The LOG of Mystic Seaport

Winter 1970



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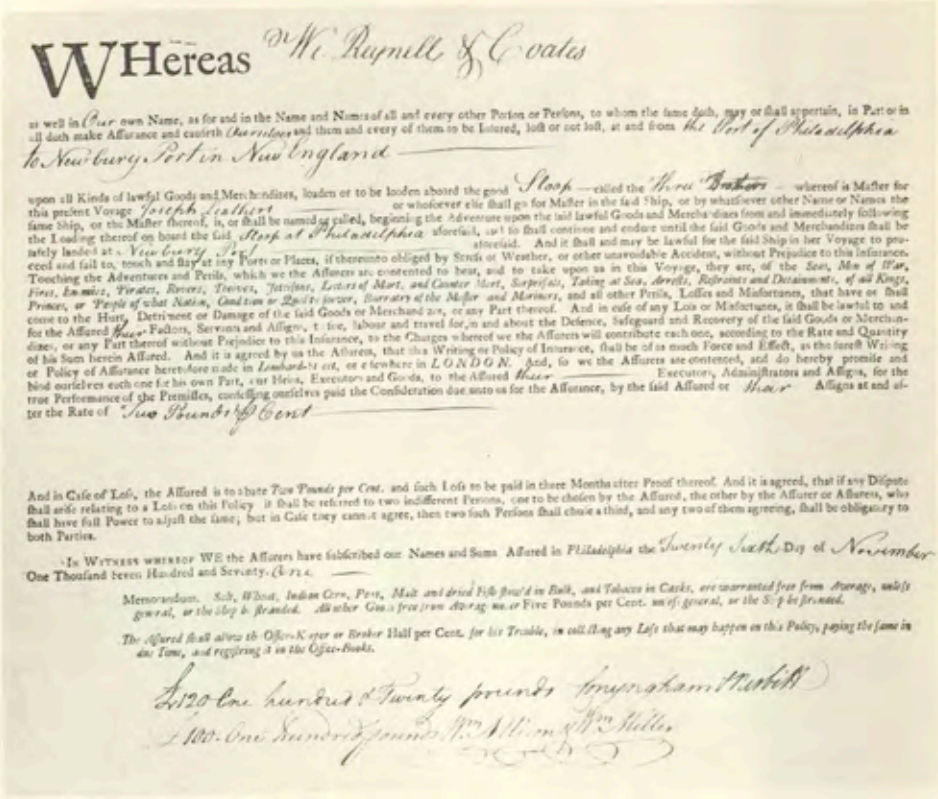
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upon all Kinds of lawful Goods and Merchandizes, loaden or to be loaden aboard the good Sloop called the Three Brothers whereof is Master for this present Voyage Joseph Stallcup or whosoever else shall go for Master in the said Ship, or by whatsoever other Name or Names the same Ship, or the Master thereof, is, or shall be named or called, beginning the Adventure upon the said lawful Goods and Merchandizes from and immediately following the Loading thereof on board the said Sloop at Philadelphia aforesaid, and to shall continue and endure until the said Goods and Merchandizes shall be safely landed at as aforesaid. And it shall and may be lawful for the said Ship in her Voyage to proceed and sail to, touch and stay at any Ports or Places, if thereunto obliged by Stress of Weather, or other unavoidable Accident, without Prejudice to this Insurance. Touching the Adventures and Perils, which we the Assurers are contented to bear, and to take upon us in this Voyage, they are, of the Seas, Men of War, Fire, Enemies, Pirates, Rovers, Thieves, Jettisons, Letters of Mart, and Counter Mart, Surprisals, Taking at Sea, Arrests, Restraints and Detainments, of all Kings, Princes, or People of what Nation, Condition or Quality soever, Barratry of the Master and Mariners, and all other Perils, Losses and Misfortunes, that have or shall come to the Hurt, Detriment or Damage of the said Goods or Merchandize, or any Part thereof. And in case of any Loss or Misfortunes, it shall be lawful to and for the Assured their Factors, Servants and Assigns, to sue, labour and travel for, in and about the Defence, Safeguard and Recovery of the said Goods or Merchandize, or any Part thereof without Prejudice to this Insurance, to the Charges whereof we the Assurers will contribute each one, according to the Rate and Quantity of his Sum herein Assured. And it is agreed by us the Assurers, that this Writing or Policy of Insurance, shall be of as much Force and Effect, as the surest Writing or Policy of Assurance heretofore made in Lombard-Street, or elsewhere in LONDON. And, so we the Assurers are contented, and do hereby promise and bind ourselves each one for his own Part, our Heirs, Executors and Goods, to the Assured their Executors, Administrators and Assigns, for the true Performance of the Premises, confessing ourselves paid the Consideration due unto us for the Assurance, by the said Assured or their Assigns at and after the Rate of Two Pounds p^r Cent

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The American Marine Insurance Market: an Outline History from 1820-1970

By C. Bradford Mitchell

Although this nation, founded upon and owing its first growth to shipping, knew marine insurance from the arrival of the first colonists, for decades it had to be imported from London, the center of underwriting capacity and expertise. Boston and Philadelphia boasted sizable fleets and traffic by 1699, but lacked the reservoirs of capital sufficient to underwrite the perils attending colonial trade.

The earliest announcement of a domestic marine insurance office was by John Copson of Philadelphia in 1721, but it fell to Joseph Marion of Boston to found in 1724 the first viable American office, lasting to mid-century. From the 1740s, offices multiplied in the leading ports.

In those days, the proprietor of an office was a broker who placed risks for shipowners and merchants by arranging to have men of substance and reputation underwrite (i.e., sign at a stated premium for) part of the risk covered by any policy "open" during their daily visits to his establishment. His office served as a meeting place for businessmen, commercial news bureau, civic and charitable activity center, and general financial center. This far-ranging community service forecast a trait distinctive of American marine insurance institutions of the next century.

After the Revolution, the new nation's shipping faced an expansion attended by great hazards: wars and pseudo-wars, embargoes, piracies and in 1818-1819 financial panic. For greater stability and strength many insurance offices had already become "companies" – generally partnerships or mutuals. Then, in the 1790s, came the stock companies: Philadelphia's Insurance Company of North America (1792); Insurance Company of the State of Pennsylvania (1794); Rhode Island's Providence Insurance Company (1799), and Washington (1800). They are still doing business. New York's Mutual Assurance Company was established in 1787, and in 1796 the New York Insurance Company, destined for a leading role in launching an American market.

This birth of the American marine insurance market took place in 1820, when the board of the New York Insurance Company inscribed in a minute book now in the archives of the Atlantic Mutual Insurance Company: "Resolved, that this Board deem . . . expedient . . . an association of all the marine insurance companies in this city . . . for the purpose of regulating premiums . . . and also . . . of reducing into a general system the principles on which losses shall be adjusted and settled, as well as any other matter in relation to the business of insurance. . . ."

This is the first known instance of American insurance companies seeking a basis of cooperation in conducting their business, and thereby recognizing their joint responsibility for that business.

However, no minutes were entered between November 27, 1820 and April 6, 1832, when "the Presidents and Vice Presidents of the several marine insurance companies of this city" met at the American Insurance Company and voted to form a board. Later they adopted the name The Board of Underwrit-

ers of New York, and established committees on premium rates, policies and clauses, settlement of losses and averages, and conduct of shipmasters and pilots. They also resolved that no action should bind the membership unless unanimously approved. And they regarded themselves as a direct and conscious derivative of the 1820 association. Appointment of agents to watch members' interests throughout the world began at once: the oldest such representative serving today, under an appointment of August 2, 1836, is the Plymouth (England) firm of Bellamy & Company.

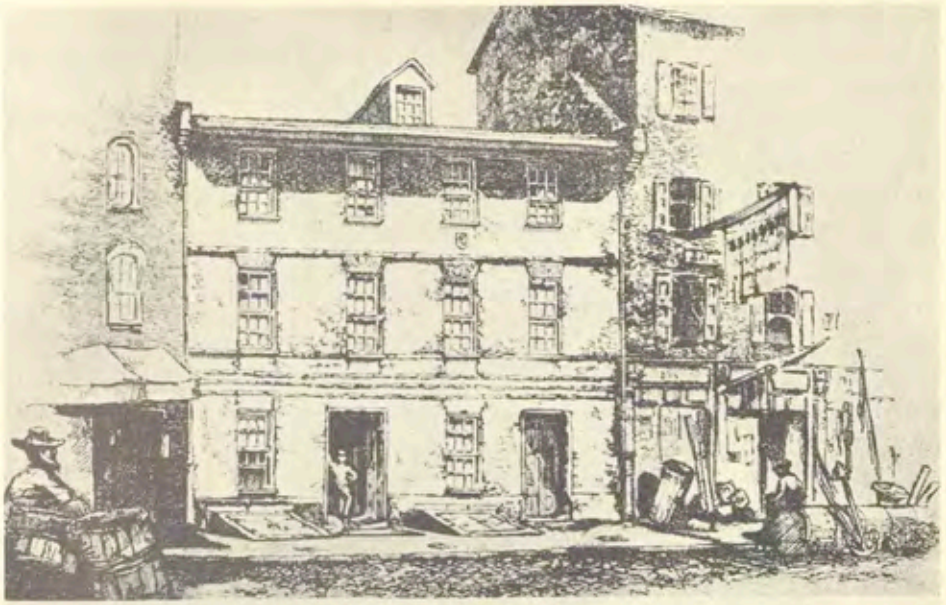
In October The Board of Underwriters of New York finally got down to 126 years' work, uninterrupted until the American Institute of Marine Underwriters virtually absorbed it in 1958.

From the start the Board's work involved a breadth and variety which has distinguished the American market ever since, especially in activities broadly beneficial to the marine industries and the community at large: e.g., surveillance of shipmasters' performance and qualifications, casualty investigations, stowage and cargo damage inquiries, and pressure for improved navigational aids, swifter communication, and readier assistance to ships in distress. Out of such activities arose numerous maritime and commercial institutions which today play vital roles locally and nationally, but are not generally thought of as connected with marine insurance.

The nine companies which founded the Board deserve to be remembered, though none exists today. They were the American, Atlantic, Jackson, National, Neptune, New York, Ocean, State Marine and Union Insurance Companies. The Commercial also was admitted, bringing the 1832 roster to ten. All were stock companies. Proliferation of companies on the mutual plan began a decade later, so that by 1856 its ten members were mutuals.

Between the panics of 1837 and 1857 came the heyday of American sail and the tardy emergence of American ocean steam, fostered by mail subsidy legislation. Powerful shipping and trade stimuli were provided by flourishing packet services, rising immigration, annexation of the West Gulf and Pacific coasts, and the California gold rush, and the American market burgeoned correspondingly. War risk rates were periodically invoked during these years, but the stress was on evaluation of risks. Steamers were somewhat grudgingly accorded lower rates than sailing vessels, albeit underwriters still distrusted propellers. A committee undertook to define "clipper ship" precisely, with a view to reduced rate classification.

From infancy the New York Board was concerned with salvage,



First Office of Insurance Company of North America
119 South Front Street, Philadelphia. Used 1792-93. The company occupied two rooms on the ground floor.
From an etching, about 1880, from contemporary descriptions, by Joseph Pennell, then a member of the Philadelphia Etching Club

in the trade connotation of moneys recovered from losses. By 1842 it decided to enter the salvage business in the popular sense of the phrase, acquiring a steam pump, hawsers and related tackle for aiding distressed vessels, and in 1854 it laid the foundation for what would be a century later the nation's largest commercial salvage firm.

A deep concern of underwriters was fraudulent handling of casualty proceeds and criminal "wrecking" on remote coasts. The market was also a generative force in communications. Through the 1830s and 1840s New York underwriters regularly patronized (and demanded improvements in) "The Telegraph," then a purely visual device employing semaphore arms, barrels, flags, or lights, restricted in range to the port's immediate coastal environs. In the 1850s encouragement was given the new electric telegraph, capable of reporting wrecks farther afield. At an 1859 meeting with Peter Cooper and Cyrus Field the board voted $3,000 to subsidize (for a year's free service) "the line . . . between New York and Squan, N. J.," thus helping launch the American Telegraph Company, now "A. T. & T."

Underwriters also relied heavily on the lifesaving stations along the coast for wreck information, relief,

and protection until custody could be assumed. After 1849 they cooperated with the Life-Saving Benevolent Association, which still exists – though its main functions have passed, via the old Life-Saving Service, to the U. S. Coast Guard.

The Board sought equally to *prevent* losses, pioneering many lines of marine safety, and in 1832 resolved "not to insure any vessel, or property shipped in any vessel, put under the command of those captains who have recently lost their vessels and whose conduct has been referred to" its Committee on Suspended Shipmasters.

In 1837 the Board lobbied successfully for federal legislation to correct abuses which it felt were lowering pilotage standards and imperiling ships; it sought also to raise performance levels by granting loans for pilot boat construction, and to this day it bears statutory responsibility for choosing two of the six commissioners to the New York Board of Pilot Commissioners. Also in 1837 there was strong Board support for aids to navigation: a successful appeal to Congress for "a floating light off Sandy Hook"; installations of fog bells similar to the one on Throgs Neck, and better lighting of the southern shoreline. A germ of modern Coast Guard search-and-rescue is discernible in the annual winter patrols off the bitter northeast coast. It supported channel improvement (notably the clearing of Hell Gate), rules of the road, charting and oceanography; sought naval protection of merchant shipping, and employed what amounted to a mercenary army to protect gold cargoes crossing Panama from California by mule train.

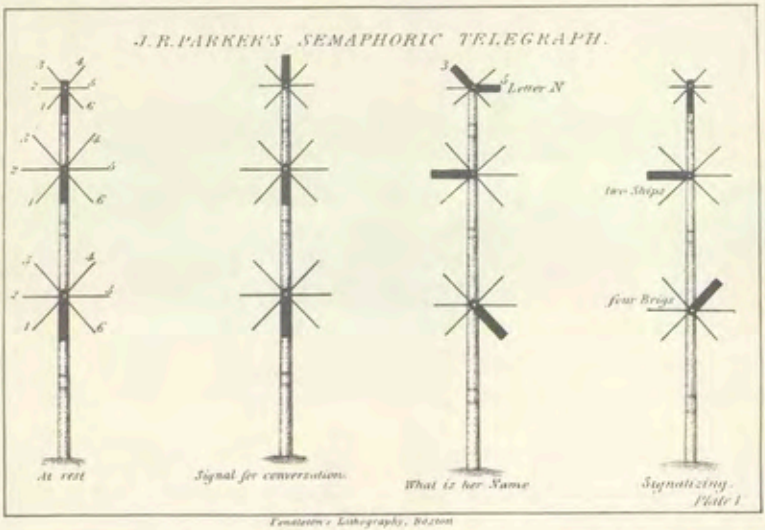
For American shipowners, shipbuilders and underwriters, the 1850s opened with a boom. Crack liners, steam and sail, flourished; clipper-building reached an 1853 peak of 120 launchings.

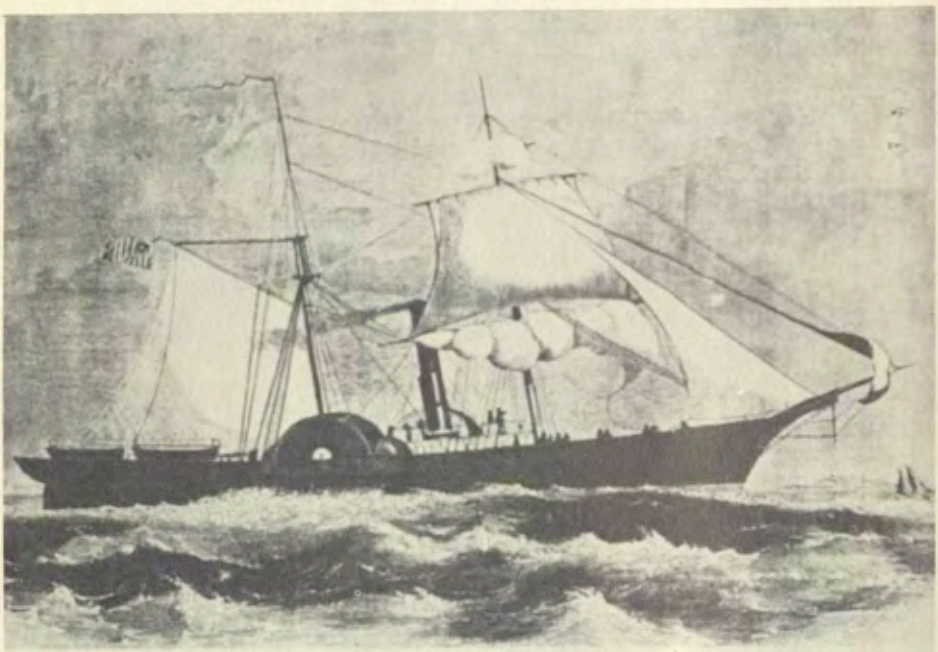
Then, with the panic of 1857, withdrawal of steamship subsidies, collapse of clipper construction, and diversion inland of capital and manpower, the nation's long shipping decline was underway. Personnel failures brought a suspension program for some ship masters, and convinced the Board that mariners' qualifications would be examined *before* losses, not *after*. So in 1860-1862 it created the American Shipmasters' Association, designed "to issue commissions to persons . . . worthy to fill the office of captain." Reduced premiums were accorded ships under masters so commissioned. The Association has since evolved into the American Bureau of Shipping.

Initially, the western market was simply an extension of the eastern, and the gold rush armada (if insured at all), was covered by eastern underwriters. By 1851 the New York Board had a San Francisco

agent, J. P. Haven, and for two decades this was one of its most important, and salaried, agencies. Early San Francisco burned down so regularly that its first insurance companies were mainly fire, and a local marine market had to wait until legislative authorization of marine writing by fire companies was approved in 1866. Fireman's Fund Insurance Company was first in the field; another name now eminent in the market first modestly appeared in San Francisco's 1868 directory: "Thomas C. Chubb, Marine insurance," founder of today's firm of Chubb & Son. Today San Francisco's Board of Marine Underwriters, founded in 1865, deals with special west coast matters and serves as Pacific Coast secretary of the American Institute.

For its first six decades the American market was a loose-knit pattern of local markets, with several independent boards of underwriters. Overlaps of jurisdiction and conflicts of interest and procedure were inescapable, and many underwriters felt the need of a truly national organization. To meet it, the Association of Marine Underwriters was established in New York in 1881 and reconstituted in 1882 as the National Board of Marine Underwriters, to maintain "uniform standards of laws, customs and practices in the modes of insurance, forms of policies and adjustment of losses." It proposed to leave local matters to local units and to concentrate on national concerns, but from the beginning the boards found themselves in frequent disagreement.





The United States Revenue-Cutter *Harriet Lane*
(From *Harper's Weekly*, c. 1860s)

It was not until 1898, when the American Institute of Marine Underwriters was organized, that the market at last had a fully national organization and finally, in 1921, the Institute and the National Board completed a mutually acceptable plan and became "The Board of Underwriters of New York, with which is incorporated The National Board of Marine Underwriters."

The First World War found United States ocean shipping emaciated and carrying barely 10 percent of our trade. The marine insurance market, being tied to the fortunes of the merchant fleet, was similarly unprepared; some two-thirds of the marine risks written here in 1914 were controlled abroad. On hulls, Europeans had a near-monopoly. By mid-August a trade journal reported, "Practically no insurance is being written."

Urged by shippers and shipowners, the government hastily created a Bureau of War Risk Insurance; its basic plan had been drafted by

Hendon Chubb who was called to Washington to set it up. Rates dropped quickly, and incipient market panic was allayed by the determination of major companies to continue writing. Government action to revitalize American-flag shipping followed, in the 1916 Shipping Act. This widened insurance market horizons by creating a Shipping Board and affiliated Emergency Fleet Corporation; also, its anti-trust exemption for international steamship conferences set a precedent for legislative treatment of marine insurance syndicates four years later.

Forewarned that the government might self-insure the huge emergency fleet already on the ways, in May 1918 a group of companies formed the Association of Marine Underwriters in the United States as a lobbying group in Washington with Benjamin Rush of the North America as president. Resolutions were passed early in 1920 assuring the government of its fifty companies' collective capacity to insure the new merchant marine up to at least $2 million per ship and proposing three syndicates to carry out the task, "A," "B" and "C."

Syndicate "A," providing the others with technical services, evaluations and surveys, has evolved into the United States Salvage Association, Inc. Syndicate "B," created to insure the government's mortgage interest in ships it sold,



Hendon Chubb (1874-1960), often called the "dean of American insurance," in his office in 1952. Photograph: Robert Nesmith.

ceased to exist after a few years, and Syndicate "C," now the American Hull Insurance Syndicate, was the chief end-product of the Association's two-year campaign. Centralizing the underwriting, premium and settlement functions, and applying a fixed apportionment of risks, receipts and losses among its subscribers – approximately 85 percent of American hull underwriters – the Syndicate has functioned with an economy which keeps it competitive with foreign markets. Many post-war developments had their roots in the war period, including Protection and Indemnity, colloquially "P. & I.," which covers

shipowners' liability for personal injury, death and loss or damage to others' property: in one authority's words, "most peacetime hazards not covered in the hull policies."

The story of the American market in its third half-century (1920-1970) becomes increasingly the story of the American Institute of Marine Underwriters. In the words of the old National Board, the Institute was becoming the market's prime authority and its ambassador to the markets of the world. Though this was not yet accomplished on the market's hundredth anniversary, it had the structure and capacity to cover postwar tonnage tenfold that of 1914 and an annual cargo flow valued at $12 billion.

Minute-bag sampling turns out some decidedly mixed interests: in 1928-1929 the Institute declined bids to endorse "calendar reform"; from 1925-1929 it assisted with the codification of federal maritime law then underway; echoing the nineteenth-century Board, it opposed Coast Guard-Navy merger in 1933, supported icebreaker legislation in 1935. It spearheaded the American market's wide-ranging pursuit of international accords, notably its battle for United States ratification of the 1924 Carriage of Goods by Sea Convention ("Hague Rules") for bills of lading. It was also represented at the International Conference on Oil Pollution at Sea in June, 1927. The previous year it had adopted a clause denying insurance to illicit narcotics shipments; in 1928 obtained virtually unanimous market agreement not to underwrite "munitions destined to China," and in 1929 it endorsed ratification of the Safety of Life at Sea ("SOLAS") Convention.

The Institute pioneered policy forms from 1898 and in 1921 a Standing Committee on Forms and Clauses supplanted the old Publications Committee. It devised and updated the basic American Institute Cargo Form in 1922 and later the American Institute Hull Form. From 1933 it was almost universally recognized as the American market's central authority on this subject. Effort was directed to resolving discrepancies, especially with regard to builders' risks, a Manila pilferage clause, warehouse-to-warehouse clauses and exclusion of P. & I. risks from hull policies.

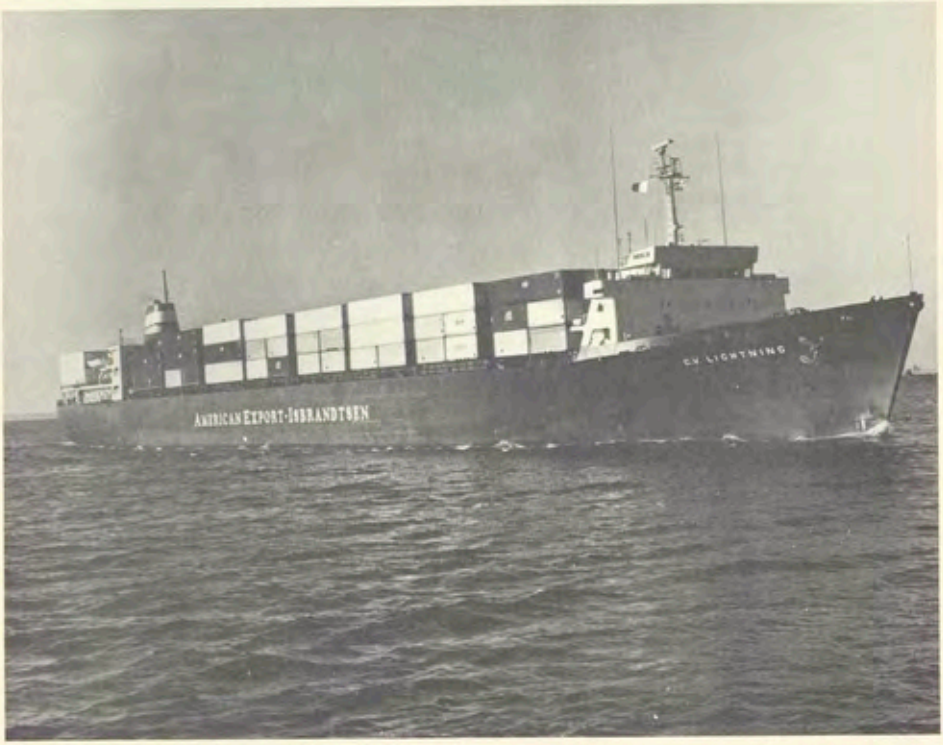
Three radical market developments marked the "peace interlude" between Versailles and Munich: the rise of "inland marine," the sorting-out of marine, fire and casualty powers as companies moved toward "multiple line" writing, and the evolution of the cargo policy from traditional "marine perils" to "all risk."

Emergence of the ocean cargo "all-risks" policy coincided with the introduction by insurance companies of scientific loss-prevention techniques. The 1919-1921 boom-

and-bust in cargo shipments to Europe and South America brought unprecedented demand for so-called "extended conditions" in covering cargo which might be delayed or left standing on piers.

Heavy disasters tested the market's enlarged capacity: the Japanese earthquake of 1923; the Florida hurricane of 1926; the catastrophic New England hurricane of 1938; with the major disaster, of course, being the depression precipitated by the stock market crash of 1929. Marine insurance men, who are keen economic weather forecasters, kept a wary eye on the speculative jamboree across the street.

The market's awareness of impending conflict may be noted from the increased number of meetings held by the 1925-established Special Advisory Rating Committee: upward of 75 in 1935; 1937, 125; 1939, 160; 1940, 200. Dominant meeting topic was war risk in all its ramifications. In 1936 American underwriters agreed to 48-hour cancellation on open-policy war risks. Its greatest accomplishment, however, was its organization of



Large container ship in the 1960s – a new department of loss prevention. Photograph: Flying Camera, Inc. for American Export Industries, Inc.



The world's largest and most powerful icebreaker, the Manhattan, *on her eighty-day, 10,000 mile first voyage through the northwest passage, which engineers believe began a revolution in shipping patterns. Photograph: Dan Guravich for Standard Oil Company (New Jersey).*

the American Cargo War Risk Reinsurance Exchange in May, 1939, with the Special Advisory Rating Committee as its underwriting arm. Some 140 member companies reported their original war risk policies to the Exchange, which apportioned reinsurance among the full membership in a ratio fixed by each company's subscription. It is impossible to overstate what the Syndicate, the Exchange and the underwriters manning the government program contributed toward winning the war.

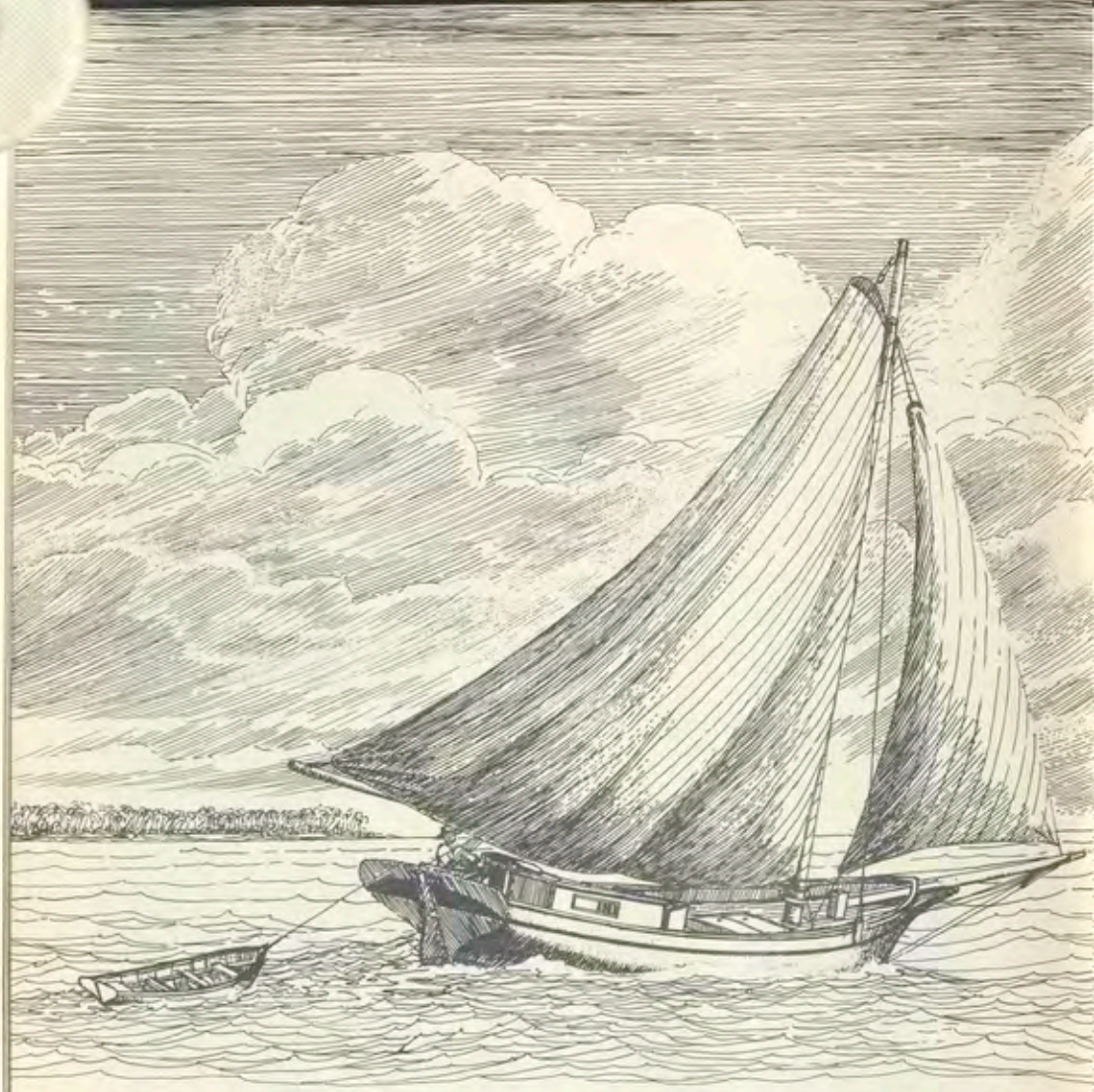
During the 1940s there was a rough "division of labor" but also considerable overlap, for it became evident that, despite separate organizations, Institute, Association and Board were branches of a single trunk. In 1947-1948 Institute and Association assimilated their officer hierarchies and established a Joint Liaison Committee "for the purpose of coordinating the activities of marine underwriters." Merger was unmistakably in the wind.

With growth came changes, including establishment of the National Cargo Bureau (a merging of the New York and San Francisco Boards' inspection bureaus) in 1952, which shared quarters with the New York Board until 1956, when it was reported "ready to operate as an independent organization." This hastened the absorption of the New York Board and the Institute, and in late 1958 it voted to merge with the Institute. Full integration is still being perfected, although since 1964 they have had synchronous annual meetings and since 1965 identity of officers.

The past twenty years have brought the market several important categories of new or escalating risk: air transport, which Chubb and the Marine Office pioneered; supertankers for seaborne petroleum and the resulting world-problem of oil pollution; and nuclear risks – where means of offering coverage are still being developed.

Today, at the beginning of its fourth half-century, the American Institute of Marine Underwriters – as the central entity for the American marine insurance market – is working for an open, non-discriminatory world insurance market, for closer collaboration with all branches of transportation insurance, and for international accords to cope with the awesome risks of the nuclear revolution. Its great challenge continues, as in 1920 and 1820, to be the challenge of capacity.

Editor's Note: This article has been condensed from *A Premium on Progress: An Outline History of the American Marine Insurance Market, 1820-1970* by C. Bradford Mitchell, with the permission of the American Institute of Marine Underwriters.

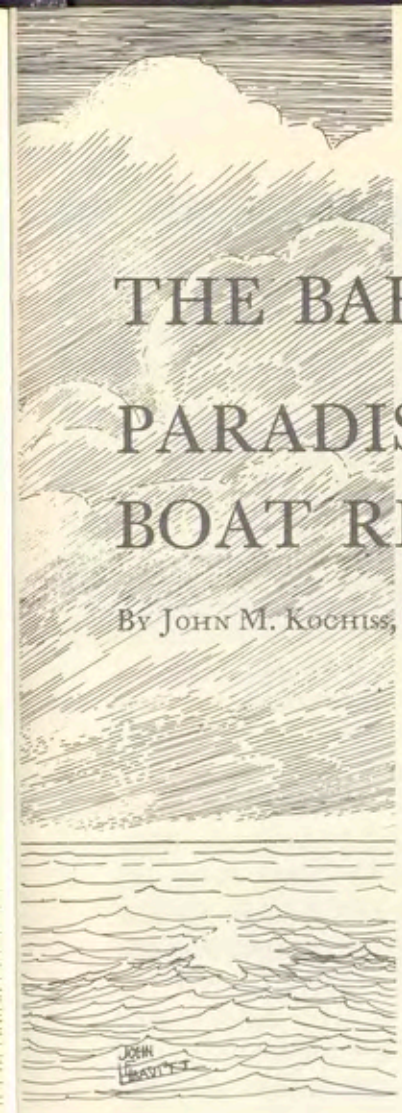


Bahamian sloop with shoulder-of-mutton sail. Many Bahamians use this term, but leg-of-mutton with a very wide headboard is more accurate. Drawing by John Leavitt.

A few years ago I appointed myself to a stimulating job. I pulled up moorings, took a teaching position in Nassau – to earn a living – and devoted my off-hours to recording with pencil, camera and measuring tape the native boats of the Bahamas.

Surprisingly, for an area so close to the United States, no extensive work on Bahamian craft appears in print, though a few magazine articles take a jab at it. My self-appointed task, therefore, proved that much more intriguing.

Most of my attention focused on contemporary craft and trades and those remembered from the immediate past. Routine research with written and pictorial material paralleled the field work. Here the boats and trades of the eighteenth and



THE BAHAMAS: PARADISE FOR A BOAT RESEARCHER

By John M. Kochiss, Research Associate

nineteenth centuries cast their shadows but that's about all. Beyond the merest mention or hint in old newspapers and prints, research at Nassau's library-museum slowed to a crawl. These backward glimpses into history only served to emphasize the need for further research in England and elsewhere.

After the initial encounter with a seemingly bewildering array of watercraft, an identification and classification of types and their variations emerged rather easily. The lines of twelve representative boat types were then taken off and these and others photographed. The measured boats ranged from the common round-bottom dinghy to the big fishing sloops. Even a Haitian sloop submitted to tape and plumb bob, for those crude but fascinating boats are now almost as much a part of the Nassau scene as the native boats.

Numerous formal and informal interviews with sailors, sailmakers, boatbuilders, and fishermen sparked the study and afforded an opportunity to visit Abaco, Andros and the other Out Islands. For the entire sunny island group scattered over 700 miles of aquamarine seas





Haitian sloop on shore in Nassau for repairs, left. Note rough-cut tree trunk for mast. On right, Andros dinghy and a sloop careened at Nassau.

is one huge living marine museum where native craft are seen daily at market, sailing, fishing or careened and under repair.

But Nassau's waterfront, familiar to every tourist, turned out to be one of the richest sources of information. Nassau, like a modern imperial Rome, is the hub of the Bahamian sea trade. Boats and men from as far off as Turks Island and Haiti gather here to sell their varied cargoes, meet friends, and have a good time.

A number of features combine to make Bahamian watercraft distinctive. The most obvious is the loose-footed short gaff or shoulder-of-mutton sail seen today on most of the native sailboats. The rig apparently developed in Holland during or before the seventeenth century and was carried to the New World by the English. Sometime in the nineteenth century the Bahamians adopted the rig from their sister colony, Bermuda. To the modern eye it may appear quite outdated but in reality is admirably suited to the Bahamian seas and wind conditions and even to the unique Bahamian hull it so beautifully graces. For one thing, a large amount of sail can be carried on a relatively short, simply supported mast with this rig. Reefing is easily and quickly done by tricing up the huge bunt of canvas at the foot of the sail.

Another feature not as obvious, however, is the shape of the midship section as seen on most boats in the Bahamas today. Frames are always natural crooks of the horse-

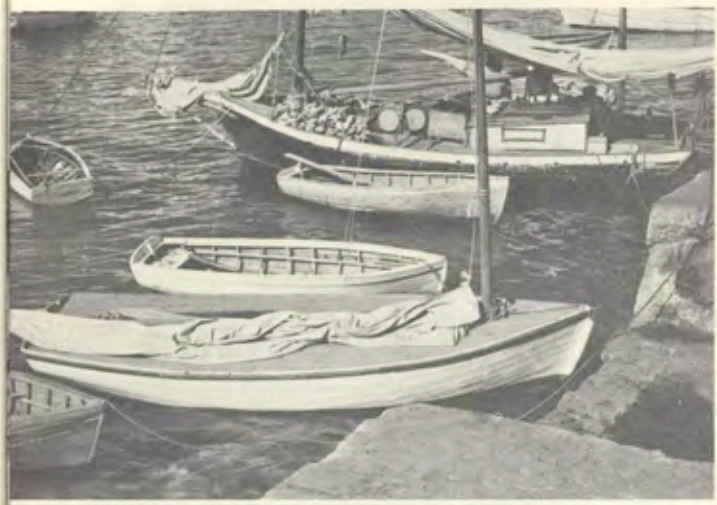
flesh, madeira or dogwood tree with the midsection as well as the other sections taking on the same natural curves as those formed at the root and trunk. Characteristically, the midsection shows a long straight floor which rises from the keel in almost a straight line – with no hollow or reverse curve – then turns sharply at the bilge, and tumbles home just a bit at the sheer. The dead rise may be flat or slack – "it all depends," as the builders say. A fast boat will have slacker bilges than one intended to carry heavy loads. Current Bahamian boat design evolved many generations ago and apparently has not changed much in one hundred years. No half models or plans exist to show us graphically what the early craft were like, and for a very good reason: few if any models or plans were ever used. Yet the designs lived on from generation to generation in the form of memorized rules-of-thumb, a boatbuilder's Ten Commandments so to speak. The rules established the main dimensions and the rest of the boat was designed "by eye."

Some of these rules or formulas were jogged from the memories of old boatbuilders during my interviews. Unfortunately, many more no doubt are lost forever, particularly those applicable to the extinct craft. Each island cherished its own set of rules and distinctive eye-appealing features, and even on the same island each boatbuilder interprets or deviates from the rules ever so slightly to suit his own ideas or those of his client – if they are not too extreme. This is one reason why an experienced eye can tell almost at a glance where a boat came from or even who built her.



Racing dinghy on left and Abaco dinghy on the right.

One of the first considerations in designing, building or buying a boat is determining or knowing her length. When Bahamians speak of a boat's length they mean the length of the keel, not the overall length, as we do. Most other vital dimensions on any type craft relate to this key figure. As an example, some design formulas for the most common Bahamian working sailboat, the loose-footed, shoulder-of-mutton sloop, are as follows: the beam equals half the keel length,



Typical Bahamian sloop (black hull) with an array of Andros dinghies and a cat-rigged small fishing boat in foreground.

the transom width measures three-fourths the beam, the bowsprit and beam have the same dimensions, and the mast length is twice the keel length. One significant tenent, related to the keel length though not expressed as a formula, places the mast at or slightly aft of the fore end of the keel. In spite of all these rules, no simple or universal set of "rules-of-thumb" can represent definitely any one type of craft. There are too many "It all depends."

Only a few of the various types of former boats and vessels remain today. The rig and deck arrangement varies according to use or type but the hull forms are quite similar. In addition, the hull is characterized by a long unballasted wooden keel with slight or no drag to it, a heart-shaped transom stern, outside rudder, raking stem either bare as on the dinghy or clipper fashion as on the sloops.

Three rigs are seen nowadays: the sloop with shoulder-of-mutton sail, the gaff-rigged sloop, and the cat – again with the familiar shoulder-of-mutton sail. It is interesting to note that Bahamians reserve the name "sloop" for those boats with a gaff sail whereas the common sloop with shoulder-of-mutton main and jib on the bowsprit is called a "sailboat" or "sailing boat," never a sloop. Oddly enough, no other boat with sails is referred to as a sailboat.

The smallest Bahamian watercraft, the dinghy, about ten feet on the keel, has an ancestry apparently reaching back to the yawl boats of Colonial days. It wasn't, however,



Native boats selling conch at the Market Range in Nassau, jib stemmers in background, sloop in center, "moon sheer" Andros dinghies in foreground.

until sometime after the advent of sponging in the mid-1800s, a trade demanding countless numbers of dinghies, that it reached its final development. The sponging dinghy, like the banks dory, was worked by two men off a mother vessel – a sloop or schooner. A small boat was needed that would scull well, carry a sufficient number of sponges, rugged but light enough to be lifted on deck. Three types or models evolved that can still be seen today – the Abaco, the Andros, and a combination model. Each design reflects the history, geography, economics, and the ethnic culture characteristic of the place of origin. The Abaco model sports a moderate to snappy sheer line and is designed fuller than most models – traditionally to carry heavier loads. In early days Abaconians needed a full form to carry their farm produce from the mainland island where their farms were located to the outer cays where they lived. Their sponging dinghy always seemed to retain this full-bodied feature. The Abaco model was invariably built better than any other boat in the Bahamas. The cruder Andros boats were less beamy, sharper all around, and hence faster than the Abaco boats. One Andros feature is the straight or frequently hogged sheer line sometimes called the "moon sheer." They claim this hump is meant "to keep water out to leeward."

Dinghies are built on other islands, but they are either copies of these two or display characteristics common to both.

In the 1930s, when a sponge dis-

ease put an end to sponging, the dinghy lost its century-old function. Today it serves as fish, conch, or utility boat and tender for the working sloops. Many now are built specifically to compete in the dinghy races of the Annual Out Island Regatta held at George Town, Exuma since 1954. As a consequence, the design trend with some builders is toward a strictly racing model. These boats are admittedly attractive but inferior to the traditional Abaco or Andros dinghy for work.

Between the ten-foot dinghy and the big sloops two general types are used for fishing and conching. The smaller model, about fifteen to twenty feet overall, is nothing but a husky, deep dinghy with a fish well amidships and an open cockpit aft. The larger one, above twenty or so feet, has a small trunk cabin aft. Most are cat-rigged with no bowsprit and are called "bare headed" because they lack the bowsprit. Some carry a small jib on a stay to the stem head and are termed "jib stemmers." All of these craft have the familiar shoulder-of-mutton rig.

The gaff rig is seen now only on boats from the islands south of the Exumas, such as Turks Island and the Caicos; before the turn of the century it was distributed more extensively throughout the Bahamas. The rig and hull of these boats are rather different from those found in the north and exhibit influences from Haiti and the Canadian Maritimes. The so-called "coco bow," copied from the spoon bows of the American and Canadian schooners of the early twentieth century, are features of the big stemheaders from Ragged Island.

Unfortunately, these few sailing craft are about all that are left in the Bahamas, although many fascinating extinct types are remembered by the older generation – types which disappeared when the trades they represented gave out or the boats were replaced by motorized vessels. Among these were the two-masted sponging schooners that flourished as late as the 1950s. Other and larger two-, three- and four-masted schooners were built or owned at Abaco, Harbor Island, Eleuthera. These vessels, patterned after United States craft, traded with the states, carrying lumber out of Savannah or delivering Bahamian pineapples or tomatoes to New York and other ports. The later models represent the last energetic spurt from the 300-year-old Bahamian shipbuilding industry. Then there were the mail, pilot, and general cargo boats, the flatbottom, centerboard, cat-yawl or "pineapple flats" from Eleuthera, the Inagua salt lighters, and the ketches from the islands to the south.

The magnanimously free trade wind keeps sail alive today in the Bahamas. To the poor Out Islander, with meager job prospects





Modern-rigged Eleuthera pineapple flat, left. "Coco bow" Ragged Island jib stemmer in Nassau, right. All photographs by the author.

ashore and little money, his sailboat and dinghy are his only means of support. With her he fishes, conches, or delivers fish and farm produce to Nassau and other islands. Fortunately for him and sail, big motorized fishing vessels have not yet grasped this small, mostly native market. However, change is inevitable. Conversions from sail to power occur often yet few sail boats are now being built. Fiber glass, motors, new methods of food distribution and even food preferences are rapidly squeezing sail and wooden boats out of existence. Young men are now unwilling to learn boatbuilding – a trade they consider as having no future, and even the older men shy away from it if they can. Furthermore, lack of suitable native wood like horseflesh, madeira, and dogwood adds to the decline. And though the wind is as free today as it was in the past, "who wants to beat against it for days when a motor can do the job in hours?" So the thoughts and elements of the times appear to make a mockery of the old ways and the glorious era of wooden ship and boat building nears its end.

Andros and Long Island are about the only places today where working sailboats are built to any extent, and even here a builder will construct perhaps one a year. Up to the 1930s Abaco led the Bahamas in quality work boats. Today the famous Alburys build only small yachts and dinghies instead of the square riggers, schooners and sloops of their forefathers.

So here in a cockleshell is what was learned in the Bahamas. A little more work down there should complete the study. Then, next stop – farther south to the West Indies proper where another relatively unexplored researcher's paradise awaits.



Mr. Johnston and Robert G. Sharp at the wheel of Star of India. *Photograph: San Diego Union.*

SAN DIEGO: First Members' Station for the MHA in the United States?

About one-third of The Marine Historical Association's Southern California membership gathered on Sunday evening, October 11, at Harbor Island Travelodge in San Diego to meet each other and hear

Waldo C. M. Johnston describe the efforts in Mystic and in European maritime museums to restore the few historic ships remaining throughout the world. Boat-owners especially can appreciate this labor, and the Kodachrome slides used to illustrate the talk were most graphic.

"Mystic Seaport has 160 vessels – large ones like the whaleship *Charles W. Morgan* and the Gloucesterman *L. A. Dunton* and smaller fishing boats, work boats and rowing types. All require continuing attention – some more, some less – but it is to the preservation of these that we are dedicated," Mr. Johnston told his audience.

The head table included Mr. and Mrs. Johnston, Mr. and Mrs. Robert G. Sharp of San Diego, who had arranged for this first Mystic Seaport Station meeting held in the United States, Joseph Jessop, president of the San Diego Historical Association, and Charles Mallory, now a student at Claremont Men's College in Claremont, California, who represented his father, Clifford D. Mallory, Jr., first vice president of the Association and his aunt, Miss Margaret Mallory of Santa Barbara – both MHA trustees.

Prior to Mr. Johnston's talk, the fifteen-minute color film *Mystic Seaport* was shown.

On Sunday morning, October 11, Mr. and Mrs. Johnston visited San Diego's museum ship *Star of India* and were greeted by Mr. Jessop – as well as television and newspaper cameramen, photographers and reporters – before touring the ship. All nineteen sails were set by a crew of four in honor of the director and remained set throughout the day. Visitors to the ship were informed that this had been done to honor Mystic Seaport and the Johnstons.

Three of the *Star of India*'s crew, Bob Scott, Phil Adams and Gregg Smith, attended the Travelodge meeting that evening especially to hear Mr. Johnston.

ALMA ESHENFELDER,
Publicity Director

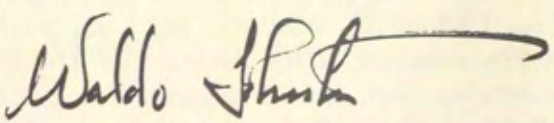
The Marine Historical Association has received its first payment from the Connecticut Historical Commission on the Grant-in-Aid for restoration of the *Charles W. Morgan.* The grant was announced in January 1968 in these words: "The Commission recognizes your unique contribution to the field of historic preservation, your contribution to the State as an outstanding tourist attraction, and your devotion to authenticity and historical integrity in the work of restoration."

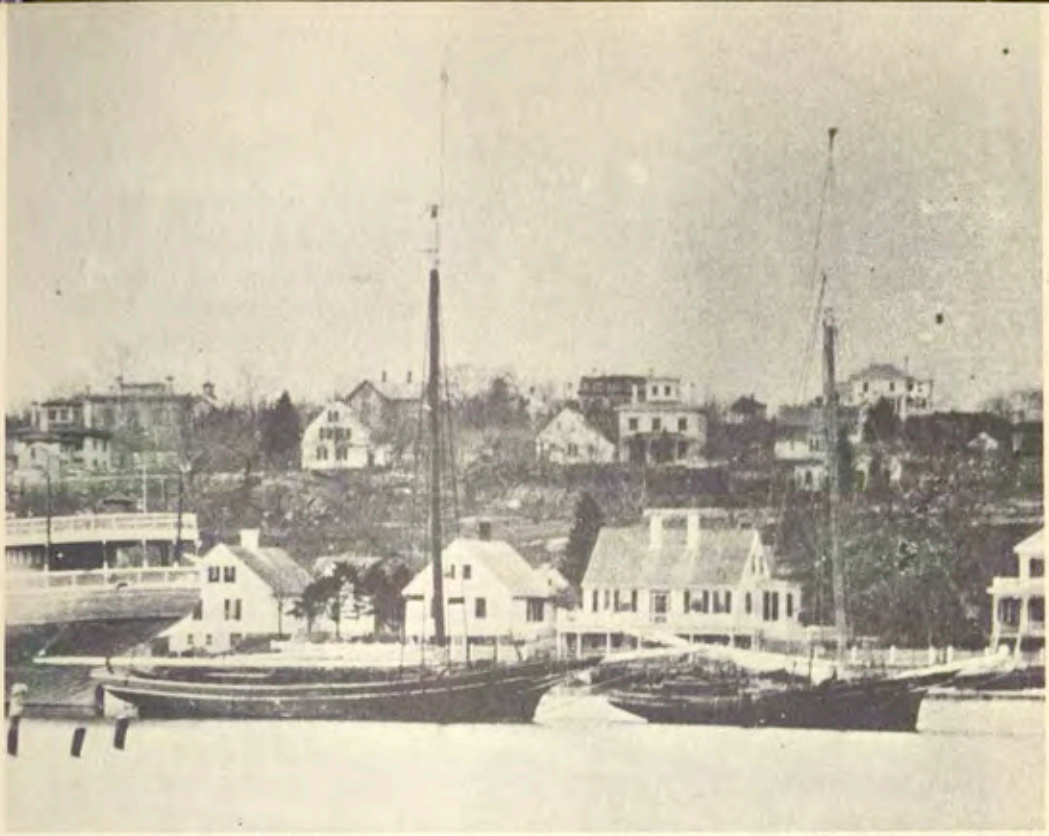
Director's Report

In October Mystic Seaport journeyed to San Diego. Acting upon the invitation of the Robert Sharps, the Carl Ackermans, and other MHA members, several Seaport staff members spent three days on the Pacific Coast, talking old ships and the days of sail, renewing acquaintances with members whose memory of Mystic goes back many years, and bringing them up-to-date on Mystic Seaport.

We found a gracious welcome in California and a warm response that sent us homeward with an awakened awareness of the closeness of the maritime heritage of our two coastlines. Many people were well informed about the economics of the nineteenth-century East which enabled the nineteenth-century West to grow and flourish. The sea and knowledge of history are great common denominators in these days of division in our country.

It is our sincere hope that San Diego will become Mystic Seaport Station Number One and will be the forerunner of other such MHA organizations throughout the United States. Such organizations could set a new course for future relationships between the museum and its far-flung membership which could hold great promise for the continuing vitality of Mystic Seaport.





Two Noank sloops, iced in their winter berths in the Mystic River just above the highway bridge. This old photograph will be used in restoring the Emma C. Berry *to her original rig.*

Reframing the *Emma C. Berry*

described and illustrated by WILLITS ANSEL, ship carpenter,
with an introduction by MAYNARD E. BRAY, shipyard supervisor

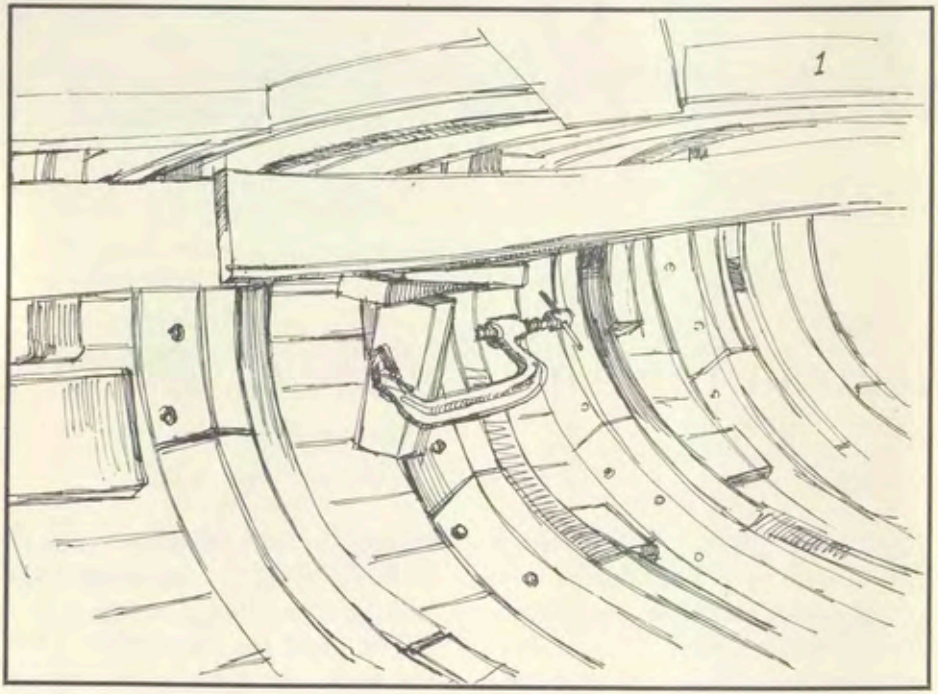
One of the most relevant vessels belonging to The Marine Historical Association is the Noank smack-sloop *Emma C. Berry*, launched only three miles downriver 104 years ago. James Latham was her master-builder and his personal journal, now in the museum archives, mentions her. Noank sloops, as a characteristic type, were well-known along the New England coast and ranged from 20′ to 50′ in length. We are fortunate in having in our collection what is probably the last surviving large (47′) Noank sloop.

The Log for September 1969 described the *Berry*'s journey to Mystic but much has happened to her since then. She leaked when she arrived, both through her deck and bottom. Fresh water introduced through leaky decks will rapidly rot a vessel, so we first set out to tighten up her decks and at the same time renew any wood which

had already rotted. This task was completed early this spring with the renewal of her bulwarks, their stanchions, covering boards and sheer streaks along with other pieces such as deck beam ends, etc.

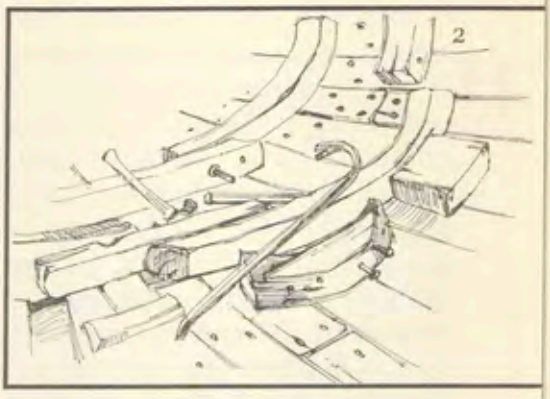
With her hauled out and housed inside a plastic shed, we then started on her leaky bottom. An inspection of her framing, once it had been exposed, indicated a need for its complete renewal and it is this process, now complete, which Will Ansel describes in the following article.

Before her launching next spring, we expect to have her deck arrangement and rig altered and restored to her appearance in 1866. M.E.B.

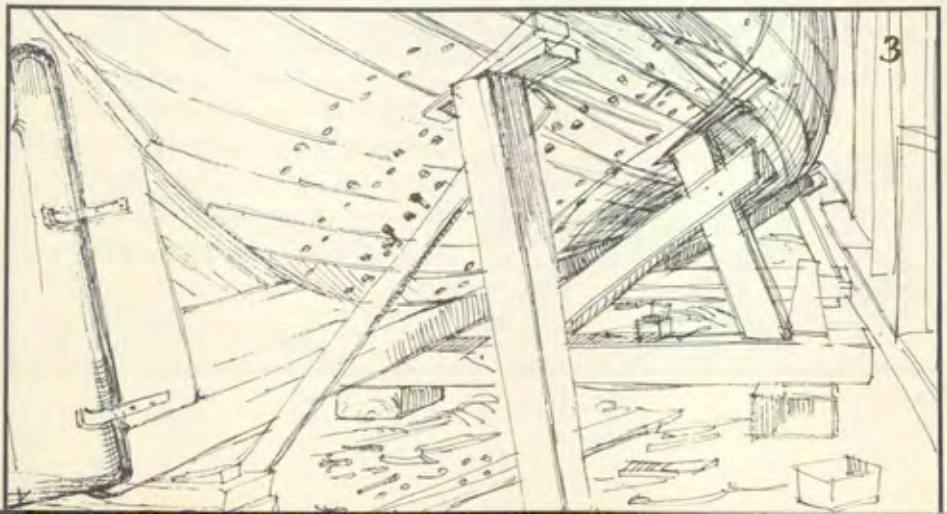


The *Emma C. Berry* was virtually reframed by ship carpenters at Mystic Seaport during restoration of the vessel in 1969-1970. The need for this work became clear as the ceiling was removed, the bilges cleaned and the frames uncovered (fig. 1). A few frames, mostly in the bow and stern, were left in the boat, but of a total of twenty-five, nineteen new frames were built. This construction presented some problems in designing and fitting not found in new construction.

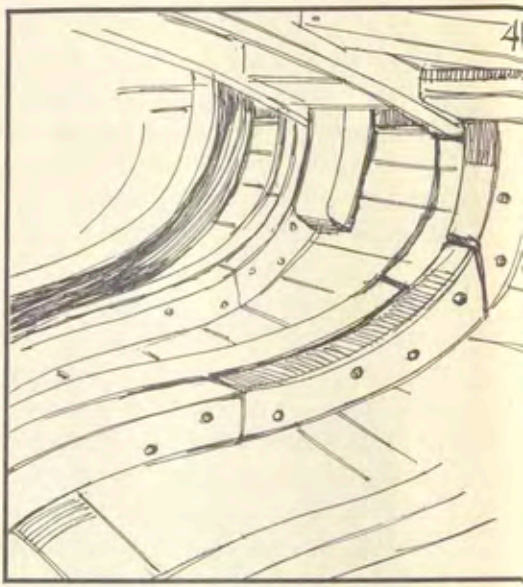
The frames that were in the boat before restoration began appeared to vary in age from originals bored for wooden treenail fastenings to frames placed in her during reconstructions in the 1920s and 1930s. In most cases, whether new or old, the frames had deteriorated next to the planking and the fastenings were weak (fig. 2). Most frames were white oak, a few with the bark still on top. Some birch was found, which probably went into the *Berry* during her rebuilding in Maine. The fastenings were ship spikes, four inches long, some completely rusted away where plank and frame met. Galvanized bolts fastened the frames that were doubled. The fit of frames to planking varied from tight to gaping cracks. Some pieces were unattached chunks, spiked to the planks and not part of a complete frame. As the work progressed, it was necessary to remove almost all of the frames because they were unsound or because their position put them in the way of new construction.



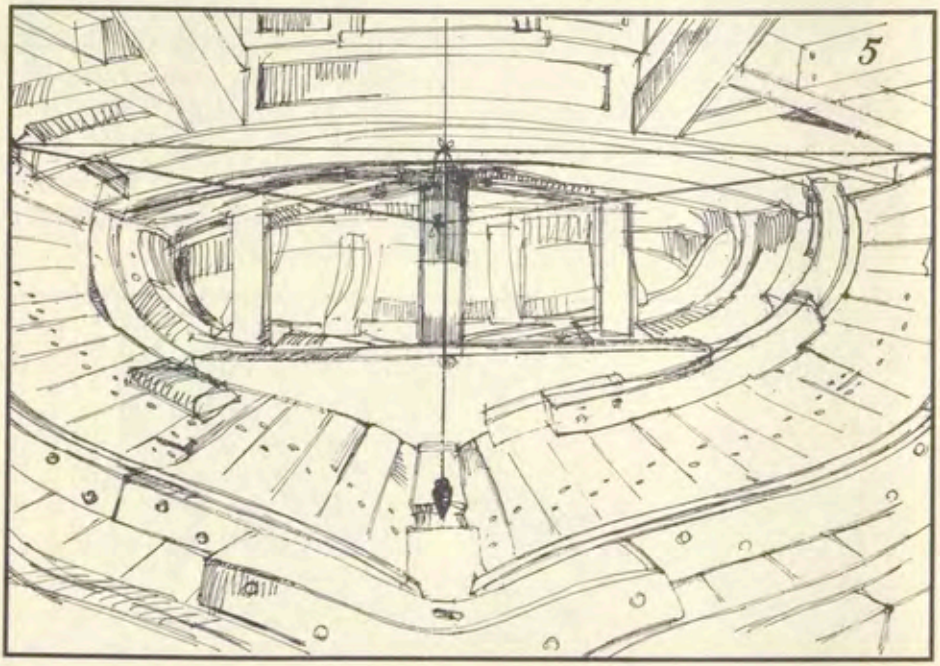
The old frames were removed by cutting them up, splitting them and prying them loose. This work was done cautiously, a few at a time, to prevent serious weakening of the boat. Care was taken not to pull the spike head through the cedar planking, and as old frames were removed new ones were installed. Shoring on the outside held the vessel's shape during this process (fig. 3). Old spikes were driven out from the inside, their holes plugged with whittled cedar sticks and then bunged. The bungs were set in epoxy.



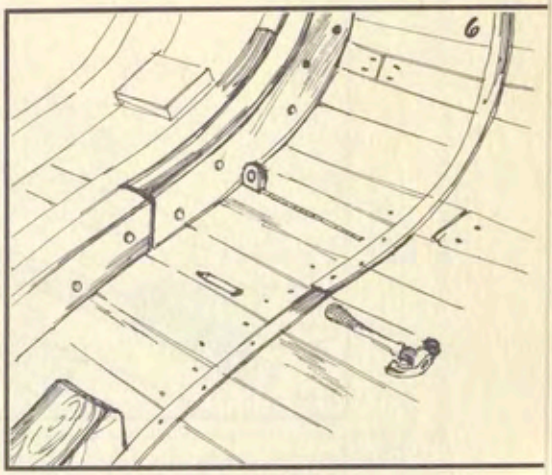
Although built originally with natural crook oak frames running in one piece from keel to sheer, the new frames were made up in pieces (futtocks) sawn from straight-grained white oak planks and bolted together in what is known as the double-sawn method of framing (fig. 4). Curved oak timbers of suitable length were just not available to duplicate the original construction method. Floor timbers of hackmatack crooks reinforced the new frames at the sharply rising ends of the vessel. Fastenings throughout were bronze.



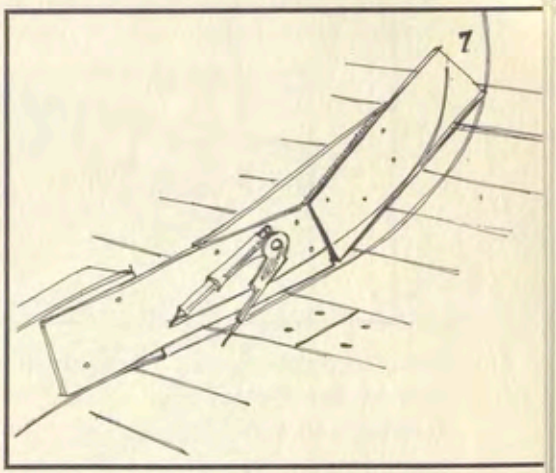
The fabrication of a new frame began with establishing points on the keel and sheer representing its center (fig. 5). There was a tendency for the frames abaft the waist to tend aft, herringbone fashion, unless these points were fixed. String was run athwartships from points marking the centers of the frame

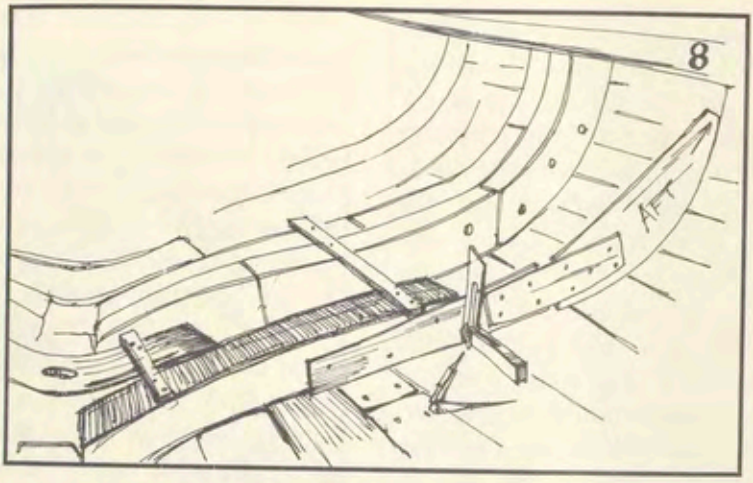


tops on each side at the sheer. From the middle of this line a plumb was dropped to the keel to a point 20″ from the center of the adjacent frame. This test and one that measured and found equi-distant the distance from frame tops on each side to the center of the rudder post ensured the alignment of the frames (fig. 6). With points on the keel and each sheer, the plane of the frame was established and battens could be placed up the sides and lines struck on the planks. These marked the center line of the new frame.



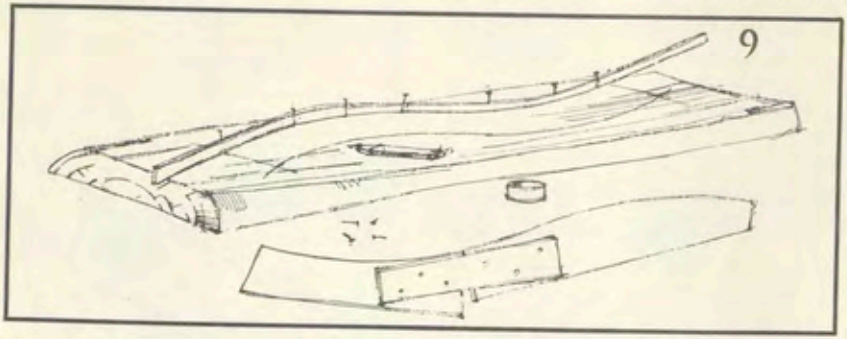
Patterns were made of thin, wide pattern stock, placed vertically along the lines up the sides and scribed with a compass (fig. 7). After cutting and fitting the patterns each was held at the proper angle to the planking by sighting along the reference line over the top of the pattern or by holding a straight edge along the pattern and checking its alignment with the line. Bevels were then taken off between planking and pattern. Patterns the full length of the frame, in some cases a curve 9′ long, were rarely practical because of the length. At some places in the boat, three or four bevels were taken for one futtock.



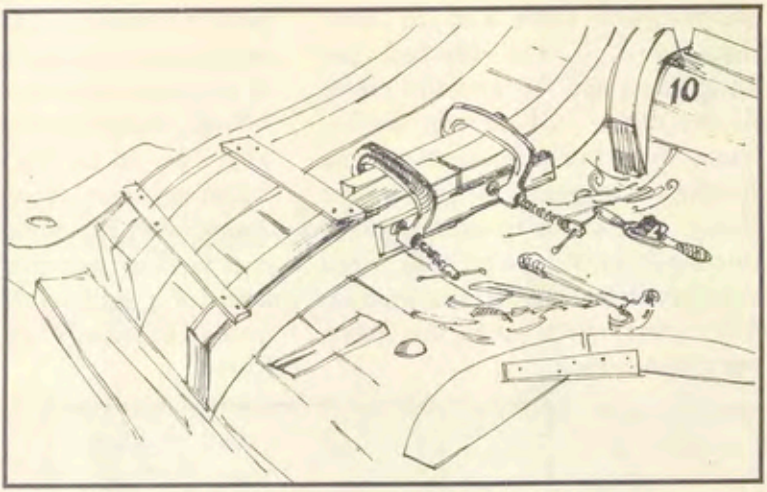


The frames were doubled pieces of 2¾″ oak, making a total frame thickness of 5½″ (fig. 8). In most frames, three futtock pieces were used between the keel and sheer. These pieces were at least 2′ long, and the overlap of the butts of the doubled pieces was 12″. In the quarters of the *Berry,* this amount of overlap and futtock length was not possible above the turn of the bilge, where the sharp turn and tumble home called for shorter sections.

The patterns were laid on the oak planks in a manner to take advantage of any sweep to the grain; however, most pieces were cut from relatively straight-grained stock. The pattern gave the bottom edge of the frame. A rough line for the top edge was struck with the aid of a batten (fig. 9). The depth of the rough frame was 5½″; later, after fitting, it was trimmed to 4½″. With the bevel gauge, the table of the band saw was set and the plank cut. Where several bevels were necessary, short cuts were made and the table re-set. On larger work this operation may be simplified with the tilting-head ship saw.

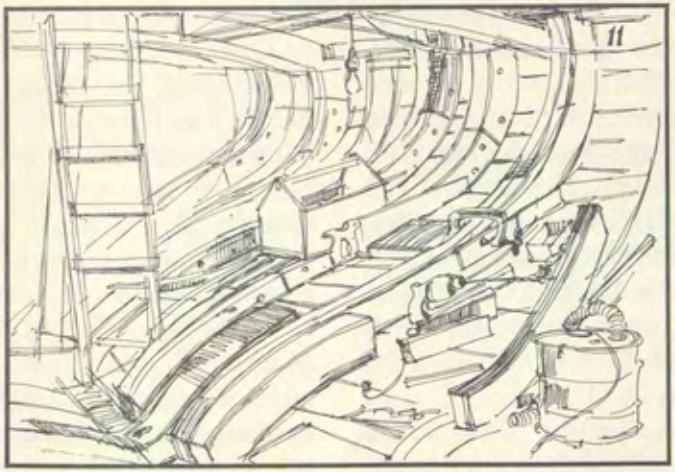


The timber was then carried to



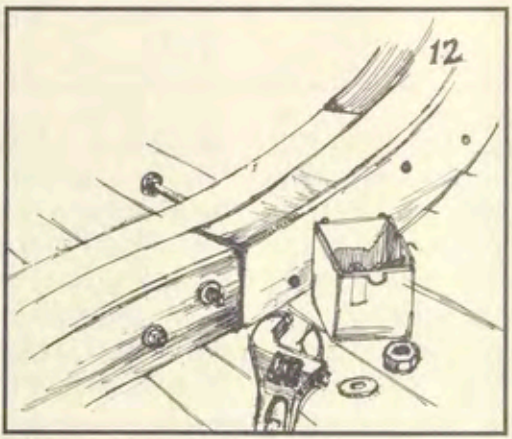
the boat for fitting. Laid along the reference line running up the side, its outline was traced and the area inside chalked. The piece was fitted by shaving its bottom surface with chisel, plane, and spokeshave until chalk marks showed a tight fit at all points to the planking – a time-consuming process which would not be encountered in building a new vessel (fig. 10). The piece was then trimmed to its finished depth of 4½", the top surface being given the same bevel as the bottom. Later the ceiling (inner planking) would lie against the top surface.

As each piece was made, starting at the keel and working up the sides, it was temporarily secured with cross battens to the next frame. The next piece was then shaped and placed until that half of the frame



was complete from keel to sheer (fig. 11). It was checked for straightness and fit, and the pieces of the other half of the double frame were made up in the same manner, care being taken to give enough overlap at the butts to make a strong joint. Where possible, butts of adjacent frames were staggered. After a final check for fit, the frame was disassembled.

then reassembled and secured with wedges and clamps. On the outside of the boat, holes were countersunk for 5/8" bungs and drilled for the 3½" No. 16 bronze screws. These fastenings were then driven with a screwdriver bit in a brace or an impact wrench, and the holes bunged with cedar set in epoxy. About four dozen fastenings went into each frame.



Into the end of the top piece, where it butted against the covering board, a hole ½" wide and 6" deep was drilled into the end grain, filled with linseed oil and bunged. (This reservoir of oil seeps into the grain and prevents rot.) The other surfaces were coated with a pentachlorolphenol preservative. Any knots were graved out and the holes filled with epoxy.

Pilot holes for the plank fastenings were drilled from the inside, two to a plank, staggered, one fastening on each of the doubled frames (fig. 12). The frame was

The frames were drilled and bolted with 3/8" bronze carriage bolts. Two of the 6" bolts were placed, staggered, on each side of a butt. Eighteen to twenty bolts held each frame together. Those frames at floor timbers were through-bolted to them with two or three bolts. As timber for the frames was unseasoned, there was shrinkage after several weeks, and the bolts holding the frames together required further tightening. The final work was smoothing the top surface of the frame, fairing any uneven butts, and beveling the edges.

The New England Wherry

By John Gardner, Research Associate

The New England wherry, unlike its more genteel British namesake, was a fisherman's workboat, sturdy, burdensome, and able at sea. In Colonial times and even as late as the early decades of the nineteenth century, wherries were numerous in Massachusetts Bay and along the coast of Maine.

The Reverend William Bentley, assiduous Salem diarist who missed very little of the contemporary scene, does not fail to mention wherries on a number of occasions. Describing a visit to Halibut Point at the tip of Cape Ann in May 1799, Bentley noted: "We then put out into the bay among the wherries which are small flat bottom boats and are as numerous as Jebacco Boats and which in good weather make two fares a day and sometimes take as many as five hundred Cod and Haddock. They are rowed cross handed by one man and even by boys of 10 & 12 years."

On another occasion Bentley mentioned that wherries in the shoal water at the end of Plum Island managed easily with two oars, and in the fall of 1817, while on a trip to Gloucester, he counted forty wherries within the piers at Straitsmouth.

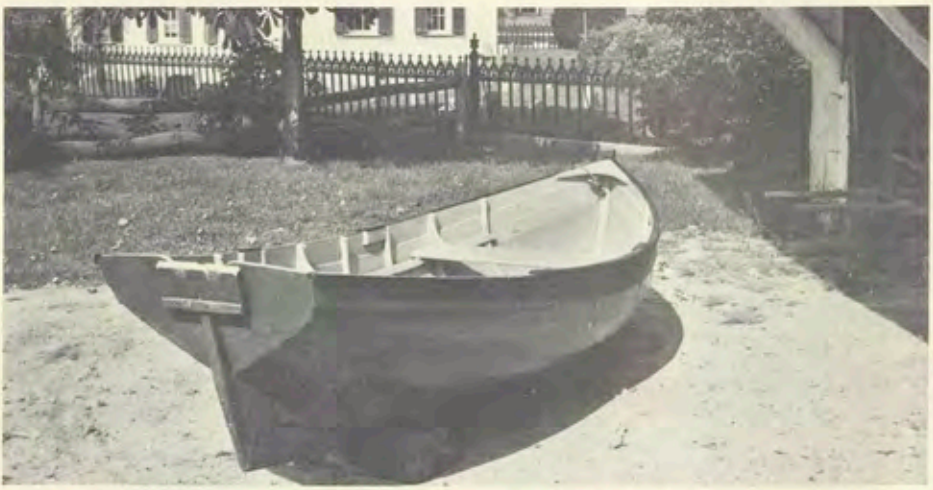
A contemporary of Bentley's, old Simeon Lowell of Salisbury Point on the Merrimack River above Newburyport, is credited by local tradition with having invented the dory in the 1790s, but Simeon called the boats he built wherries. In fact the dory does resemble the wherry in more ways than one, and some have surmised that dories replaced wherries in the New England fisheries because the former were easier and cheaper to build.

Whatever the reason, wherries had almost completely disappeared from New England waters before the nineteenth century came to a close. G. Browne Goode's monumental survey, *The Fishing Industries of the United States*, published in 1887, did not find wherries in use at that time, but mentions the Cape Roseway wherry as an extinct type formerly found on

the Eastern Bay of the Penobscot. Of course it was not Cape Roseway, but Cape Rosier, and almost directly across the Bay at Lincolnville Beach and farther down the shore at Ash Point, wherries were still in use had Goode but known, and continued in use at Lincolnville in particular through the first quarter of the present century.

the bow had to be apple-round to keep from going under and swamping, especially if a sea was kicking up.

This winter in the Small Craft Laboratory we shall build a salmon wherry as authentic in all respects as it is possible to make it. The salmon fishery at Lincolnville Beach petered out in the 1930s, and most



Osborn Wade's wherry from Lincolnville, Maine. Photograph: Les Olin.

The Lincolnville salmon wherry is every bit a wherry, yet a wherry of distinct type because of its full, rounded bow. In tending his net the salmon fisherman knelt in the bottom of the boat on a low platform just abaft the stem, hauling the lengths of wet net and struggling fish over the bow. Some of these Penobscot salmon were busters and still fighting when they came over the gunwale, and if the fisherman was a large man as well,

of the boats in use were old then. So far as we have been able to determine, only three of the old wherries actually used in the salmon fishery have survived, and two of these we have succeeded in bringing to Mystic Seaport for the winter. One is loaned through the kindness of Osborn Wade of Lincolnville, who formerly fished it. The other comes from the small craft collection of the Adirondack Museum where it has been since 1959. This



Northern white cedar knees dug on the banks of the St. Croix River in Maine. Photograph: Les Olin.

wherry originally belonging to Captain Robie F. Ames, also of Lincolnville, was built in 1882 by Captain Elisha Griffin.

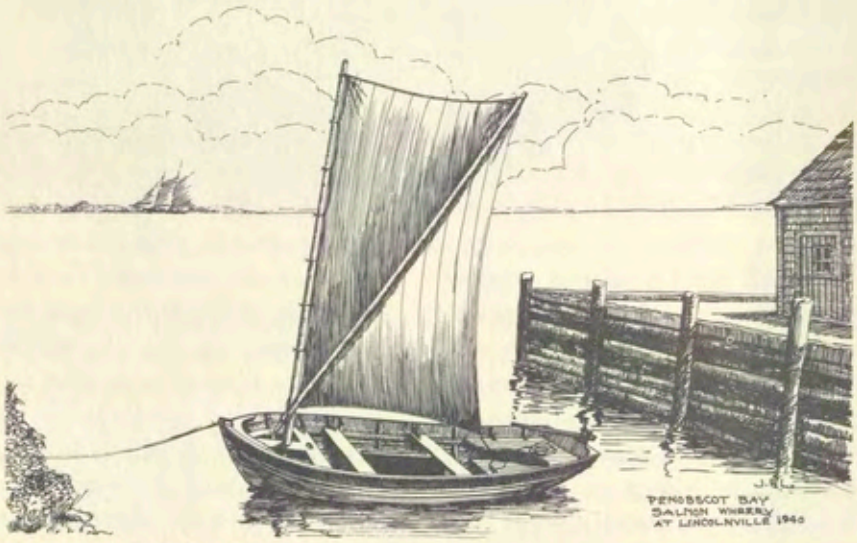
We shall need a salmon wherry at Mystic for the salmon fishery exhibit planned as part of a comprehensive representation of nineteenth-century New England shore fisheries, complete with boats, gear, and historic buildings, to occupy the shore line at the south end of the museum. Already the Robie Ames salmon fish shack with its contents and gear intact has been secured and moved to the Seaport from Maine. All that is lacking is a wherry.

A distinctive feature of salmon wherry construction surviving from Colonial times is the manner of framing. Put in after planking, the frames are sawn to shape from large cedar root crooks of the right curvature. Foreseeing that we would be building a wherry sometime in the future, we dug a supply of cedar knees last year in Maine and these are now seasoned and ready to use.

While salmon wherries were mostly worked under oars, some of the larger ones fitted with sprit-sail, centerboard and rudder were sailed, especially if also employed at a distance in other fisheries. Larger wherries of a similar sort, at

Ash Point farther down the Bay, were likewise rigged and sailed, continuing in use well into the present century. The wherry is a good sea boat. The larger full-bowed boats are stiff in a blow and sail handily. With their slim sterns and high-tucked transoms, these boats can also be launched stern first in surf.

Visitors to the Seaport this winter interested in small craft construction will be able to see the salmon wherry in the process of building. It will also figure in the course in basic boatbuilding for amateurs to be offered during the winter as part of the Small Craft Laboratory program. Limited in number to fifteen, the group taking this course will be given a practical introduction to boat-building methods, equipment and materials not possible to obtain merely from books. The class will meet for two hours on Tuesday evenings from January 3 through April 14. For complete information, write or call the curator's office at Mystic Seaport.



Drawing by John F. Leavitt.

Acquisitions

The Thomas Thomas oyster house which arrived at the museum September 18 is the latest addition to the proposed New England Fisheries Exhibit which will be designed around the Gloucester dory fisherman, the *L. A. Dunton*. Among other elements in the exhibit will be the Robie Ames salmon shack, which came to the Seaport earlier in the year, and clam and fishing shacks which have yet to be acquired.

Built around 1874 by Thomas Thomas on South Water Street in New Haven, Connecticut, the oyster shop was used for culling up until Mr. Thomas' death in 1918. Then his son John took over the business and used it as an "opening" shop until the time of his retirement in the '50s. The elder Mr. Thomas led a checkered and interesting life: he once owned a gold mine in New Zealand, he prospected in Australia and served as a quartermaster on the clipper *Donald McKay*. Reputed to have been the first deep water oyster cultivator in New Haven, he is also known as the inventor of the star mop, a device for ridding the oyster beds of the destructive star fish, and an oyster drill dredge.

His son, who died recently in his eighties, was an oysterman all his life. New Haven was the second largest center for the distribution of oysters in the United States, supplying New York City and even far-off California. Times have changed, however, and the only oyster opening shop in Connecticut now working is that of the Bloom brothers in Norwalk.

The Thomas oyster house was sold in 1956 and has been donated to the museum by its owner, M. Joseph Kavenesky, and moved to the Seaport through the generosity of Merrill Stubbs. Unused for many years, it has been a storage place for lobster pots. The remains of the original loading dock, buried under a changing shoreline, were discovered during the removal of the house and will be measured and reproduced when the building is put in its final position out over the water. In addition, some of the early oystering equipment is available.



The Curatorial Department's new motion picture equipment is shown in action in Lunenburg, Nova Scotia as photographer Lou Martel focuses on a white pine being cut down for a dory. Philip Gelbach, a volunteer from the Groton sub base, watches. This much-needed equipment for the Maritime Oral History Program was acquired through a fund established by the late Mrs. Arthur W. Butler of New York City shortly before her death. Photograph: John M. Kochiss.



Elizabeth F. Willets of Mystic Chas. C. Sisson Esqr. Commander.

The museum has received from Philip R. Mallory, chairman of the board, a most important addition to its collection of paintings: a fine water color of the Mystic ship *Elizabeth F. Willets* by the famous French marine artist Frédéric Roux. The *Willets* was built in 1854 at the Appleman Point yard of Charles H. Mallory at Mystic on the Groton side of the river, and was owned entirely by the Mallorys. John A. Forsythe was master carpenter, and the first master of the vessel was Captain Charles Sisson of Mystic, whose portrait is shown here. At first called a "medium clipper," she is listed in American Lloyds as a "sharp" model and, although holding few real records, was a fast ship. In 1857 Captain J. Warren Holmes took over as master. Captain Isaac Gates, also of Mystic, became commander in 1859 and in 1860 sailed the *Willets* from Lahaina



to New Bedford in eighty-seven days, probably a record for that passage. In 1863, under the command of Captain Williams, she went out to Shanghai where she was sold for $15,000.

An important collection of over 125 books of maritime and naval history, yachting, voyages and travels, and naval architecture have been given to the G. W. Blunt White Library by Henry S. Morgan of New York City. Of principal interest are several publications of the Marine Research Society, a few rare, early voyages and travel and two important and scarce Dutch works of naval architecture.

The rare, early voyages and travels include: Anson, George – *A Voyage Round the World in the Years 1740, '41, '42, '43, '44 and '48;* Astley, Thomas – *A New General Collection of Voyages and Travels . . . Comprehending Everything Remarkable in its Kind, in Europe, Asia, Africa and America, . . . 1745;* Dalrymple, Alexander – *An Historical Collection of the Several Voyages and Discoveries in the South Pacific Ocean, 1770-1771;* Funnell, William – *A Voyage Round the World . . . Dampier's Expedition into the South Seas, 1704;* Osborne, Thomas – *A Collection of Voyages and Travels . . . from the Library of the Late Earl of Oxford, 1745;* Parkinson, Sydney – *A Journal of a Voyage to the South Seas in His Majesty's Ship, the Endeavour, 1773.*

The Dutch treatises of naval architecture are: van Yk, Cornelius – *De Nederlandsche Scheeps-Bouw-Konst,* 1697 (2 copies, one of which contains all plates); Witsen, Nocolaes – *Aeloude en Hendendaegsche Scheeps-Bouw en Bestier,* 1671.

In addition, the collection includes a 1769 edition of William Falconer's *An Universal Dictionary of the Marine.*

A second important gift came from Chauncey Stillman, who purchased the volume of plates to illustrate Part Two of John Fincham's *An Outline of Shipbuilding* for the Library. We have had the text for several years and are very pleased to now have the accompanying illustrations. The volume acquired by Mr. Stillman was given by the Lords Commissioners of the Admiralty to Thomas Riley as a school prize at Pembroke yard in April 1858.



Oil painting by G. Selden Roorbach of Mystic River in 1880s shows the Aloha Meeting House on the left bank.

PARTY FOR JOHN



Marion Brewington, right, director of the Kendall Whaling Museum in Sharon, Mass. and member of the American Maritime Library Advisory Board, and Mrs. Brewington with John Leavitt.

A reception to celebrate the publication of *Wake of the Coasters* (second book in the American Maritime Library series) and to honor its author – our own John Leavitt – took place in the south wing of the Stillman Building October 23. John's friends gathered from far and wide, in spite of a drenching rain, for this long-awaited occasion. Wesleyan University Press and the MHA were hosts.



John Leavitt, Willard Lockwood, director of Wesleyan University Press, and Waldo Johnston start the festivities with some witty speech-making.



MHA trustees Judge Robert Anderson and Judge Leonard P. Moore exchanging opinions while Allen Seymour listens; in foreground Mrs. Seymour and Mrs. Donald Robinson with Atwood C. Ely, MHA treasurer.



Among the guests, left to right, John Leavitt, Willard Lockwood, trustee Jan Irvine, Dr. James M. Shannon, Mrs. Robert Maxwell, Mrs. Shannon and J. R. de la Torre Bueno, senior editor of Wesleyan University Press. Photographs: Les Olin.

Recommended Reading

THE WAY OF A SHIP by Alan Villiers. *Charles Scribner's Sons, New York, 1970.* Forty maps, charts, diagrams; eighty photographs by the author. $10.

Among the more accurate and interesting books appearing in the maritime historical field are a number of reprinted volumes by qualified writers on various phases of the subject. One of the best and most informative volumes appearing to date is *The Way of a Ship* by Alan Villiers, perhaps the most knowledgeable writer on the subject now living. Couched in seamanlike language, the book nevertheless can be comprehensible to the veriest landlubber if he has the interest to read it. It is well illustrated with photographs, drawings and diagrams and although the uninitiated will hardly be able to "learn all about ships" in the one volume, he can get a fair idea of what the author is presenting.

There have been men in the past and there may be a few still living who have had longer experience at sea than Villiers, but there could have been few with sailing ship experience more varied. The writer has sailed in Arab dhows, 3000-ton four-masted barks, replicas of seventeenth- and eighteenth-century ships and was master of the last British sailing vessel to voyage completely around the world – the *Joseph Conrad* – which he owned and sailed with a group of British, Australian and American cadets. She is now at Mystic Seaport playing an active part in the Youth Training program.

The Way of a Ship is not a technical book only, for its pages are filled with anecdotes and vignettes of particular ships and the men who sailed them. The material is factual but, as is so often the case, the reader is carried further back into the age of sail than any fiction would take him.

Little, if any, new material appears in the text although Villiers has written an introduction to the new edition which is well worth reading. To those whose interest in, and curiosity about, sailing ships brought them to the subject too late to acquire a copy of the first edition, we would like to recommend the present reprint as one of the most fascinating books on the subject to be offered today.

JOHN F. LEAVITT
Associate Curator

RECOLLECTIONS PERTAINING TO A SEAFARING LIFE, Being the Memoirs of Captain Alonzo T. Bacon. *The Evening News Company, Bridgeton, New Jersey.* $3.15.

This modest little paper-backed book is sponsored by Ida G. and Carolyn P. Bacon and consists of a selection of articles written by Captain Bacon for Cape May (N. J.) county newspapers

after his retirement from the sea. Besides an outline of the captain's career as master of coasting vessels, there are lists of losses of New Jersey vessels at sea, lists of masters from that area and lists of vessels. The volume, printed and published at Bridgeton, New Jersey by the Evening News Company would be primarily of interest to anyone whose concern is the vessels, people and events of the New Jersey area.

Unfortunately there is no indication of exact rigs and, in some cases, tonnage of many of the vessels and the list of masters gives only the names without any designation of the period of their careers. However, for those interested in the shipping of the area, the information can probably be supplemented by a study of U. S. Merchant Vessel registers and other sources of information.

J. F. L.

THE YEAR OF THE WHALE by Victor B. Scheffer. *Charles Scribner's Sons, New York, 1969. $6.95.*

The little sperm whale began life one September day in the Pacific Ocean, about 200 miles west of Mexico. Mr. Scheffer, in following the month-to-month adventures of the "Little Calf," has managed to weave in the entire life story and history of the mammoth beasts which make up the family group.

Mr. Scheffer is a biologist with the United States Fish and Wildlife Service. A world authority on the biology of marine animals, he is a writer of great skill. He not only tells us of the early life of a young sperm whale, but also introduces little-known facts of the whale's birth, adolescence, mating and feeding habits. He describes the peregrinations of the whale family from south of the equator to the fringes of the Arctic, the constant necessity to follow sources of tremendous quantities of feed, with great bonanzas of fish on the surface in certain areas and at tremendous depths in others. And all through the story he refers back to the need of the "Little Calf" to sustain himself with quantities of milk from his mother. While mother dives to half-mile depths in search of giant squid, the "Little Calf" must wait near the surface for her return. His weaning is accomplished by snatching tidbits of squid or albacore that float from her voracious jaws and alternating this diet with milk.

In the social order of the sea, sperm whales reign supreme. The killer whale and the swordfish are known to attack them, but it is only the sick or the stray who may fall victim. Only man has the knowledge and the weapons to threaten the sperm's extinction and this, through greed, he is in imminent danger of accomplishing.

The Year of the Whale is one of the fine stories of our generation – a book written by a man who has spent a lifetime studying marine life and its relationship to the increasing numbers and needs of mankind. Extinction of a species may mean much or it may mean little in the future annals of our planet. Mr. Scheffer is a conservationist at heart; he wonders at the effect unrestricted whaling and extinction of this species will have upon the future of our own species. It may be time to ponder this question.

This is highly recommended reading for all with a love of the sea and an interest in the mightiest of its inhabitants.

FRANCIS E. BOWKER
Captain of the *Brilliant*

Letters

To the Editor:

I read with great interest the account "Steamboats to New England" in the summer issue of the Mystic Seaport *Log*. Perhaps as a footnote, you would be interested in the following extract from a letter written by the distinguished Frenchman, Alexis de Toqueville to his mother in France on May 16, 1831.

"After having for three hours savoured the pleasure of being on land, Tocqueville pursued his description, 'we embarked on a tremendous steamship which, coming down from Providence, was making for New York. It is impossible to picture to oneself the interior of this immense machine. Let it suffice you to know that it contains three great saloons, two for men, one for women, where four, five, and often eight hundred people eat and sleep comfortably. You can judge of its speed, since in spite of a contrary sea and wind we covered in 18 hours the 60 leagues which separated us from New York.' "

This would seem to put regular service between New York and Providence, around Point Judith, at a somewhat earlier date than is indicated by the author of your article.

Incidentally, de Tocqueville goes on to describe with great animation, the beauty of New York City as seen from the East River with "the slopes covered by lawns and trees in bloom right down to the water, and more than all that, an unbelievable multitude of country houses, big as boxes of candy, but showing careful workmanship. . . ."

Those were the days!

Percy Chubb, 2nd
New York, N. Y.

Two letters about the *Deadeye*–

Dear Mr. Kochiss:

We received a review copy of *The Deadeye* yesterday. Although I don't feel qualified to review it for any publications, I do want you to know how delighted I am with it. It is the sort of thing which should be done with all the crafts related to shipbuilding: framing, planking, caulking, joining, spar-making, block-making, masting, rigging, carving, sail-making, black- and tinsmithing, plumbing, and coopering, as well as seafaring life as an officer, seaman, fisherman and dozens of other related subjects.

The conciseness of the descriptions and the clarity and completeness of the drawings should serve as a model for all such future publications.

If we can be of any assistance to you in future works, please let me know. Magnificent job!

Charles E. Burden, M.D.
Bath Marine Museum
Bath, Maine

To the Editor:

Mr. Kochiss has written a most enjoyable as well as informative text and Mr. LaPresle's drawings, especially of tools, are splendid.

May I say, as a member, I am terribly pleased, and hope this is a sample of things to come. It seems to me that the publication of this kind of thing, handled with this type of care and style, is a very important function of the Association.

Valentine Cesare
Stamford, Connecticut



Glory Anna II, *a modern reproduction of a Block Island cow horn, built for Paule Loring in 1948, has been acquired for the Seaport collection through the generosity of trustee Thomas R. Wilcox. No original cow horns exist today, and this is the best-known reproduction of the type of double-ended fishing craft that was once so common in this area.*

Front cover: photograph of the Conrad *by Michael Philip Manheim for United Air Lines'* Mainliner *Magazine.*

Back cover: Star of India, *ex-*Euterpe, *with all nineteen sails set in honor of the director's visit to San Diego for the MHA's membership meeting. Photograph: Betsy Sharp.*



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