as "open work models with longitudinal strips" or as "open frame and batten" models, seem to have had a considerable vogue, particularly between the years 1810 and 1825. The example shown below is that of the brig *Annawan,* Captain



Model of the brig *Annawan,* built at New Bedford, 1822, an excellent example of the "open frame and batten" style of model building. Pine 39½" length x 5½" half breadth. Formerly in the author's collection. (38.429)

Nathaniel Palmer's famous vessel, which was built in New Bedford in 1822, and which was regarded at the time as one of the fastest and best.

The popularity of this type of model must largely have been due to its handiness for inside measurements. Its disadvantages are obvious. These models were difficult to fabricate and must have been somewhat inexact guides to build from. Their vogue did not last long, nor have many of these fragile creations survived the vicissitudes of time.

Waterline Models

Lift or waterline models have been preserved in considerable numbers, although the number in existence is very small by comparison with the numbers which were fabricated during the nineteenth century.

Large collections can be found at the Smithsonian Institution at Washington, D.C., Mystic Seaport Museum, the Peabody Museum of Salem, Massachusetts, the U.S. Naval Academy, and the Mariners Museum of Newport News, Virginia. There are good sized collections at the Webb Institute, New York, in the Portsmouth Atheneum, Portsmouth, New Hampshire, and in the Francis Russell Hart Nautical Museum at the Massachusetts Institute of Technology, Cambridge, Massachusetts. Many other maritime museums and state and local historical societies also contain collections of half models. It is of course impossible to say how many waterline models are now in private collections; several operating shipyards and a number of lesser boat building concerns have saved their models and a number of clubs have done likewise, notably the New York Yacht Club which has a room especially devoted to the display of yacht models of various designs and periods.

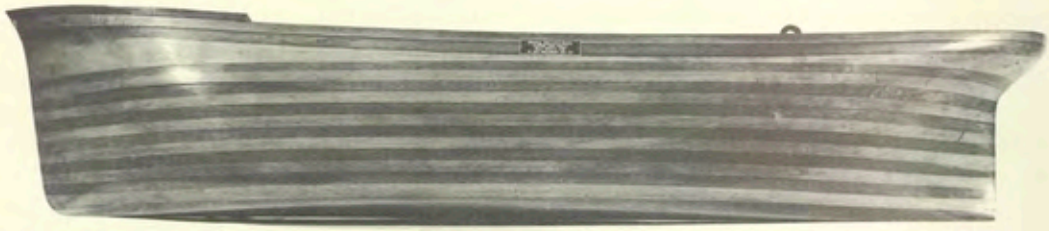
The present, many believe, marks the passing of the lift model. This is the day of iron ships, of huge, complex, and bewildering constructions in steel, and for such, as for a skyscraper, intricate architectural drawings are essential. The naval architect's drawing board has largely replaced the bench and sharp cutting tools of his pre-



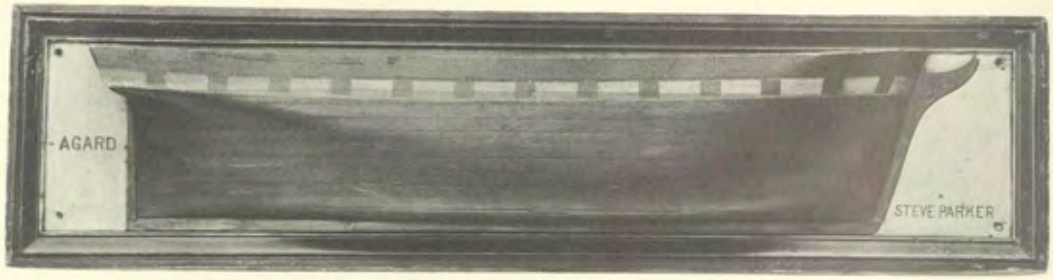
Lift model of a bark from Belfast, Maine, ca. 1840, showing square dowels. Pine. 40¾" length x 4½" half breadth. Formerly in the author's collection. (38.433)



Lift model with square dowels of the ship *Wizard King*, 1,398 tons, 199.6' x 38.10', built by J. T. Southard, Richmond, Maine, 1854. Model has stub bowsprit, stem, keel, and rudder. Pine. 74¼" length x 7" half breadth. Formerly in the author's collection. (31.194)



Mixed wood lift model of ship *Frolic,* 1,365 tons, 194′ x 39′, the last full-rigged ship built by George Greenman & Co., Mystic, Connecticut, 1869. Pine and mahogany. 73¾″ length x 6⅜″ half breadth. (38.325)



Painted and decorated model in the collections of Mystic Seaport Museum. 50½″ length x 5⅛″ half breadth. (49.182)



Facsimile model of clipper ship *Golden West,* 1,441 tons, 196′ x 39′, built by Paul Curtis, East Boston, 1852. Pine and mahogany. 59¼″ length x 5⅜″ half breadth. Formerly in the collection of Carl C. Cutler. (31.154)

decessors. Even yachts, small fishing boats and "outboards" are now built from plans and the builder's model is infrequently seen.

In the earlier waterline models it was usual to fasten the lifts together with pegs or dowels which made it easy to take the various units apart for measurements. Square dowels, similar to those shown in the upper model on page 95, a bark of 1840 from Belfast, Maine, were common in the period between 1830 and 1850 and are occasionally found in half-hulls of the following decade.

The writer has two medium clipper half-hulls, the *Wizard King,* Maine, 1854, and the *Governor Morton,* Mass., 1853, in which the lifts are held in position by square dowels. In most yards, however, long screws were used in place of dowels after 1850, a practice which has continued to the present day.

A good many waterline models were built

throughout of clear pine; pine in New England was easily to be had and it was a suitable wood; it was built with, just as for similar reasons clear mahogany was, and is still, often used in the West Indies. The pine models were not as beautiful as those constructed of alternate lifts of pine and mahogany, or of pine and black walnut, or of pine and cedar, but they retained their smooth exterior surfaces; in mixed wood models, on the other hand, uneven shrinkage of the lifts is often noted.

Painted Models

The pine models begged for decoration and got it. The temptation to make them bloom and blossom like the rose was irresistible; many a long, cold winter's evening in Maine or Nova Scotia was beguiled by the pleasant task of painting the *Sally* or the *Polly* to make her resemble the real vessel that was careening somewhere out on the wide expanse of ocean. Black topsides and green bottom, black topsides and red bottom, sometimes with a gold deckrail, and, maybe, a bright contrasting boot top; these old painted models are fair to look upon and appeal to sentiment. The painting of models of vessels already built was not limited to Maine or Nova Scotia. Human nature, north or south, is much alike, and painted specimens are found from Canada to Florida.

Aftercare of models, in a majority of cases, however, was limited to a heavy coat of orange shellac or of varnish and the occasional dignity of a board for background. Sometimes these latter also were colored, often in very artistic contrast with the painted model or the golden tone of a shellacked half-hull. Usually, but not always, the mount was finished with a moulding. When backboards or mounts were used, stem, cutwater, keel, rudder post, rudder, bowsprit and stub masts were sometimes reproduced to scale and affixed in proper relation to the half-hull.

Models constructed of alternate lifts of light and dark wood, the majority, in fact, after the early period, were only occasionally painted. When thoroughly sandpapered and varnished they had the gloss of fine old furniture and were worthy of a place over sideboard or mantel.

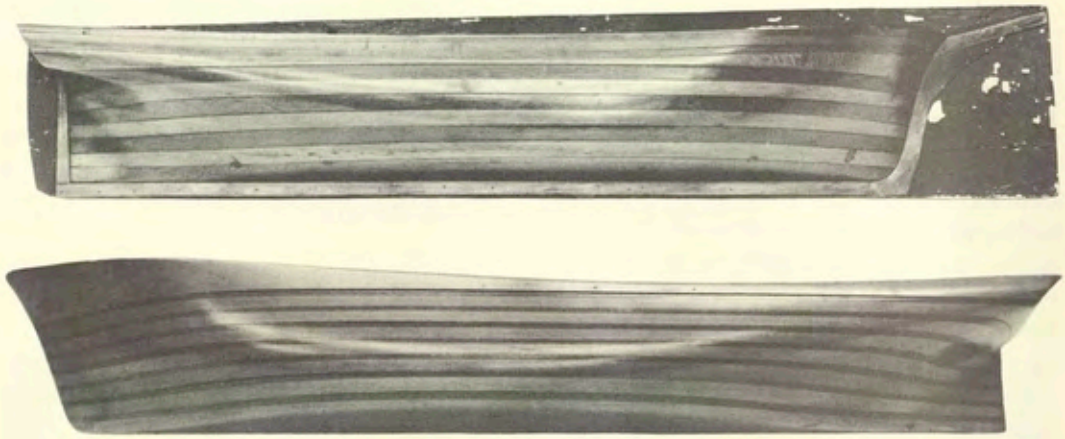
Office Models in Paint and Varnish Finish

A painted minority included models of many famous vessels, models especially of clippers which hung conspicuously over important desks in the offices of merchants and agents. These models were only varnished below the waterline to show the lifts of mahogany and pine, but above they were richly ornate in liveries of black and gold. An example illustrative of this type of decoration is here shown.

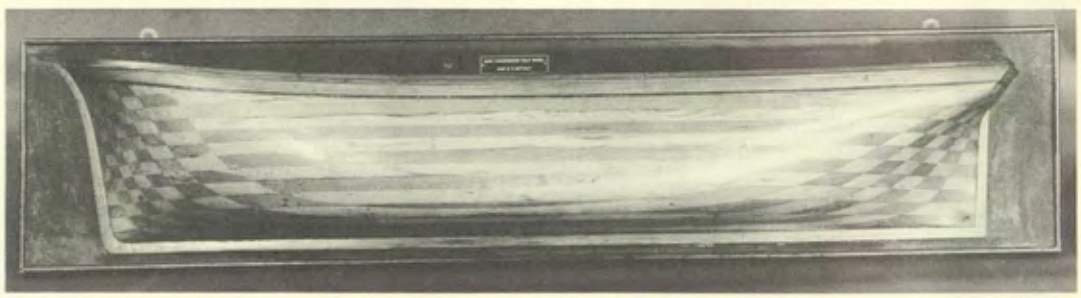
Practices in the construction of the lift model were never quite standardized. In the heyday of the model builder's art, which we may assume to have been in the fifties and sixties, many noted builders discarded the common practice of using light and dark colored lifts of equal thickness. They built more with pine and less with black walnut or mahogany; the dark woods appear only in thin laminae which accent the waterlines. The constrasting types are illustrated on page 98.

So Called Checkerboard Models

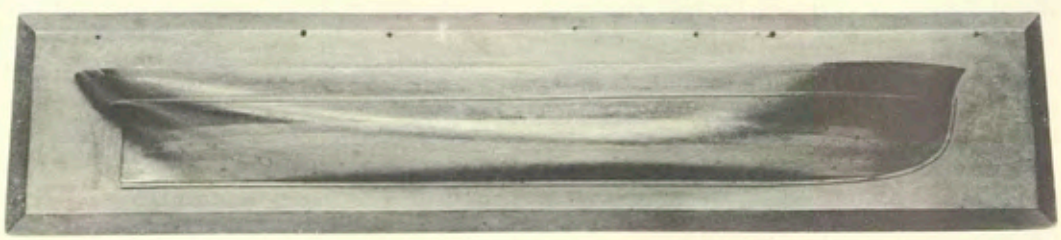
Refinement of method went even farther and occasional attempts were made to indicate sectional lines by various distribution of light and dark wood in the block before modelling. In so called "checkerboard" models the lifts were built of squared strips alternately light and dark and glued edge to edge. Some of the finest examples probably did not serve as builder's models but were made for show pieces or as examples of expert handicraft.



Top, model showing light and dark lifts of equal thickness, believed to be the schooner *Water Line*, 275 tons, 111.6′ x 30.2′, built at the Silas Greenman Shipyard in Westerly, Rhode Island, 1874. Silas Greenman was a brother of the Greenmans of Mystic. Pine and mahogany. 50″ length x 6½″ half breadth. (30.20) Bottom, a model with narrow dark lifts along the waterlines, representing a schooner built by Cottrell, Belfast, Maine, ca. 1875. Pine and mahogany. 53½″ length x 6″ half breadth. Formerly in the author's collection. (31.187)



A fine example of "checkerboard" construction, ship *B. D. Metcalf*, 1,189 tons, 190′ x 37.6′, built by Metcalf & Morris, Damariscotta, Maine, 1856. Backboard length, 61¼″. Formerly in the collection of Carl C. Cutler. (48.479)



Cabin model on wall panel from coastal steamship built in East Boston, ca. 1860-70. 48″ length x 3½″ half breadth. Formerly in the author's collection. (38.461)

Cabin Models

In old time vessels it was not unusual to see a small and more or less ornate half model firmly fastened to the panelled walls above the captain's desk. These were "cabin models," miniatures of hulls that bore them. Their purpose was useful as well as decorative, for they were visual reminders of sailing potentialities and handy references when it was a question of trim or of repairs. Considering the number of these which were made it is surprising that more have not been preserved. The example shown, that of a steam coast liner from East Boston in the 1860-70 period, is an easy one to classify, but unless there is a history; unless, as in this case, some of the vessel's panelling has been preserved; or unless there are certain deviations from builder's working half-model practices, it is unsafe to assume that this or that is a cabin model simply because it looks as if it might have been one. Size is no criterion, for some very large vessels have been constructed from small scale builder's models.

Variants

Peculiar builder's models, that is to say examples unique or out of line with the general fashions of the time when they were constructed, are now and then discovered by collectors. As a full description of those to which we have access would require space equal to that already used and be out of place in a paper devoted to common methods and types, we shall refer to only one variant, and our excuse for so doing shall be that it is one which occurs so often as to demand mention. This is the solid half-hull builder's model, no doubt the form which man first thought of and which has resisted oblivion even unto the present day. In one collection of 110 models there are no less than five of these primitive half-hull models, mostly of pine.

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Dr. Stillman's article remains the most comprehensive and authoritative work on half model types. He owned one of the largest private collections of half models in the 1930s.

William A. Baker, naval architect, adds the following information. "As far as I know, the oldest known Admiralty model dates to about 1650. It is so complete that considerable experience in model making must have preceded it. From manuscript scantling tables and remains of ships under water, it is apparent that the models that followed it do not show actual ship construction. It has been suggested that they represent the way ships would have been built about 1600, had sufficient timber been available.

"The contents of Matthew Baker's notebook suggest that it was a working file in use from about 1550 to 1600 or 1610 rather than the fixed date of 1586.



Solid block model of a Connecticut River drag boat, built by James Hurlbut, Essex, Connecticut, ca. 1885. Pine. 17¼" length x 2⅞" half breadth. Formerly in the author's collection. (38.514)

"The 'hawk's nest' type of model may be older than the 1810 to 1825 mentioned, or at least the method of designing was, for it was simply a continuation of the ancient method shown in Matthew Baker's notebook. At least one board has been found with the basic design lines for a small vessel scribed in (see *The American Neptune,* 38 (1978), pp. 170-74). The next step would be to draw a number of sections from the design lines, cut them out of thin wood, and mount them on the board. This was done as late as 1828.

"Lift models were used in major shipyards at least as late as 1960 for metal vessels, to lay out the plating for ordering. In general I would say that the lift model was a means for designing a ship used at first by shipwrights without the technical knowledge needed to produce a 'hawk's nest' model. As time passed and shapes departed from those developed by arcs of circles, the lift model or even a block model gave the shipwright a means of working out variations. N. G. Herreshoff did all of his designing by cutting block models."–*Editor*

MYSTIC SEAPORT MUSEUM: THE FIRST TWELVE YEARS

1929 25 December–Edward E. Bradley, Carl C. Cutler, and Dr. Charles K. Stillman meet to incorporate as The Marine Historical Association.

1930 2 January–Organizational meeting for adoption of bylaws. Edward Bradley elected President.

14 January–Connecticut Legislature approves Articles of Association.

3 September–First Annual Meeting, held at home of Dr. Stillman (present Seaport Administration Building). Nine members present.

Membership now 27.

1931 4 April–Marine Historical Association acquires a home when Mrs. Mary S. Harkness deeds over the Mystic Manufacturing Company, containing two acres and seven buildings. The Association begins to demolish wooden mill buildings and modify brick buildings for exhibition and storage.

The Museum's first vessel, sandbagger *Annie,* presented by Dr. Stillman.

9 September–The Museum's first exhibit opens in Assembly Hall (Wendell Building) for second Annual Meeting of members.

Membership now 71.

1932 Membership now 94.

1934 July, August–First public exhibits on Thursday and Saturday afternoons.

September–Rear Admiral Herbert O. Dunn elected President of the Association.

1935 Second exhibit building opens (now part of *Benj. F. Packard* Exhibit building), Cramp and Gildersleeve models displayed.

Summer–Attendance 184 (admission 25¢).

Membership now 97.

1936 Summer–Attendance 202.

Membership now 83.

1937 Summer–Attendance 89.

Clifford D. Mallory, Sr., elected President of the Association.

1938 22 March–Dr. Stillman dies. Carl Cutler named Managing Director in his place.

19 September–Edward Bradley dies.

Third exhibit opens (in south wing of Stillman Building).

Membership now 88.

1939 Spring–*Benj. F. Packard* panelling and artifacts acquired before the ship is scuttled in Long Island Sound.

Membership now 90.

1940 27 July–Fourth exhibit building opens, dedicated in memory of Dr. Stillman, at eleventh Annual Meeting.

Membership now 143.

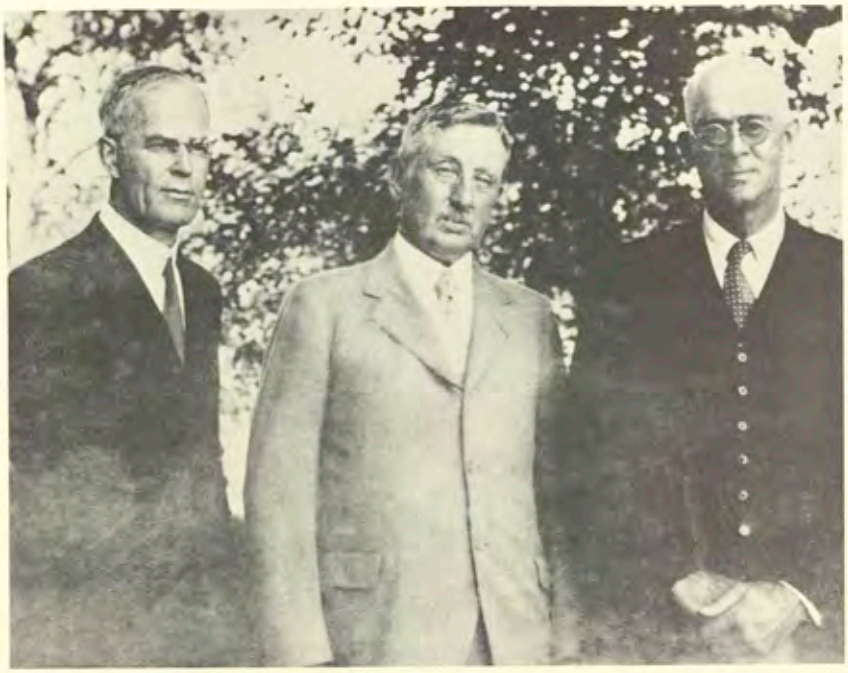
Pinky *Regina M.* presented by Clifford D. Mallory, Sr.

1941 7 April–Clifford D. Mallory, Sr., dies. Philip R. Mallory elected President.

Membership now 225.

8 November–Whaleship *Charles W. Morgan* arrives at Mystic (opens to the public, 27 June 1942).

Photographs follow





Left: The three founders, Carl C. Cutler, Edward E. Bradley, and Dr. Charles K. Stillman, posed together in the early 1930s. *Right:* Rear Admiral Herbert O. Dunn (1856-1939), a graduate of the U.S. Naval Academy in 1877, and a veteran of the Spanish-American War and World War I, joined the Marine Historical Association in 1930. He served as the second President, 1934-37.

The machine shop of the Mystic Manufacturing Co. became the first exhibit hall of The Marine Historical Association in September, 1931. It now houses the figurehead exhibit. Here it is seen in the spring of 1931, with the original wooden textile mill building (on the site of the anchor circle) behind it.







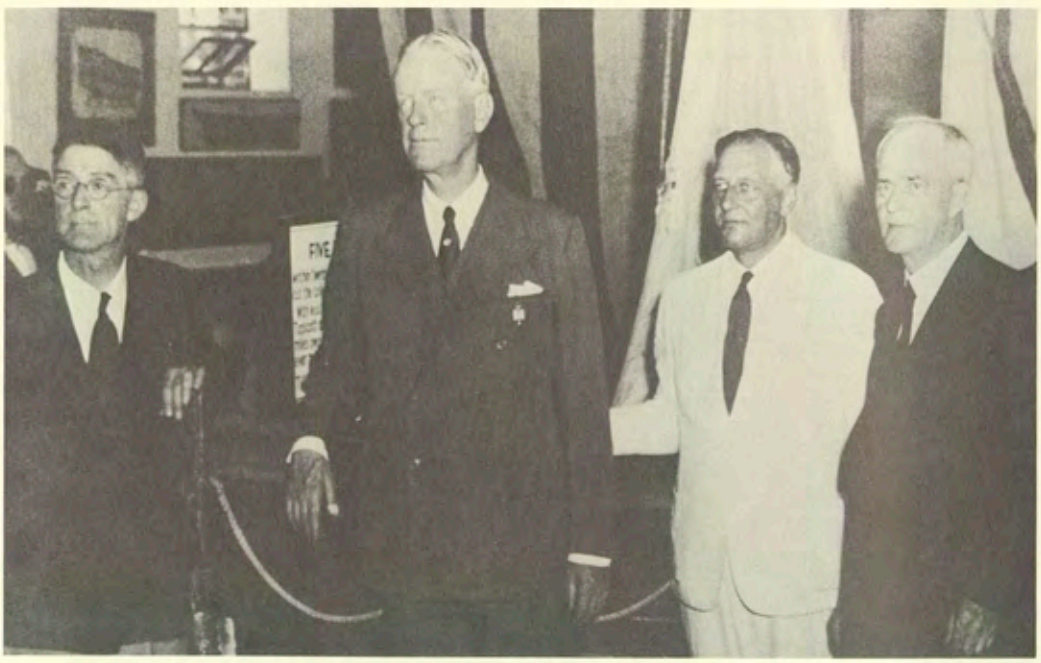
Left: Clifford D. Mallory, Sr., (1881-1941), President of the shipping firm of C. D. Mallory & Co., and other businesses, at the helm of his *Bonnie Dundee III*. He joined The Marine Historical Association in 1930 and was elected its President in 1937. *Right:* Philip R. Mallory (1885-1975), brother of Clifford, was President of P. R. Mallory & Co., a leading electronics firm. A member of the Association since 1931, he took over as President upon the death of his brother in 1941.

The Museum's first exhibit was open to members for several weeks in the fall of 1931. Many of the artifacts were loaned by the members themselves.

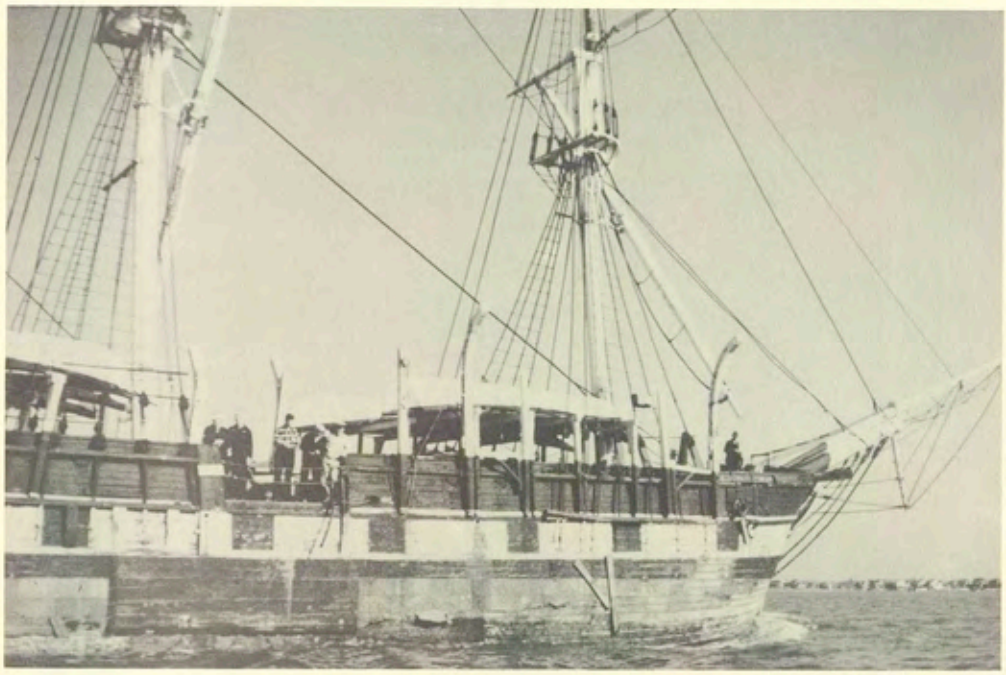




Sandbagger *Annie,* the Seaport's first vessel, arrived in 1931 and was exhibited for many years on this location.

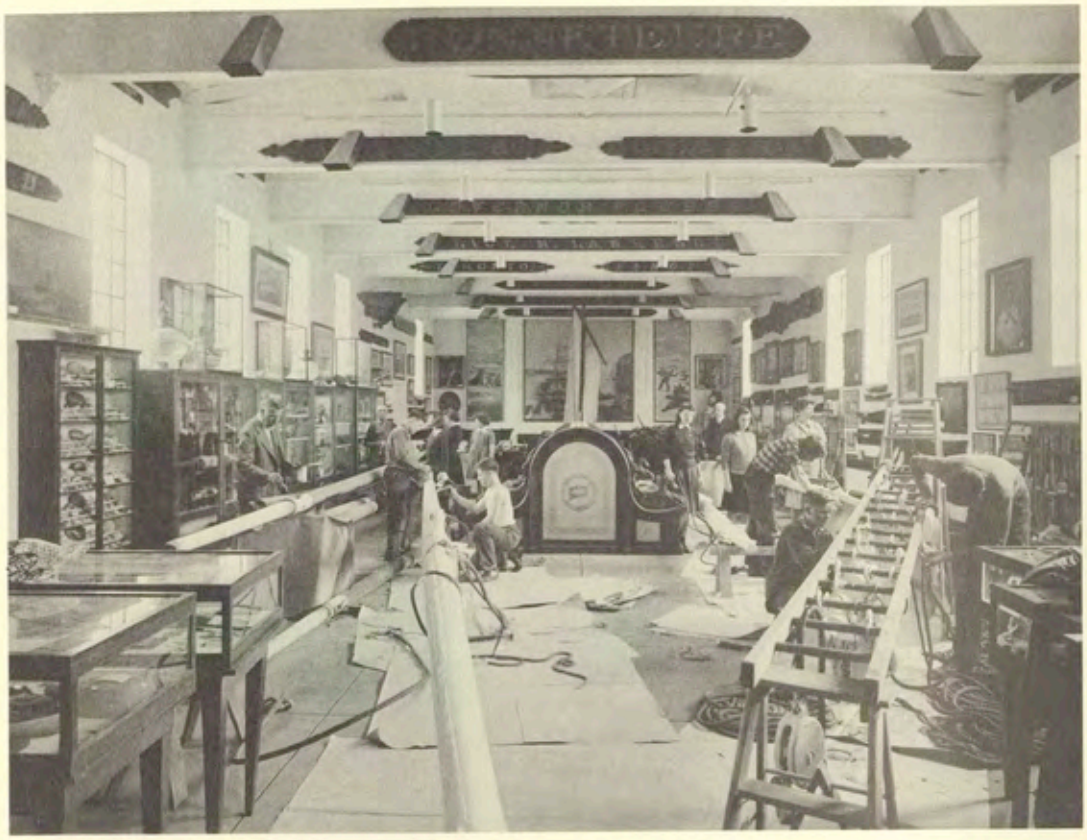


The war in Europe preoccupied members at Annual Meeting, 1941. General Manager Carl Cutler (right) and Brower Hewitt (second from right), early member and Vice-President of the Association, welcomed speakers George Emlen Roosevelt (center), Vice-Commodore of the New York Yacht Club, and B. J. Ellis, an English yachtsman.



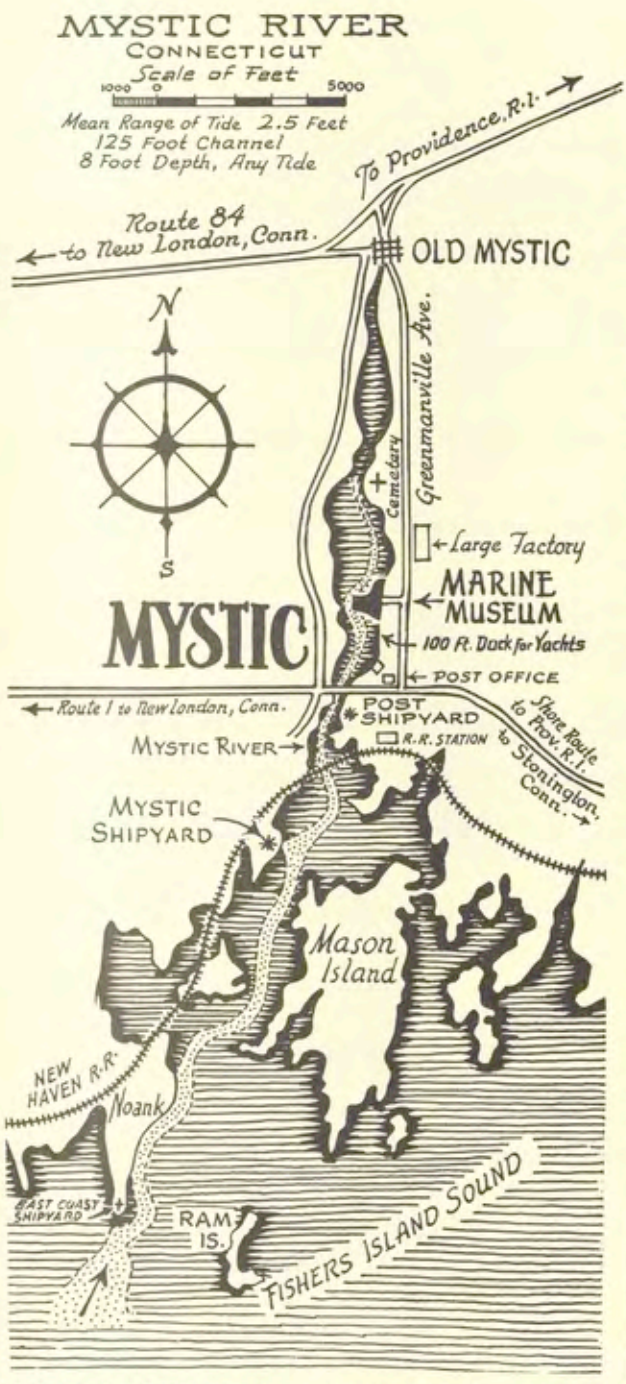
When it became clear that the whaleship *Charles W. Morgan* could not be maintained in New Bedford, Carl Cutler offered to take her to Mystic to ensure her survival. Her supporters, Whaling Enshrined, Inc., agreed, and in November, 1941, she was hauled out of her sand berth and towed to Mystic. The effects of years of neglect and the 1938 hurricane showed as she approached her new home.





Above: True to its desire to expose youth to the traditions of the sea, The Marine Historical Association began to train sea scouts early. Here, scouts and staff members paint the *Morgan's* blocks and spars under the watchful eye of Carl Cutler (right rear). They occupy the South Wing of the Stillman Building, opened as an exhibit hall in 1939. *Below:* Pinky *Regina M.* (left) arrived at Mystic shortly before the *Charles W. Morgan,* here dressed to celebrate V-J Day, 1945. The Bristol Channel pilot boat *Frances* (right) came to Mystic in 1943.





WHALESHIP MORGAN'S NEW HOME
2 hours from New Bedford week days, (2½ hours Sunday)

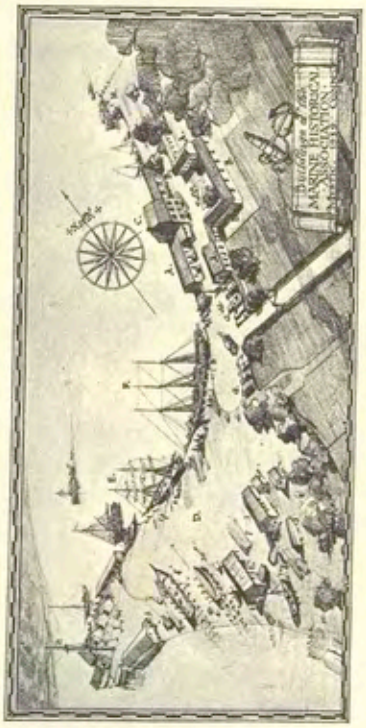
MARINE MUSEUM

OPEN EVERY DAY FROM 10 TO 5 (Sundays Included)
ADMISSION FREE

MARINE HISTORICAL ASSOCIATION, *Inc.*
MYSTIC, CONNECTICUT

(This folder donated by the New Bedford Printer who visited the Mystic Museum for the first time in Aug. 1939—Second time Aug. 5, 1941) — They have done a fine job in the interim. Taking the Whaleship Morgan over will be a bigger job and they will appreciate your help.

Our conservative estimate of the cost is $50,000. plus.



This advertisement appeared late in 1941. The illustration represents an artist's conception for development.

AN INVITATION
TO JOIN MYSTIC SEAPORT MUSEUM

We should like to extend a cordial invitation to like-minded individuals to join with us in programs dedicated to the preservation of our national maritime heritage. Annual dues materially strengthen Mystic Seaport Museum. At the same time, a member receives tangible benefits and privileges:

Unlimited Free Admission to Mystic Seaport Museum during regular hours. (In all classifications above Individual, this applies to the immediate family: husband, wife and their children through the age of eighteen).

Receipt of THE LOG *of Mystic Seaport,* a quarterly magazine devoted to articles on maritime subjects.

Receipt of the WIND ROSE, the Seaport's newsletter, reporting on current museum activities and personnel.

A Ten Percent Discount on boat dockage for Individual, Family, and Participating Members. Sustaining Members and above are accorded free dockage for the length of their stay.

A Ten Percent Discount on purchases at the Mystic Seaport Museum Stores, Inc.

Purchase of Guest Ticket Books at substantial savings.

Eligibility for Subscriptions to the Adventure Series, illustrated lectures for armchair travelers.

Memberships are available in the following categories:

Individual	$ 15.00	Associate	$ 250.00
Family	25.00	Life	1000.00
Participating	50.00	Benefactor	5000.00
Sustaining	100.00		

Contributions to Mystic Seaport Museum are deductible within legal limits for U.S. income tax purposes. Please make your check payable to Mystic Seaport Museum, Inc. and send to: Membership Office, Mystic Seaport Museum, Mystic, Connecticut 06355





GIFTS AND BEQUESTS

The development of the museum–the buildings, ships and wharves, the exhibits, books and manuscripts–give eloquent testimony to the generosity of members and other friends of Mystic Seaport Museum. There are continuing opportunities for gifts and bequests which will help assure its future strength and development.

Members of the Seaport who have not already done so are urged to perpetuate their interest in the work of the museum through a bequest. Some members will want to make a specific bequest while others may want to designate Mystic Seaport Museum as a residuary or contingent beneficiary of all or a portion of their estate.

Mystic Seaport Museum is a privately supported nonprofit institution. Contributions are deductible within legal limits for Federal income tax purposes. Inquiries regarding gifts and bequests are encouraged and may be directed to the Director of Resource Development.

SUGGESTED FORMS FOR BEQUESTS

General

I give and bequeath to Mystic Seaport Museum, Inc., a corporation existing under and by virtue of a charter granted by the State of Connecticut, and located in Mystic (Town of Stonington) in said State, $ . . . . . , to be used (or the net income to be used) at the discretion of the Trustees of said Corporation.

Residuary

All the rest, residue, and remainder of my real and personal estate I devise and bequeath to Mystic Seaport Museum, Inc., a corporation existing under and by virtue of a charter granted by the State of Connecticut, and located in Mystic (Town of Stonington) in said State, said estate to be used (or the net income to be used) at the discretion of the Trustees of said Corporation.



THE LOG
OF MYSTIC SEAPORT

Mystic, Connecticut 06355

Non-Profit Organization
U.S. Postage Paid
Mystic, Connecticut
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